

## **SECTOR D**

# **SOCIAL AND COMMUNITY DEVELOPMENT PLAN**

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## D. SOCIAL AND COMMUNITY IMPROVEMENT PLAN

### D.1 Social Environment

#### D.1.1 Educational Sector

(1) Present Condition and Issues in Educational Sector

##### 1) General

The Kyrgyz education system comprises the following five (5) levels:

- pre-school education
- primary education for grades 1 to 4 (1<sup>st</sup> stage)
- basic secondary education for grades 5 to 9 (2<sup>nd</sup> stage)
- complete secondary education for grades 10 and 11 (3<sup>rd</sup> stage)
- additional education

Primary and basic secondary education (grades 1-9) is compulsory for all Kyrgyz citizens and is, in principle, free within state educational institutions.

**Table D.1 Education System of Kyrgyzstan**

8	<b>Postgraduate education</b>		Additional education	24
7	<i>(postgraduate teaching, doctorate, refresher teaching course and conversion teaching)</i>			23
6	<b>Complete Higher Education</b>	<b>Higher education</b>		22
5	<i>Master degree Specialty</i>			21
4	<b>Basic Higher Education</b>	<b>Professional Education</b>		20
3	<i>Bachelor degree</i>			19
2	<b>Secondary Professional Education</b>	<b>Incomplete Higher education</b>		18
1		<i>3<sup>rd</sup> stage</i>		17
11	<b>Professional Education</b>	<b>Complete Secondary Education</b>		16
10		<i>3<sup>rd</sup> stage</i>		15
9	<b>Compulsory School Education</b>			14
8			<i>2<sup>nd</sup> stage</i>	13
7	<b>Compulsory School Education</b>		12	
6			<i>2<sup>nd</sup> stage</i>	11
5	<b>Compulsory School Education</b>		10	
4			<i>1<sup>st</sup> stage</i>	9
3	<b>Compulsory School Education</b>		8	
2			<i>1<sup>st</sup> stage</i>	7
1	<b>Compulsory School Education</b>		6	
0			<b>Pre-school Education</b>	5
Years of study			Age of learners	

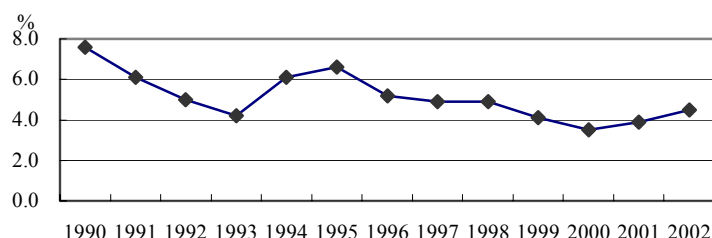
Source: Education for All, Ministry of Education

2) Problems in Educational Sector

The level of education and literacy in the Kyrgyz Republic is higher than in other countries. Since independence, however, these levels have declined. According to the social survey conducted by the JICA Study Team, 24% of the respondents are concerned about education of their children because they spend a lot of money in areas such as school repair charges, fees to cover the teacher salaries, rent of text books, and so on. Also 40% of respondents were concerned with low quality of education, unqualified teaching methods, and outdated text books.

*i) Decline of Budget*

Expenditure of the government budget (as a percentage of GDP) for the educational sector has declined from 7.6% in 1990 to 4.5% in 2002. This causes the reduced access to education and reductions in educational quality.



Source: Kyrgyz Republic, Common Country Assessment,  
The United Nations System in the Kyrgyz Republic Bishkek, 2003

**Figure D.1 Educational Expenditure (as percentage of GDP)**

The average teachers' salary is just above the poverty line, and the teaching profession is no longer regarded with respect. For these reasons, the number of teachers has been declining. Reductions in the budget are the cause of deterioration in quality of teaching materials and short supply of materials.

*ii) Number of Schools and Pupils*

The number of public schools has slightly increased from 1,794 in 1991 to 1,939 in 1998. But pupils per school have increased from 528.6 in 1991 to 556.1 in 1998. Therefore, schools are insufficient in comparison to pupil numbers.

**Table D.2 Number of Public School and Pupils in Kyrgyz Republic**

year	Number of schools	Number of pupils (1,000)	Pupils per school	year	Number of schools	Number of pupils (1,000)	Pupils per school
1991	1,794	948.3	528.6	1995	1,865	971.4	520.9
1992	1,823	943.6	517.6	1996	1,888	1,006.3	533.0
1993	1,854	937.8	505.8	1997	1,910	1,039.9	544.5
1994	1,862	946.9	508.5	1998	1,939	1,078.3	556.1

Source: Ministry of Education

In Issyk-Kul Oblast, numbers of pupils per school in the cities of Karakol and Balykchy are almost twice the numbers in other Rayon. The number of pupils per teacher in the two cities is also higher than in other Rayon.

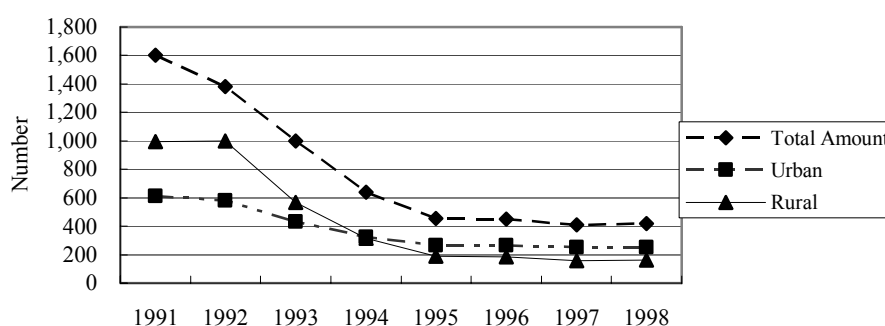
**Table D.3 Number of Public Schools and Pupils in Issyk-Kul Oblast in 2003**

	No. of schools	No. of pupils per school	No. of pupils per teacher
Total	189	530.8*	13.4*
Ak-Suu	35	422.8	13.2
Jety-Oguz	39	476.7	13.1
Issyk-Kul	30	589.9	11.7
Tong	29	424.1	10.9
Tup	35	415.8	14.1
Balykchy	10	954.1	18.4
Karakol	11	1,167.9	17.3

\* national average

Source: Issyk-Kul Oblast Administration

The number of pre-school institutions has dramatically decreased from 1,604 in 1991 to 418 in 1998, with a marked decline seen in the rural area.



Source: Ministry of Education

**Figure D.2 Number of Pre-school Institutions**

### iii) Decline in Enrollment and Graduations

Basic education has also suffered from a decline in enrolments. According to the UN report of Kyrgyz Republic (Common Country Assessment), official figures indicate 95% enrollment in 2001. However, UNICEF studies have revealed that non-attendance and drop out rates are 7-10 times higher than official estimates because unofficial payment for education is required.

The following table shows the number of enrolments and graduations. The percentage completing 9<sup>th</sup> grade is 88.4% in the overall country, while the percentage completing 11<sup>th</sup> grade (of those enrolling in 1<sup>st</sup> grade) is 22.6%.

**Table D.4 Enrollment (grades 1 and 10) and graduations (grades 9 and 11) at the beginning of 2002-2003 academic year**

(Unit: 1,000)

	Total	Osh oblast	Jalal-Abad oblast	Batken oblast	Talas oblast	Chui oblast	Issyk-Kul oblast	Naryn oblast	Bishkek
Enrollment of students to the 1 <sup>st</sup> grade - total	115.9	32.7	25.6	10.5	5.6	15.0	9.9	6.7	9.9
Graduating students from 9 <sup>th</sup> grade	102.4	29.4	21.6	10.0	4.9	12.9	9.1	6.5	8.0
% of those graduated from 9 <sup>th</sup> grade	88.4	89.9	84.4	95.2	87.5	86.0	91.9	97.0	80.8
Enrollment of students to 10 <sup>th</sup> grade	87.2	24.9	18.2	9.2	4.4	9.7	7.8	5.8	7.2
Enrollment ratio to the 10 <sup>th</sup> grade of those graduating from 9 <sup>th</sup> grade (%)	85.2	84.7	84.3	92.0	89.8	75.2	85.7	89.2	90.0
Graduating students from 11 <sup>th</sup> grade - total	26.2	6.6	1.2	3.7	0.6	5.6	3.5	1.2	3.8
% of those graduating from 11 <sup>th</sup> grade out of enrollment to 1 <sup>st</sup> grade	22.6	20.2	4.7	35.2	10.7	37.3	35.4	17.9	38.4
% of those graduating from 11 <sup>th</sup> grade out of enrollment to 10 <sup>th</sup> grade	30.0	26.5	6.6	40.2	13.6	57.7	44.9	20.7	52.8

Source: Ministry of Education

According to the UNDP Report on Macroeconomics of Poverty Reduction (2002), unofficial payments for education at urban public schools vary from US\$3-20 per month. For comparison, in 2000, the average salary was US\$22 in industry and US\$12 in agriculture.

Secondary enrollment rates are now below 50%, having declined from 65% in 1989. A large number of students are unable to complete their studies because of their inability to pay annual tuition fees, which may amount to US\$300-500 in public secondary schools. Previously, the duration of compulsory education was 11 years. (\*)

### 3) Improvement of Education

Education is an important sector to develop human resources to shoulder the future development of the country. It should be equally available to everyone regardless of income levels. Both school studies and youth education are quite important to foster the mental health of youth. In the Republic, the young generation is concerned about unemployment and their future.

Vocational training is also required to be practically useful once they start working. In particular, strengthening higher education to enable employment in the IT software industry is required. Currently, even if students manage to graduate from schools, it is difficult to find jobs and brush up their skills acquired through education.

\* UN report: Kyrgyz Republic: Common Country Assessment, The United Nation System in the Kyrgyz Republic Bishkek, 2003

(2) *Plan for Human Resources Empowerment*

1) Objectives (Vision)

Development of human resources by improving the educational environment is crucial for the future development not only of Issyk-Kul Oblast but also the overall republic. Basic education should be equally provided to everyone regardless of their income levels.

2) Strategy and Measures

Primary education and vocation training should be intensively improved so that people will have practical skills for jobs. High-grade education, such as IT software training, should be simultaneously promoted for the future development of the Issyk-Kul zone and the Kyrgyz Republic. Vocational training should emphasize practical skills and knowledge to provide job opportunities, starting new businesses and participating in potential industries such as tourism and services.

3) Proposed Project

Improvement/enhancement of vocational training should be the priority project. The current training institutions should be renovated, and aimed at ensuring graduates can find job opportunities. Current teaching systems should be changed to be more practical, employing useful programs for actual businesses.

## **D.1.2 Health Sector**

*(1) Present Condition and Issues in Health Sector*

1) General

A healthy life is the most basic element of human needs. In the Soviet periods, people had access to medical services free of charge. In the Kyrgyz Republic, however, patients now basically bear the medical charge using health insurance.

Since independence, MOH has been responsible for developing its own health policy. The health reform project, "MANAS", was designed in 1994 and has been implemented since 1996. It is supported by World Bank, USAID, the Swiss Development Corporation and other donor agencies. MANAS has focused on restructuring hospitals and the Sanitary Epidemiological Services (SES) to strengthen primary healthcare and to replace polyclinics with a network of family physicians at the primary level.

## 2) Problems in Health Sector

Medical services in the Soviet period were of a high level and people could access them free of charge. After independence, however, the situation has changed.

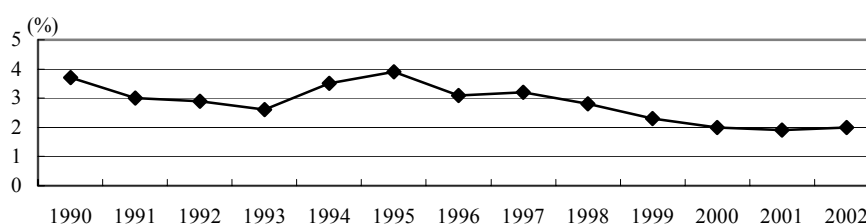
According to the social survey conducted by the JICA Study Team, the major concern of respondents is healthcare problems (56.7%: multiple answer). The medical healthcare problems include the long distance to the hospitals or unavailability of hospitals, lack of skilled personnel, outdated equipment, expensive medicine, damaged hospital facilities, etc.

### *i) Deterioration of Health Condition*

People are being affected with many kinds of diseases caused by poverty, e.g. brucellosis, tuberculosis, hepatitis B, TB, iodine-deficiency disorders, iron-deficiency anemia, etc. These are caused by deteriorating living conditions, such as difficulty in accessing safe drinking water and sanitation, deficiency of nutrition, and difficulty in accessing medical services.

### *ii) Decline of Budget*

The Government budget for healthcare has been steadily declining, from 3.7% of GDP in 1990 to 2.0% in 2002, as shown below.



Source: Kyrgyz Republic: Common Country Assessment, The United Nations System in the Kyrgyz Republic Bishkek, 2003

**Figure D.3 Government Budget in Health Sector (as a percentage of GDP)**

### *iii) Scale-down of Healthcare System*

The budget shortage is obviously causing a deterioration in service standards and infrastructure of health centers, which often lack basic equipment and supplies. Numbers of doctors have decreased slightly and numbers of hospitals and beds have decreased seriously.

In Issyk-kul Oblast, the number of doctors and doctors/ person have also declined. The 21.4 doctors per 10,000 people of Issyk-Kul Oblast in 2002 is below the national average of 26.0. Especially in Ak-Suu (9.1) and Jety-Oguz Rayons (9.7), the situation is serious. Karakol city, on the other hand, has an extremely high number of 63.2 doctors per 10,000 people, which is three times the oblast average.



According to an interview with a doctor in Tong Rayon, a number of doctors in Tong Rayon was originally small because young doctors did not want to stay in the rural area. In Ak-Suu, Jety-Oguz and Tup Rayons, the number of doctors is lower than in Tong Rayon, as shown in the table above. There are no cars at hospitals in these Rayon and doctors have to go to patients' houses on foot.

**Table D.5 Number of Doctors (2000-2002)**

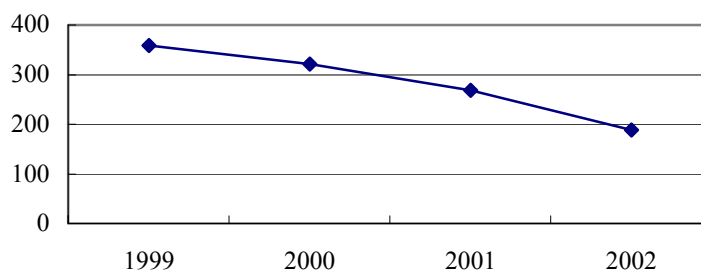
	Number of doctors of all specialties including dentists					
	absolute number			per 10,000 people		
	2000	2001	2002	2000	2001	2002
Kyrgyz Republic	13,799	13,379	12,909	28.2	27.2	26.0
Batken oblast	650	645	629	16.6	16.3	15.7
Jalal-Abad oblast	1,505	1,494	1,448	17.0	16.6	15.8
Issyk-Kul oblast	1,045	955	897	25.1	22.8	21.4
Balykchy city	88	97	98	21.1	23.6	23.6
Karakol city	545	475	426	79.1	69.4	63.2
Ak-Suu rayon	61	57	53	10.8	9.9	9.1
Jety-Oguz rayon	80	79	75	10.6	10.3	9.7
Issyk-Kul rayon	135	126	130	18.9	17.6	18.2
Tong rayon	66	58	55	14.0	12.2	11.5
Tup rayon	70	63	60	12.7	11.3	10.6
Naryn oblast	603	592	516	23.8	23.1	19.9
Osh oblast	2,180	2,177	2,143	18.1	17.8	17.3
Talas oblast	462	425	401	22.8	20.8	19.4
Chui oblast	1,634	1,466	1,393	21.2	19.2	18.5
Bishkek	2,366	2,356	2,287	30.8	30.7	29.7

Source: Ministry of Health

**Table D.6 Number of Beds (2000-2002)**

Regions	Number of beds			Per 10,000 people		
	2000	2001	2002	2000	2001	2002
Kyrgyz Republic	34,412	30,313	27,447	70.4	61.5	55.3
Batken oblast	2,511	2,426	2,247	64.3	61.3	56.0
Jalal-Abad oblast	5,457	4,940	4,319	62.2	54.9	47.3
Issyk-Kul oblast	2,243	1,513	1,335	53.8	36.1	31.8
Balykchy city	325	175	175	77.8	42.0	42.2
Karakol city	975	710	592	141.5	103.8	87.8
Ak-Suu rayon	228	151	151	40.2	26.3	25.9
Jety-Oguz rayon	210	142	142	27.9	18.6	18.4
Issyk-Kul rayon	200	130	110	28.0	18.2	15.4
Tong rayon	135	100	60	28.6	21.1	12.6
Tup rayon	170	105	105	30.7	18.8	18.6
Naryn oblast	1,515	1,480	891	59.9	57.8	34.3
Osh oblast	7,236	6,854	6,469	60.2	56.2	52.2
Talas oblast	1,192	1,113	827	58.8	55.8	40.0
Chui oblast	4,318	2,658	2,440	56.2	34.9	32.3
Bishkek	2,259	2,215	2,090	29.5	28.8	27.1
Republican institutions	7,681	7,114	6,829			

Source: Ministry of Health



Source: Ministry of Health

Figure D.4 Number of Hospitals in Kyrgyzstan

### 3) Improvement of Health

It is urgent that people's health be improved to overcome poverty. This can be achieved through better nutrition, access to safe water and a clean sanitary environment. In addition, educational campaigns for primary healthcare are important.

Due to the limitation of public support and individual capacity, cooperation and mutual help among community members are necessary to improve living and sanitary environments and to reduce poverty in the community.

To enhance medical standards, development of higher medical centers and rehabilitation centers are required for the region to create a healthy and harmonized area in the Issyk-Kul zone, through the utilization of the lake's natural features.

#### *(2) Plan for Healthcare Enhancement*

##### 1) Strategy (Vision)

Poverty reduction is the basic framework to improve constraints in health care. Moreover, cooperation among community members and improvement of the living and hygienic environments are to be programmed. Enlightenment in primary health care is also necessary for the prevention of disease and improvement in nutrition.

To establish a health utopia in the Issyk-Kul zone, not only for the local people but also visitors seeking medical care and rehabilitation of disabled people, the facilities of sanatoriums should be improved, offering first class medical treatment under the unique environment.

## 2) Proposed Projects

### *i) Central Asia Rehabilitation Center*

In Central Asian and neighboring countries, there are disabled people and patients suffered from radiation. To utilize the supreme natural environment of the Issyk-Kul region, a Central Asia Rehabilitation Center can be built as a rehabilitation center for Central Asia. Those patients could then remain for long-term treatment.

### *ii) Improvement of Sanatorium/rehabilitation center management*

Sanatoriums/rehabilitation centers (health resorts), which were built in the Soviet period, are decrepit due to improper management and maintenance. In line with the development concept of a healthy and harmonized region of Issyk-Kul, those centers should be renovated to again become functional. In addition, the management system shall be improved. Information technology (IT) should be applied to enhance effective and efficient services.

## **D.1.3 Trend of Donor Activities in Social Sector**

### *(1) Poverty Reduction Program (UNDP)*

The Poverty Reduction Program has been supported by UNDP from 1998 until 2004. The objective is to support the efforts of the Kyrgyz Government, civil society and other organizations for the reduction of rural poverty in accordance with national development goals as set out in NPRS and Millennium Development Goals. The program consists of four (4) components as follows:

#### Policy Advice

An expected outcome of the component is increased capacity of the government to design, implement and monitor policies and program for poverty reduction.

#### Social Mobilization

The objective of the component is to contribute to overall poverty alleviation, especially through self-reliance, advancement and more active participation in community development.

#### Micro-Finance Development

This component is to provide micro credits disbursed by Kyrgyz Agricultural Finance Corporation (KAFC) to poor families through self-help groups. A village person, who is selected from the village, is assigned as an animator.

#### Small-scale Business Development

This component is to promote the growth of specific small-scale sustainable enterprises. One of the directions is promotion of agricultural cooperatives, which will provide purchasing,

production and marketing arrangements for their members. Another direction is to support development of business incubators, which will support self-employed entrepreneurs and small-scale enterprises.

The program is implemented in all Oblast, which covers 142 villages in 33 Rayon. In Issyk-Kul Oblast, the southern part, which includes 19 villages in Ak-suu, Jeti-Oguz, Ton Rayon, are covered.

## *(2) Local Self-Governance Program (UNDP)*

The Local Self-Governance Program has been supported by UNDP since 1998 until 2004. The objective is to provide assistance to the Government of the Kyrgyz Republic in creating efficient local governance institutions in accordance with the goals and objectives stipulated by NPRS and CDF. The interventions of the program are made within the four (4) components:

- Decentralization
- Institution and capacity building
- Participatory development planning
- Local self-government infrastructure development

Basically the program emphasizes local self-government bodies. The communities are stipulated as a part of the local self-government by law. Therefore the program also supports the activities of community-based organizations (CBOs) and communities. These support activities are composed of economic projects, which aim at income generation and social infrastructure/facility improvement.

For the economic project, the Local Development Fund (LDF), which is a kind of micro credit, was established. The LDF is used by CBOs to initiate small businesses. The resources of the LDF come from UNDP (80%), Ayil Okmotu (10%) and CBOs (10%). When a CBO initiates a business project, it shoulders 10% of the project with 90% being funded by the LDF. Finally, it will return 100%. Therefore, 10% can be considered as interest.

The social projects construct or renovate social infrastructures/facilities, such as public baths, schools, water supplies, and barber shops. The mechanism is that a CBO is organized for the purpose of operating and maintaining; 50% of the project cost is covered by the community and the remaining 50% is borne by UNDP, Rayon administration and Ayil Okmotu. The cost to be covered by the community is not in cash but in labor, which is converted into a cost. Therefore, there is no cash requirement from the community.

The program covers about 100 villages in 30 Ayil Okmotu in 11 Rayon in 7 Oblast. In Issyk-Kul Oblast, 36 villages in 13 Ayil Okmotu in Tup Rayon are covered. The activities in Issyk-Kul Oblast have been in place since 2001; 6 villages in 2 Ayil Okmotu in Tup Rayon have been implemented as a model project since 2001 to 2003.

(3) Village Investment Project (WB)

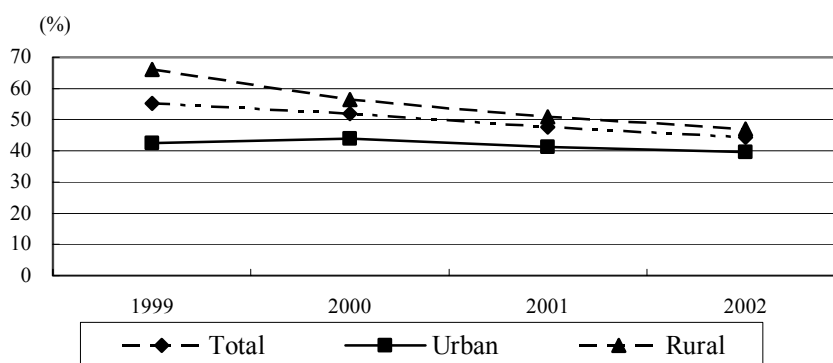
The Village Investment Project supported by World Bank was initiated in 2004 and will continue for five (5) years (until 2008). The objectives of the project are 1) improving governance and capacity at the local level, 2) strengthening the provision of, and access to, essential infrastructure services, and 3) supporting private small-scale group enterprise development. The total project amount is 15.1 million US\$. The project will cover 220 Ayil Okmotu, which is almost half of the total Ayil Okmotu of 471, and in Issyk-Kul Oblast, where 38 Ayil Okmotu are planned to be covered out of 59 Ayil Okmotu in total.

The basic mechanism of the project is to provide villages with grants to improve village infrastructure/facilities based on a strategic plan, which is a kind of village development plan developed by the village and supported by the project. The amount of the grant is defined by the number of village members. It amounts to 600 som per person for four (4) years, in total. The project requires villages to bear 20% of the project cost. The 20% consists of 3% cash from the village members, and provision of labor and/or materials equivalent to 17%. Therefore, there is a cash input by the community equivalent to 3% of the project cost.

**D.1.4 Poverty Structure**

(1) Poverty Structure

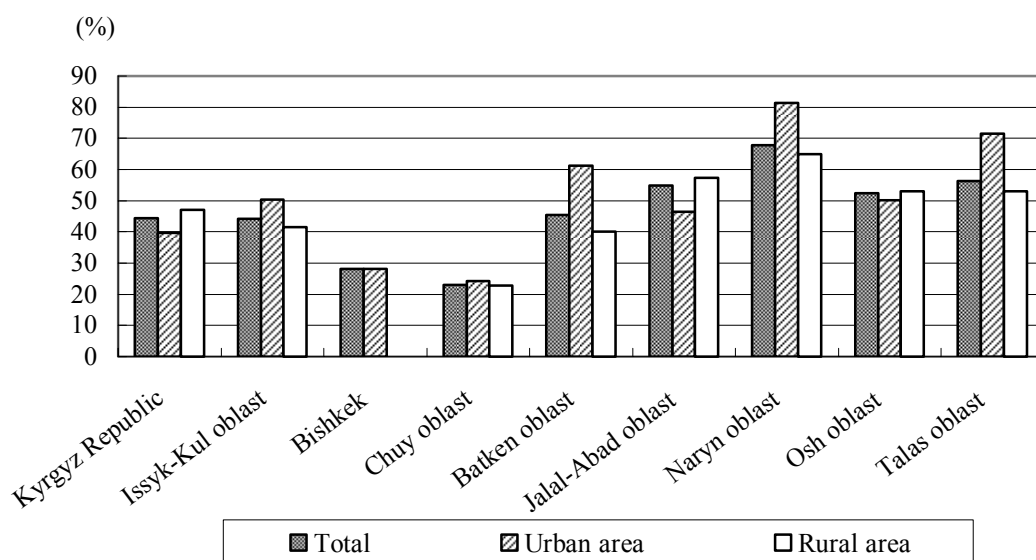
Poverty is a one of the most critical problems in the Republic. According to the 2002 data of the National Statistical Committee (NSC), 44.4% of the population is in poverty and 13.8% of these are in extreme poverty. Almost half of the population in poverty is considered to be a serious situation. Poverty in the rural area, is a more serious problem. Poverty incidence in rural areas is 47% compared to 39.6% in urban areas. But poverty incidence in rural areas has been reduced from 66.0% in 1999 to 47.0% in 2002.



Source: National Statistical Committee

**Figure D.5 Poverty Incidence**

Poverty incidence in Issyk-Kul Oblast is slightly lower (44.1%) than the national average (44.4%). It is the third lowest Oblast, followed by Chuy Oblast and Bishkek. Poverty incidence in the urban area of Issyk-Kul Oblast is greater (50.3%) than in the rural area (41.6%) despite the fact that the national average of poverty incidence in rural areas is higher than in urban areas. This is because in Issyk-Kul Oblast urban unemployment is a serious problem.



Source: National Statistical Committee

**Figure D.6 Poverty incidence by Oblast (2002)**

The NSC defines poverty as having an annual expenditure below 7,491 som. That is an indicator based on an economic measurement. For simple understanding of the realities of poverty, in this section poverty is defined as a difficulty of life. There are two characteristics of poverty based on this definition, (i) economic aspect and (ii) living environment aspect.

Poverty is captured by economically tangible aspects and occurs due to insufficient income, increases in expenditure, and increases in work load.

Poverty caused by deterioration of living environment results from economic poverty and a decline in public services, such as difficult access to education and medical services, deficiency of nutrition, and increased youth problems, drug abuse and gender problems.

### 1) Economic Aspect

#### *i) Economically Tangible Aspect*

##### Insufficiency of Income

Income is insufficient because of unemployment. This has resulted due to a closure of factories, insufficient markets for agricultural products, and so on. Therefore it is difficult to purchase commodities. But most people in the rural area are able to survive because they have their own farmland and livestock and stand on their feet even though there is nutrition disorder.

For pensioners, their incomes have declined because pension payments have reduced due to insufficient government budget for social protection. They are, however, supported by their families or relatives with mutual help and strong ties. An old man responding to the Social Survey said “*I am not anxious about poverty because my children and relatives support me.*”

Income of Agricultural Activities

Based on the social survey conducted by the JICA Study Team, the gross income from farmland (average of the 48 households) is 10,969 som/year, while the gross income from livestock (average of the 21 households) is 13,293 som/year. The expenditure for agriculture is 3,461 som/year, so that the net income from farmland is estimated as 7,508 som/year and from livestock is estimated as 9,832 som/year.

**Table D.7 Average of Agricultural Income by Income Source**

Unit: Som/year/household

Income Source	Gross Income	Expenditure for Agriculture	Estimated Net Income
Farmland (48 households)	10,969	3,461	7,508
Livestock (20 households)	13,293	3,461	9,832

Source: Social Survey, JST

The average gross income from agriculture by type of household is shown in the table below based on the social survey. The households engaging in both livestock and cultivation have average gross incomes of 27,700 som/year. The households engaging in cultivation of farmland only have average gross incomes of 10,429 som/year. The households engaging in livestock only have average gross incomes of 10,321 som/year from livestock. The average of all types is 14,406 som/year.

**Table D.8 Average of Gross Income from Agriculture by Type of the Household**

Unit: Som/year/household

	Number of households	Gross Income
Households engaging in cultivation of farmland only	35	10,429
Households engaging in both livestock and cultivation	13	27,700
Households engaging in livestock only	7	10,321
Average of all types	55	14,406

Source: Social Survey, JST

The average expenditure of a household per year is 25,000 som, based on the social survey. Therefore, only the households engaging in both livestock and cultivation can cover this. The households engaging in farmland or livestock only cannot cover average expenditure, so they need other income sources.

Increase of Expenditure

In addition to insufficient incomes, people are also burdened with increased expenditure. Medical services are charged even though they were previously free of charge. Various payments are required for education even though basic education is compulsory and free of charge, ostensibly.

Furthermore various payments are required for repairs such as public wells, renovation of community halls, and so on. Facilities and equipment of a community/village are not maintained properly because of insufficient government expenditure.

*ii) Economically Intangible Aspect*

Poverty factors caused by economically intangible aspects include increased work load and inefficiency of works. Previously, agricultural works were undertaken by a group/organization with machinery. After independence, it is now done by individuals with insufficient machinery, and in some cases with none. Machinery is aging, not well maintained, and sometimes is more than 50 years old. Some components are out of order or were sold after independence.

2) Living Environment Aspect

Poverty caused by deterioration of the living environment resulted from declines in public services. As a result, various works and self/mutual help of the community supplement these declines. For example, people who used to use public wells have to draw surface water from some distance because wells cannot be utilized due to high operation costs of pump equipment.

According to the Survey conducted by the JICA Study Team, 29.2% and 15.7% of the respondents rely on public wells and surface water, respectively. Some 35.9% and 20.6% of poor family respondents (with incomes under 500 som per month) depend on public wells and surface water. This shows that it is difficult for poorer families to secure safe water, and their work load for drawing water is heavier. An average distance to the water resource is 0.9km, and in some cases is more than 2 km. In addition, water problems are the fourth largest concern of respondents followed by health, economic and social problems.

**Table D.9 Water Source by Family Head Income (%)**

Family Head Income (Som/month)	Tap water in the house	Private well	Public well	Spring water	Water from open source	Others
Above 2,000	62.5	12.5	12.5	0.0	12.5	0.0
1,001-2000	35.4	27.3	18.2	9.1	9.1	0.0
501-1,000	40.0	16.0	32.0	0.0	8.0	4.0
Under 500	13.0	24.0	35.9	0.0	20.6	6.5
Total	28.1	21.3	29.2	1.1	15.7	4.5

Source: Social Survey, JST

In addition to drawing water, repair works of school facilities, renovation of community halls, and inefficient agricultural works cause damage to communities and people through increased work loads.



## *(2) Problems of Social Environment*

### *1) Collapse of Systematic Social System*

A systematic social system (based on a top-down approach) was established in the Soviet era. For this system, people were not required to take initiatives and behave positively. Society had functioned and individuals had lived lives without any major problems.

After independence, however, those Soviet systems, such as collective farms and state factories, have collapsed. Therefore production, marketing and distribution systems are not functional.

As a result, at present there is an inefficient system without specialized and cooperative work. The population is facing various problems and is confused since most do not know what and how to react. Therefore people have to consider, determine and take initiatives by themselves although they have never experienced this before.

### *2) Limitation of Public Support*

Poverty is caused by internal and external factors. Internal factors are related to individual lives, such as unemployment, inefficiency of works and decreases in income. External factors are things not related to an individual life and out of personal control. These included decreased expenditures in areas such as education, medical services, and decreases in pensions, caused by declining government budgets. Poverty is caused by synergy of both internal and external factors.

People can make efforts to alleviate the poverty caused by internal factors. They, however, cannot control external factors that result from a limitation of public support due to insufficient budgets.

## *(3) Improvement of Social Environment*

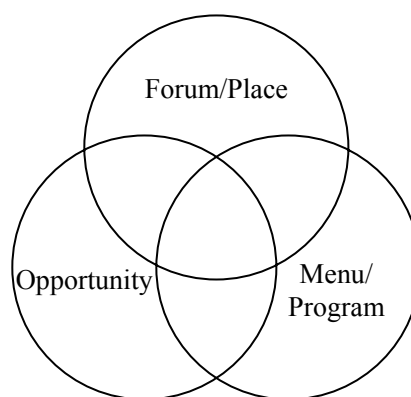
### *1) Organizing, Cooperation and Mutual Help*

The social system has shifted from a systematic and top-down system in the Soviet era to be democratized, liberalized and privatized after independence. Land tenure has been privatized and new business opportunities can arise. Various problems, however, have now appeared.

Soil fertility in collective farms had previously been sustained by crop rotation. After privatized allocation of farmland, however, soil has become poor because farmers cannot rotate crops. Farmers realize the problem and its reason but do not know how to mutually cooperate and organize or demonstrate initiative.

Thus it is important to re-establish an efficient and rational social system by promoting and organizing based on the bottom-up approach. For this purpose, it is necessary to strengthen and re-activate community social capital so that people consider and determine by themselves, act with initiative and in a voluntary manner, and cooperate mutually.

The government should encourage them. Forum/place, opportunity and menu/program are essential to encourage the organizing and community activation. Forum/place enables people to get together physically. Opportunity encourages them to meet each other. Menu/program, which provides ideas, technologies and funds, facilitates them to organize to do something.



**Community Activation Essence**

## 2) Development within self-help

Finances of not only individuals but also the state are poor. It is difficult for the people to seek support externally because the government does not have sufficient budget. Therefore, it is necessary for them to seek developments, which could be attained by people's self-help including through mutual help and organizing, such as small businesses at individual or community levels and organizing agricultural groups.

The government should reform institutional constraints so that people can access any resources needed for their self-help, and enable and encourage them to develop the region by themselves.

Once the community is re-organized and re-activated, it can construct, renovate, operate and maintain its community infrastructure through self-help. This will improve the living environment in the community and encourage economic development.

## **D.2. Social and Community Improvement Plan**

### **D.2.1 Strategy**

For the purpose of social and community improvement, social capital should be formed by the reactivation of communities and the reconstruction of the social system. Empowered communities can improve or renovate community infrastructures/facilities to the maximum extent through their own efforts and so improve the community living environment. For the purpose of poverty reduction, community organizations should be well organized and strengthened. The productivities of present agriculture production and cattle breeding will be enhanced through mutual help. Furthermore, new distribution channels and new industries related to tourism and process industries shall be developed to revitalize the local industry.

The government should support and facilitate the community to undertake their own efforts and encourage their initiatives. The government should make legislative and institutional preparations, which provide the communities with access to the necessary resources, such as information and funds, and to reduce or remove the legal and institutional obstacles presently discouraging their initiatives.

### **D.2.2 Countermeasures**

#### *(1) Reactivation of Community and Restructuring of Social System*

It is necessary to reactivate the community and restructure the social system so that the communities can improve their living environment through their own efforts. Opportunities have been lost because of privatization and nonfunctional community centers/clubs, which used to provide community events. Therefore it is important for the community to get together again and strengthen the sense of common bonds in the community members in order to reactivate the communities and restructure the social system. As a result, the community reforms the social capital and is able to discuss, determine and act.

Three factors are necessary for community empowerment. These are a place/forum, which allows community members to get together physically, an opportunity to meet and resources, such as funds, technology, facilities/equipment as a necessary menu.

#### *(2) Government as Enabler/Facilitator*

It is important that the government leaves those things the community can do by themselves to the communities, and support and facilitate them in order to encourage their initiatives. Consequently, the government can work within the limited budget.

In order to be an enabler/facilitator, the decentralization should be facilitated and the local self-governance should support and facilitate the community as a partner. In addition, the local self-governance should leave the communal properties, which were transferred to the

community in accordance with the law on communal property, to be utilized for their purpose and use through active initiatives.

The government should also encourage and facilitate the community to undertake community activities and initiate their business by reducing or removing legislative and institutional obstacles. These include strict standards and complicated administrative procedures for an application and registration.

### *(3) Nourishment of Local NGOs*

A facilitator from outside is effective for community empowerment. Local NGOs are expected to play an important role to activate communities. They will act as facilitators and will be deeply involved in the communities.

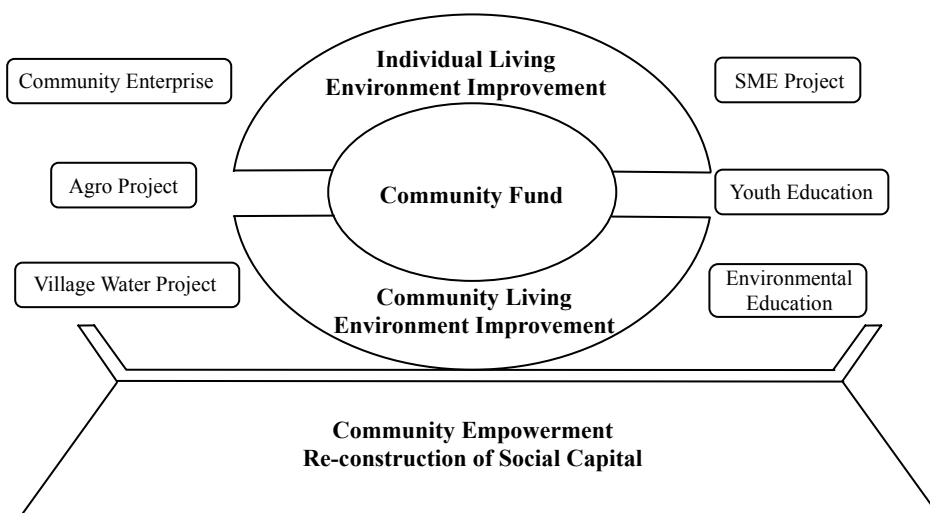
There are 306 local NGOs in Issyk-Kul Oblast according to the database collated by the local NGO (named “Leader”). This is one of the best in Issyk-Kul Oblast and supports other NGOs. However, even though there are many NGOs, only three (3) are specialized in community empowerment or social mobilization. These include the Resource Center for Old People, Shoola and Leader in Balykchy, Ton Rayon and Karakol.

### **D.2.3 Proposed Projects**

It is necessary for communities to reduce poverty and improve their living environment by reforming the collapsed social capital and system and promote community empowerment. Their income should be generated and the community living environment improved by communities and individuals through initiatives utilizing the reconstructed social capital.

The following projects are expected to be implemented to realize community empowerment based on the strategy and measures mentioned above. These projects should be implemented not on an individual project but in a comprehensive program so that they function organically and interactively. Only then will communities be empowered.

The basic concept of the program is to renovate community centers/clubs, which are the physical focal point to reform the social capital. This will provide the place/forum for communities to get together and take various actions. Community development funds, which provide micro-finance for community and individual enterprises, should be established on the basis of a community saving and outside resources. The fund accumulated from the benefit and any interest will be revolved and invested for the improvement of community infrastructures/facilities. Community business incubation centers will also be established to support the community and individual enterprises will be commenced based on the community development fund. To activate community activities, a community-networking center will be established, and a community Internet Center will be installed in each community center/club so that their experiences and information can be shared and transmitted. These projects, which are to be implemented simultaneously, can realize community empowerment.



## **Appendix      COMMUNITY EMPOWERMENT PILOT PROJECT**

### **1. Objectives**

Objectives of the pilot project are to reconstruct and activate communities aiming to verify the following:

- i) community-based improvement of their living environment
- ii) promotion of agriculture and industry by organizing
- iii) youth education and nurturing those who shoulder the future

Results of the pilot project shall be replicated in the development of Issyk-Kul zone through community reconstruction, activation of community networks and cooperation.

### **2. Methodology and Approach**

For the purpose of reconstruction and activation of communities, three essences of place/forum, opportunity, menu/program, can be considered necessary. It is considered that the community center, which is not utilized now due to a lack of proper maintenance, can provide a place/forum, where community members can meet together. The project can create an opportunity for them to meet, and provide a menu/program to start their activities.

Based on this concept, repair of the community center to again function as previously is a critical item. The community could meet each other, discuss their issues, decide on plans, and take actions.

Moreover, the community center can be utilized as a shop/kiosk for tourists. If the center is located appropriately for tourist attraction, a yurt can be built along a major road. There are only poor rest stations for tourists among the tourist roads. The concept of “Road Station,” initiated by the Ministry of Land, Infrastructure and Transportation in Japan, can be applied to the community center by installing a good quality toilet with flushing water and a septic tank and parking space so that tourists can rest. The Road Station with toilet and shop can sell souvenirs and local products to tourists.

### **3. Outline of Pilot Project**

#### *3.1 Project Area*

Two communities were selected for the project area. The selection criteria were as follows:

- The two were located in Issyk-Kul Rayon because the JICA Study focused more on Issyk-Kul Rayon for the general plan.
- One was located between Balykchy and Cholpon-Ata, as a tourism-oriented area.



## 4. Monitoring and Evaluation

### 4.1 Monitoring Results

#### (1) Community Center Repair and Toilet Construction

The community centers had been repaired and sanitary toilets constructed in both villages at the end of August by community members. Women or persons, who were not able to work, helped by serving meals or donated based on the community decisions.

The community centers were utilized for many purposes, for many times and for many community members as follows.

**Utilization of Community Centers (since September)**

	Ornok Village		Orkutu Hotur Village	
	(times)	(persons)	(times)	(persons)
- Meeting	11	71	12	53
- Training	13	145	9	87
- Discotheque	9	80	12	112
- Concert	3	216	1	200
- Holiday Event	3	350	2	250
- Elections	1*	70	1**	350
- Total	40	932	37	1,052

\*for a village head) \*\*election for the Ayil kenesh (council)

The toilets were utilized by tourists based on the Road Station (Michi no Eki) concept. User charges from the tourists were collected generating a profit for the Community Development Fund (as described later). The utilization of the toilets is shown in the table below.

**Utilization of Toilet**

	Ornok Village	Orkutu Hotur Village
Number of Users (person)	100	5
Income (som)	300	15
Expense (som)	78	0
Profit (som)	222	15

#### (2) Yurta Shop

Yurta shops were established along the lake ring road in each village as souvenir shops. They were built in July and have fully operated since early August. Goods for sale are handicrafts (felt product), herb, dried fruit, honey, jam and dairy product. These were produced by women's groups of the community members. Handicraft training was provided to give attractive design patterns for foreign tourists and to make felt material from original sheep wool with dyeing. Training in packaging, bottling and labeling was also provided. The packaging was herbs, dried fruits and dairy products in a plastic package using sealing equipment. Small bottles with caps were provided for honey, home made jam and dairy products (butter). Labels in Russian and English to explain the products, such as herb effectiveness, were put on the bottles and packages. Many tourists stopped there and bought the products. Some profits were gained and saved for the community development fund. The results of the shops are shown below.



**Sales Results of Yurta Shop**

	Ornok Village	Orkutu Hotur Village
<b>1. Sales (som)</b>		
- Sales Amount	27,750	30,960
- Material Cost	1,650	1,460
- Salary	18,000	22,000
- Profit	8,100	7,500
<b>2. Number of Tourists (person)</b>		
- to visit	182	115
- to buy herb	21	17
- to buy souvenir	83	25
- to buy local product	52	43

*(3) Youth Nourishment*

It is difficult for young people to have spare time because they are busy doing seasonal work in the tourism and agriculture sectors in summer and autumn. Youth training was provided from October after harvest. As a result, a youth debate clubs was established to discuss various issues in the village. Also the youth members organized and held a discotheque in the community center every weekend. The discotheque is only a social entertainment differing from Japanese types.

*(4) Community Development Fund*

Community Development Fund (CDF) was devised for community development and starting new community businesses, al though it was not planned at the beginning of the Project. The CDF in each village was established on a trial basis.

The revenue of the CDF is from the profit of Yurta shop, a user charge of the community center and a user charge for toilets. The community invited a professional singer from Bishkek and held a concert and collected a user charge for use of the community center based on sale of tickets. The amounts of CDFs were 11,000 som (Ornok) and 8,040 som (Orukut-Hotur), respectively, as shown below. The governmental budgets of Oblast, Rayon, Ayil Okmotu are practically zero for physical improvement (community infrastructure) and were almost entirely used for staff salaries.

**Community Development Fund (som)**

	Ornok Village	Orkutu Hotur Village
Income from Yurta shop	8,100	7,500
Income from community center rental	950	525
Income from toilet	222	15
Others	11,000 (donation)	0
<b>Total</b>	<b>20,272</b>	<b>8,040</b>

**Governmental Budget for Physical Improvement in Villages (2003) (som)**

	Ornok Village	Orkutu Hotur Village
Oblast Administration	0	0
Rayon Administration	30,000 for school repair	0
Ayil Okumotu	0	0

(5) Training

Training to facilitate community participation based on their needs was provided as shown in the table below.

	Ornok Village		Orkutu Hotur Village	
	(days)	(persons)	(days)	(persons)
- Yurta business design	4	36	4	40
- Agriculture	2	22	2	20
- PCA	3	22	3	25
- English for tourists	5	36	5	28
- Service for tourists workshop	1	6	1	8
Youth leadership	1	30	1	19
Women leadership	1	21	1	20
Business planning	2	13	2	14
Total	19	186	19	174

(6) Meeting

There had been only once or twice yearly meetings before the Project. There were about 20 meetings in the project period.

Meeting Performance

	Ornok Village		Orkutu Hotur Village	
	(times)	(persons)	(times)	(persons)
- General meeting	2	142	3	105
- Community center repair work plan	2	86	1	92
- Yurta business plan	4	66	3	43
- Community Development Fund	3	95	2	66
- Accountant	2	71	2	92
- Repair work management and supervision	2	36	2	13
- Community needs assessment	1	72	1	31
- Joint monitoring and evaluation	3	120	3	14
- Joint elaboration on drafting regulatory documents	3		2	
- CAP	3	48	3	71
Total	22	142 *	19	105*
Before project ( per year)	1	80	2	60

\*Total number of people who attended meetings. this mark \* means general numbers of people who attended meetings.

(7) Community Action Plan

Community Action Plans were made for further action. Some parts of the plans have already been carried out or are being implemented. The plans include Yurta shop plan for the next season (expansion, improvement of surrounding area, produce, promotion/publicity, delivery to sanatorium, etc.), interior upgrading in the community center, improvement of school and road, forestations, etc. The communities have already gained agreements with bus companies and tourist agencies, where they will stop for a rest at the Yurta shop.

Detailed action plans for both pilot project villages are summarized in the following table.

**Action Plans of Ornok Village**

Goal	Actions on solving problems	Ideas for success	Effects (target)	Schedule	Resources	
					Necessary resources	Source
<p>1. Organization of tourist service business.</p> <p>1) Set up a yurt camp (cafe, shop)</p> <p>2) Collection of tourists by contract with the bus tour firms,</p> <p>3) Preparation of local production</p> <p>4) Development picnic field on the road of Alma-Ata – Cholpon-Ata</p>	<p>1. Systematic work of yurt committee</p> <p>2. Fund raising</p> <p>3. Work processes for 1)</p> <p>Make an agreement with yurt owners in the village</p> <p>Set up a yurt camp and make a schedule of security and sale</p> <p>For 2)</p> <p>Preparation and sorting of fruit</p> <p>Tare preparation (big jars)</p> <p>Jar canning</p> <p>Storage of production for souvenirs</p> <p>Organize sowing of souvenirs</p> <p>For 3)</p> <p>Organize correspondence with PU “Chernobylitsy Nookata in 21<sup>st</sup> century” and other organizations that have experience in fruit purchase and fruit sale</p> <p>Make contracts about partnership for delivery and transportation</p> <p>For 4)</p> <p>Prepare yurts for picnic tourist reception</p> <p>Contracts with tourist firms for the development of picnic program and visiting on Ornok village</p>	<p>- monthly meetings of the yurt committee</p> <p>- a list of sponsors, negotiations</p> <p>- possibly there will be marathon</p>	<p>182 tourists in 2004</p> <p>500 tourists in 2005</p>	<p>Before October, 2005</p>	<p>Training of about 70 community people</p> <p>- the most standard club</p> <p>- modern restroom</p> <p>- yurt</p>	<p>Budget of ayil okmotu</p> <p>Hedge</p> <p>greening,</p> <p>Kiosk</p> <p>Stairs</p> <p>parking lot</p>
<p>2. Running water. Clean drinking water provision</p> <p>Population health improvement.</p> <p>3. Road state improvement. Pot hole repair in the village</p> <p>4. Wool cleaning</p>	<p>1. Make calculations</p> <p>2. Money collection</p> <p>3. Election of water committee</p> <p>4. Dig a hole (circulation)</p> <p>1. Hold meeting of residents on each street.</p> <p>2. Distribute work</p> <p>3. Mobilize population and tools</p> <p>4. Repair work</p> <p>1. Meetings of district inspector’s committees</p>	<p>World bank program «Taza Suu»</p> <p>Competition with bonus among streets</p> <p>Project development</p>	<p>There is 100% drinking water on the streets</p> <p>Improvement of roads; 90% are destroyed now; at the end of the project – 20%</p> <p>The workshop</p>	<p>January 2005 – January 2006</p> <p>1 quarter of 2005</p> <p>21 of March, Nooruz – summing up</p> <p>Till the ends of</p>	<p>Place for running water system, 5% money collection</p> <p>Community participation, machines, tools, building waste</p> <p>Taught people</p>	<p>US\$ 5000 World Bank</p> <p>Local population</p> <p>For the purchase</p>

Goal	Actions on solving problems	Ideas for success	Effects (target)	Schedule	Resources	
					Necessary resources	Source
workshop	2. Work schedule		works in Ornok village, increase of the community fund	2005		US\$ 1600
5. Computer class and further increase of the community fund	1. Calculation 2. Search by different ways 3. Space in school 4. Obtain quartz communication service	Search for sponsors; among the local residents as well	Computer class is working and in perspective – internet class for 300 people	2005 September (computer class) – 2010 internet class	4 computers; 1 teacher  3 computers	- there are some computers in the school and it is needed to start using them in a computer class - sponsors
6. Camping for tourists on the shore next to the community center	1. Development of business-plan 2. Legitimacy 3. making of the project and calculation documentation 4. Affirmation of the project and agreement with the population 5. Creation of a firm of local residents and with determination of contributions 6. Construction 7. Start	Creation of a firm with determination of contributions		till July 2007	Labor resources - Land - Readiness of Ayil Okmotu to provide ownership of land for potential investors and agreement of the community	Community
7. Setting up a camp for tourists on the shore	1. Give the plot of land having the agreement from community to the appointed group 2. Development of the project and calculation and presentation at the general meeting in the village 3. Organize money collection 4. Have a lawyer, possibly, for determining of contributions 5. Development of the marketing plan 6. Start construction 7. Make a memorandum about obligation of adding money to the community fund 8. Have the camp start working	Create a firm of interested residents with their contributions and mobilize private resources	Improve attractiveness of Ornok village for tourists, and increase number of tourists' visits	Till 2010	- Land - Readiness of Ayil Okmotu to provide ownership of land for potential investors and agreement of the community - Project and calculation from the rayon architecture	Ayil - Okmotu The rayon architecture  Initiative group which is responsible for the project
8. Construction of greenhouse for growing flowers the whole year round and greens	1. Get technology of the Korean firm working on the territory of the sanatorium "Chaika" 2. Presentation of the resources for the construction by Mr. T. Joldoshev 3. Development of the project and calculation	Opening of the enterprise on the basis of lawyer's consultations	Improve attractiveness of Ornok village for tourists, and increase number of	2008	Technology Source Projection and calculation documentation	Korean firm agreement Businessman Joldoshev the Rayon architecture

Goal	Actions on solving problems	Ideas for success	Effects (target)	Schedule	Resources	
					Necessary resources	Source
for sanatorium	documentation 4. Construction start		tourists' visits			Community and initiative group under command of Joldoshev
9. Sports complex	1. Reconstruction and repair of the old post office 2. Get sports equipment 3. Create groups according to kinds of sport 4. Schedule of work days 5. Equip sports ground by efforts of parents, coaches, and sports participants	Repair and organize work of the community and initiative groups, and use of local budget money and resources for purchasing of sports equipment	Support and activation of the youth, and satisfaction of their interests	2006	Labor, tools and building material	Population Local budget, resources of the deputies (connections)
10. Reconstruction of public bath	1. Reconstruction and repair of the old banay (bath) 2. Get equipment, furniture and detergents, 3. Have the public bath start working	Repair and organize work of the community and initiative groups	Sanitary and health improvement of community	2007	Building Labor, tools Equipment, Furniture	Ayil okmotu Community Local budget

**Action Plans of Orkutu Hotur Village**

Plan	Action	Ideas for success	Expected Effect	Schedule	Detailed Plan		Remarks
					Necessary input	Expected Resource	
1. Income generation of young poor families through animal community fund	1. A list of poor families 2. Animal purchase 3. Meeting/ distribution 4. Talk to rich people	Animal community fund is formed by 3 cows + 1 sheep	4 families will be yearly helped.	Spring 2005 -2006	Cows and sheep	Community creates the animal fund	
2. Community will be lightened from heavy work in land cultivation by purchase of a tractor	Purchase of tractors and agricultural machines	Donors, money collection in the village (donation)	Timely seed sowing and harvesting	Year round	4285\$ (agricultural machines and equipment)	52,718\$ (project cost) Search for donors	Not less than 244\$ will benefit the community fund
3. Increase of souvenir sales	1. Preparation of material for making souvenirs 2. Organize sewing of souvenirs	Felt goods; a room near the Gynecology office	Increase of community fund – not less than	Season work	5 sewing machines, 1 serger (a machine that wraps thread	Women from the initiative group to provide machine	

Plan	Action	Ideas for success	Expected Effect	Schedule	Detailed Plan		Remarks
					Necessary input	Expected Resource	
4. Setting up a mini-mill. Wheat processing for local people and near villages	- - Equipment purchase - Building construction - Organize budget hearings and include the ayil okmotu budget in the purchase of necessary equipment - Collection of additional resources from the people - Opening of working places - Seed cleaning - Making smaller grain waste for animal food	- Search for a donor - government	US\$12 a month.  Reduction of unemployed and creation of working places	Year round	around edges of fabric) and iron Labor contribution, money contribution, donation	Community farmers ayil okmotu budget	US\$ 245 a year to the community fund
5. External repair of school/heating	- Write a list of work - Clarify calculation - Meeting for responsibility allocation	Mercy Corps/ Healthy communities / Parents donation	140 children Project will aid the children be healthy	Summer 2005	Labor resources Building material purchase	Population Budget of ayil keneshe (village council)	
6. Woodworking industry. Aid to new families	- Equipment purchase - Increase of the community fund - Making souvenirs from wood and sale to tourist	Collect money from women's initiative group and borrow part of the money from the community fund	Working places; Adding money to the community fund	2005-2006	Financial resources for the purchase of wool cleaning machine	Donations of the community and initiative group and borrowing the money from the community fund	44\$ a year - adding to the community fund
7. Repair of running water system (clean water)	1. Make calculations 2. Money collection 3. Election of water committee 4. Dig a hole	World bank program «Taza Suu»	100% drinking water supply	January 2005 – January 2006	Repair of running water system money collection	- program of the World Bank «Taza Suu» -Community participation	
8. Banyas/sauna	Reconstruction and repair of the old banay (bath) Get equipment, furniture and detergents,	Repair and organizing work of community and initiative groups, Use of local budget and resources for purchase of equipment, detergents, and furniture	Sanitary improvement and health improvement of the community	2007	Building, labor, tools, equipment, furniture	Ayil okmotu Community	

Plan	Action	Ideas for success	Expected Effect	Schedule	Detailed Plan		Remarks
					Necessary input	Expected Resource	
9. Bird house and fish hatchery (business)	Get technology from the Israel program MASHAV Make a contract with the program MASHAV Make calculations Legalize water and land plots Start the business	Cooperation with the program MASHAV	Adding money to the community fund, creating work places	2006	Technologies Labor contribution Building material	MASHAV Community Ayil okmotu	

## *4.2 Evaluation by Work Items*

### *(1) Works of Repair and Construction*

It was confirmed the communities can repair and construct buildings or community infrastructure by community participation. The women and other members, who cannot work as laborers, can support the works by serving meals or donations. Such direct and indirect participation of the community are estimated to improve community infrastructures/facilities by a community participatory approach.

### *(2) Yurta Shop*

The Yurta shops could make profits even under poor conditions, time constraint and low recognition. Much more profit can be achieved if more tourists visit there through promotion and publicity in the next season.

It was confirmed that the ladies in the community could make more competitive and better quality products by applying the design patterns to which foreign tourists are attracted because the handicraft skills are already with them (tradition). Therefore handicraft products are effective and efficient as community products.

In addition, it is confirmed that simple techniques, such as packaging, bottling and labeling, could make local products attractive, competitive and a quality souvenir. Product developments utilizing local materials are possible without cash investment; herbs grow naturally in the mountain; fruits are cultivated in a home garden; livestock produces wool as a felt material and dairy products. These can be utilized as souvenirs. More understanding and penetration of the services concept and upgrading of the souvenir quality are needed. They do not know to treat tourists and the quality of souvenirs has not yet matured.

Yurta shop was a first experience for the community members to operate a business themselves, especially for ladies. The ladies had a lot of great experiences, gained in self-confidences and were proud.

### *(3) Youth Nourishment*

Actions are now being taken just after the busy summer and harvest season. Self-actions of the youth were confirmed, such as organizing the debate club and discotheque themselves. It is important to develop their activities into a business and community contribution.

### *(4) Community Development Fund*

The community has had no other choice but to rely on donor's support as the government cannot afford to support them. In this connection, the community development fund is significant as the community can use it for their activities and community improvement can be



based on their own decisions without any interference. It is necessary to establish a sustainable fund management system, which can be utilized for community improvement and investing in community businesses.

#### *(5) Meeting*

Actual achievements of the many meetings are significant in terms of community activation and social capital construction, as there had been few meetings previously. The project could achieve such success by physically providing a community center to have meetings, and opportunities for technical and financial support through training. The communities evaluated that they have changed their minds, can now express their opinions, discuss with each other and determine outcomes by themselves even though the actual meetings were formal.

### *4.3 Evaluation by DAC Five Items*

#### *(1) Relevance*

The project is considered to be relevant in terms of community needs, a mechanism of community empowerment, utilization of local material for souvenirs, and a mechanism of community infrastructure improvement. Repairs of community centers matched their needs. The community center encouraged community members to take their own actions by providing a place to meet, discuss and decide. The local materials could be used to produce souvenirs easily. The community development fund can improve community infrastructure without any dependence on others.

#### *(2) Effectiveness*

The project is considered to be effective in terms of physical improvement of the community center, income generation and benefit of the community development fund from Yurta shop. In terms of income generation, it was not as effective at the end of the Project because not many tourists visited the Yurta shop due to time constraints and low recognition. But it is obvious that the Yurta shop will be much more profitable if more tourists visit. The communities have made agreements with bus companies and tourist agencies that they stop at the Yurta shop to rest. A coach will bring many tourists and they will ensure greater profits. The communities are now negotiating with sanatoriums to purchase jam and other items from the Yurta shop. Therefore it will be more effective if more members participate and more promotion and publicity undertaken.

#### *(3) Efficiency*

Most of the project cost was used for purchase of material for the community center. Market products and imported goods are very expensive in this country. The labor forces were provided by the communities. Therefore the Project cost was minimized and the Project is cost efficient.

In terms of schedule, it was very efficient. The communities repaired the centers for two months, and established the Yurta shop. Poor effects were, however, observed due to time inefficiencies. The community center repair and Yurta shop were decided at the beginning through the community discussions and agreements. As a result, some members feel the Project to be a gift from the donor without project ownership.

#### *(4) Impact*

Through participatory evaluation by the communities, they became more tied through project activities such as cooperative works and discussions. As a result the communities have been activated and social capital has been built. In the Soviet period, they were used to following orders without discussion but now can express their own opinion, discuss issues, and can participate in the decision-making process.

Conflicts did occur as people expressed opposing opinions. They will be able to solve these if the social capital is matured completely. Until then, an external facilitator is necessary to intervene and mediate as a catalyst. In this connection, the local NGO as Kyrgyz people and the JICA Study Team as a foreigner were useful.

A relation between men and women has been changing in terms of gender. Many women participated in the Project. They had experiences with business and earned money. As a result, they feel self-confident. They can express opinions to husbands at home. The husbands feel that wives have become impudent from the traditional sense of male chauvinism. Therefore new conflicts have appeared. But these can be considered as a welcome phenomenon. It is a temporary side-effect and necessary process to the gender equality society.

Their initiatives could be observed as changes. The community center involved in the Yurta shop feel they need English skills to communicate with foreign tourists otherwise they cannot promote. English training was provided by the Project based on their needs and decision. In addition, agricultural training was also provided.

#### *(5) Sustainability*

It is difficult to judge sustainability of the pilot project. The community became more tied; they have changed and are in the process of implementing their actions based on their decisions. When they take actions, financial support might be a constraint. Therefore one of the key points of sustainability is a successful operation of the community development fund based on the benefit from the community business including Yurta shop.

Another key point is the level of empowerment. Some people are still dependent and are used to being dictated to as in the Soviet period. After the Soviet collapse, they have become used to demanding everything from the government or donors rather than solve problems themselves.

However, as shown in the action plans developed by the pilot project community, especially Ornok Village, they have realistic plans with little dependence on donor assistance. This is the outcome of the pilot project, and reflects the importance of self-help activity despite government/donor assistance.

**SECTOR E**

**INVESTMENT PROMOTION  
AND  
FINANCIAL SECTOR ISSUES**

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## E. INVESTMENT PROMOTION AND FINANCIAL SECTOR ISSUES

This Sector Paper looks at the issues of private sector development. Given the constraints on the fiscal position of the government, significant growth of private investment is necessary in order for overall investment of the country to grow. There will be even more increased expectation toward foreign direct investment (FDI). At the same time, domestic investment needs to grow. Development of micro, small and medium enterprises will be particularly important in view of its impacts on poverty reduction. This paper comprises two parts. Part I gives an overview of situations surrounding FDI, reviews impediments to investment that are faced by both foreign and domestic firms, and identifies specific measures that can be implemented geared towards the development of Issyk-Kul. Part II reviews the financial system of the country, particularly the banking sector, and identifies additional areas of support that would be required from development partners for sustainable development of the financial sector.

### E.1 Investment Promotion

#### E.1.1 Macroeconomic Situation

Independence in 1991 was followed by a sharp decline in GDP, especially industry, which was brought about by a sharp reduction in resources for investment and production. Since 1996, gradual growth began related largely to agriculture, gold mining and energy. Table E.1 summarizes the basic facts of GDP and sector performance.

**Table E.1 The Trend of GDP from 1990 to 2002**

	1990	1995	1998	1999	2000	2001	2002	Annual growth rate	
								1990-1995	1995-2002
<b>GDP at Constant 1990 Factor cost (million soms)</b>									
GDP	41.7	21.1	25.4	26.3	27.8	29.3	29.1	-12.7%	-3.0%
Agriculture	14.0	10.1	13.4	14.5	15.0	16.0	16.6	-6.3%	1.4%
Industry	14.6	4.3	5.4	5.4	5.7	6.1	5.3	-18.3%	-8.1%
Services	13.1	12.2	12.7	12.5	13.7	14.3	13.4	-1.4%	0.2%
<b>Growth of Output annual change (%)</b>									
GDP		-5.2	2.0	3.8	5.6	5.3	-0.7		
Agriculture		-1.9	2.3	8.2	3.4	6.7	3.8		
Industry		-10.4	0.0	0.0	5.6	7.0	-13.1		
Service		-6.9	1.5	-3.0	10.9	1.4	0.0		
<b>Population</b>	4.34	4.62	4.81	4.9	4.91	4.95	4.98	(million persons)	

Source: ADB : Key Indicators of Developing Asian and Pacific Countries

The macroeconomic projection indicators of the National Poverty Reduction Strategy were reviewed at the mid-term as shown in Table E.2. With a gradual decrease in public investment, private investment will have to fill the gap. Foreign direct investment is expected to play a large role, yet the investment climate and cooperation with neighboring countries need to be improved. The share of net exports of GDP will also be improved provided exports will

continue to grow. This projection was based not only on the assumption of the growth of gold production, but also of diversification on export positions. The most favored nation status needs to be fully utilized for increasing export goods. Simultaneously, the Republic needs to intensify the cooperation with newly emerged partners such as China, Turkey, Germany, and India as well as the Slavic countries.

Issyk-Kul oblast has the Kumtor gold mining company, which accounted for nearly 40 percent of total industrial output and 50 percent of exports of the Republic in 1998. Thus, the economic indicator of the oblast shows distinct feature among the oblasts. Despite the fact that the output of Kumtor has been 30 percent less than that of the previous year due to the accident in 2002, the share of the value added on Kumtor is still fairly large in Issyk-Kul oblast. With Kumtor output, the Gross Regional Outputs per capita in Issyk-Kul Oblast are approximately 25% more than without it. Given that the Kumtor gold mining production is expected to decrease, the production output of the industry will be expected to decrease accordingly. Other sectors such as tourism and agro-based industry need to play a significant role for accelerating the output growth of the region.

Table E.2 Medium-term Budget Framework Figures, 2005-2007

	2003	2004	2005	2006	2007
	Actual	Expected		Forecasted	
Nominal GDP, bln. Soms	83.4	91.8	100.5	110.5	121.47
Real GDP growth rate, %	6.7	4	4.5	5.3	5.2
GDP composition, %					
Private consumption	68.3	69	68.5	67.4	66
Government consumption	17.5	17.9	17.7	17.7	17.1
Gross investments	18	18.1	19.8	20.3	20.6
Public investment	5.3	3.9	3.5	3.1	3.2
PIP (external funding)	4.4	3.5	3.2	2.9	2.8
Private investment	12.7	14.2	16.3	17.2	17.4
Net export	-0.3	-5.2	-6.1	-5.4	-3.7
Export of goods and services	36.7	37.4	36.3	35.3	35.2
Import of goods and services	37	42.6	42.4	40.7	38.9
Rates of production growth by industries, %					
Agriculture	3.8	4.2	4.6	4.6	4.4
Industry	-17.4	0.1	0	5.3	5.8
Construction	-6.8	6	7	7	8
Services	6	5.6	6.2	5.9	5.9
Inflation rate, CPI, %	5.6	3.8	4	4	4
Public foreign debt, % of GDP	93.1	85.1	82.6	79.3	74
Poverty level, %	40.8	38.6	36	32.9	30.2
Consolidated state budget deficit, % of GDP	5	4.4	4	3.2	2.9
Quasi-fiscal deficit in electric power, % of GDP	10.4	9.2	7.7	6.2	4.8

Source : NPRS Progress Report for 2003

### E.1.2 The current situation of FDI

Given the low saving rate as a result of high underemployment and low purchasing power, and the limited capacity of domestic financial institutions, the domestic investment is still stagnant. Government spending has declined slightly and cannot increase without a higher tax

collection. Export volume has not increased sufficiently and the export items have not yet diversified and remain heavily dependent on gold and electricity. In order to improve the income of the people, an increase of foreign direct investment (FDI) is essential. Various efforts have been undertaken for attracting FDI, and the inflow has been relatively steady in the past several years at the level of approximately 100 million USD per year.

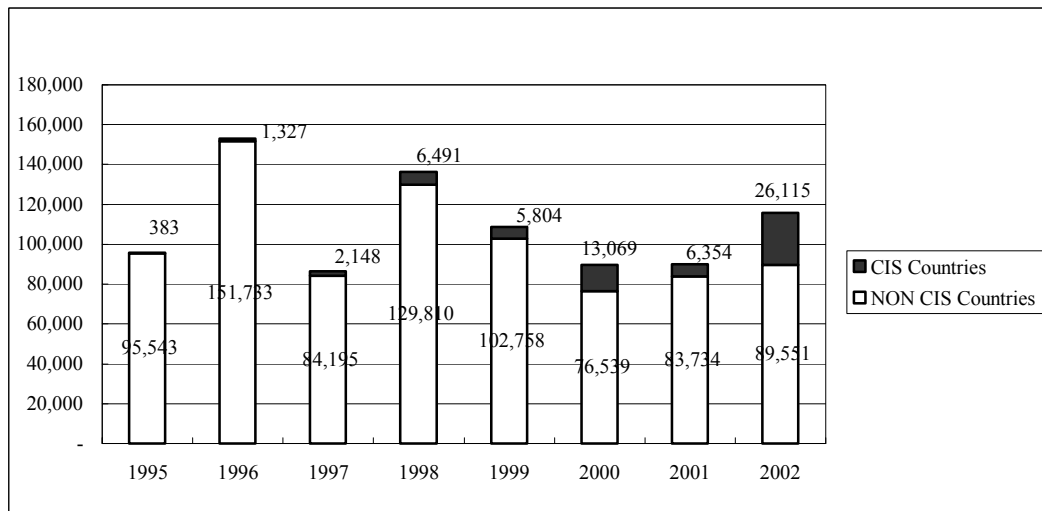


Figure E.1 FDI by CIS Countries and Non CIS Countries from 1995 to 2002 in Thousand USD in Kyrgyz Republic

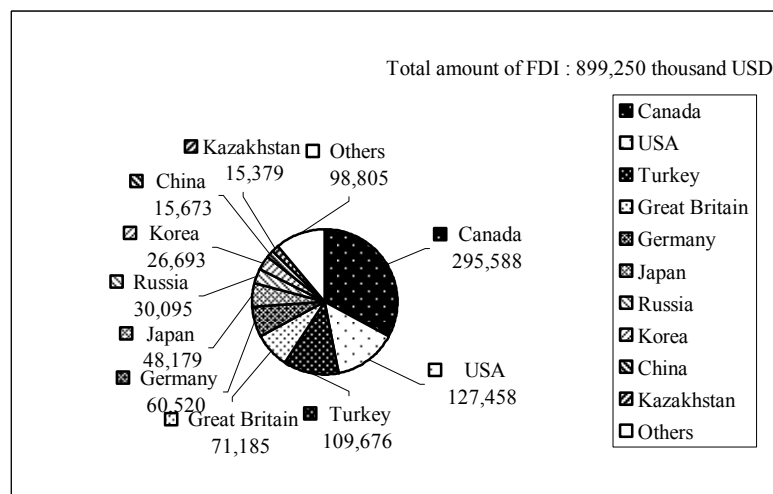


Figure E.2 Cumulative Amount of the FDI from 1995 to 2002 in Thousand USD by Countries in Kyrgyz Republic

The total FDI during 1995-2002, based on the official data of GOK, is shown in Figures E.1 and E.2 and Table E.3. Out of 518 million USD in industry, Kumtor gold mine related investment accounts for approximately 60%, mainly invested from Canada. Thus, Canada features distinctively in the FDI statistics. Main investment originates from Canada, followed

by US, Turkey and EU countries. The gradual economic recovery of Russia and the region also contributes to the recent increase of the FDI from CIS countries. The four major sectors, namely, mining, energy, tourism and agriculture are considered to have potential for further investment.

**Table E.3 Flow of FDI by Sectors of Economy in 1995-2002 in Kyrgyz Republic**  
( in thousand USD)

Sector	FDI	Share
Industry	518,168	59.2%
Commerce and public catering	115,244	13.2%
Procurement organizations	60,994	7.0%
Construction	46,186	5.3%
Geology, geodesy & hydrometeorology	32,050	3.7%
Public utilities	21,452	2.5%
Finance, credits, insurance & pension services	21,128	2.4%
IT services	13,735	1.6%
Communication	11,415	1.3%
Healthcare, physical training & social protection	10,145	1.2%
Others	25,039	2.9%
Total	875,555	100.0%

### E.1.3 Problems identified regarding FDI statistics

FDI is defined as the category of international investment that reflects the objective of a resident entity in one economy obtaining a lasting interest in an enterprise resident in another country. The official statistics on FDI have been compiled by NSC through disseminating the questionnaires to existing entities and collecting them. The data are compiled in accordance with the IMF guideline. However, detailed data are not widely shared with stakeholders including government decision makers. Thus, the statistics are not fully utilized for analyzing past investment activities and formulating policies for attracting further investment. In addition, detailed information by Oblast is difficult to obtain due to limited data compilation and information sharing system within the Oblast.

### E.1.4 FDI inflow into the Issyk-Kul Oblast

The share of FDI inflow into the Issyk-Kul Oblast is currently several percent of the whole nation (Table E.4). Due to the difficulty of obtaining detailed investment statistics for the past years, the volume of investment by sector cannot be verified. According to the detailed statistics on FDI of Issyk-Kul Oblast in 2003, one can conclude that the investment is significantly small beside the investment related to the Kumtor mining project. The number of foreign investment projects in the past is considered to be fairly small despite the availability of the tourism resources and the Free Economic Zone in Karakol.



**Table E.4 The Share of FDI in the Issyk-Kul Oblast in Thousand USD**

Year	1999	2000	2002
Total	108562.1	89607.9	115666.1
Batken oblast	33.8	3558.3	253.5
Djalal-Abad oblast	9412	13532.8	6641.2
Issyk-Kul oblast	4474.1	5969.3	8105.2
Naryn oblast	1349	150.2	1060.9
Osh oblast	22115.1	15302	13153.5
Talas oblast	-	-	12.1
Chui oblast	4379.5	3871.4	9640.1
Bishkek city	66798.6	47223.9	76799.6
Share of the Issyk-kul	4.12%	6.66%	7.01%

Source of all figures and tables up to Table F.4 : NSC

**Table E.5 Structure of FDI in Issyk-Kul Oblast 2003 by Sector and Country of Origin (in Thousand USD)**

FDI by country		FDI by industry	
Total Direct Investments	28,667.57	Total Direct Investments	28,667.57
Kazakhstan	3.43	<b>Mining</b>	3,294.94
Russian Federation	2,031.33	Canada	3,294.94
Great Britain	86.76	<b>Processing Industry</b>	23,253.73
Canada	26,383.42	Kazakhstan	2.50
China	99.01	Great Britain	0.12
South Korea	50.00	Canada	23,088.48
Turkey	10.30	China	99.01
Switzerland	3.32	South Korea	50.00
		Turkey	10.30
		Switzerland	3.32
		<b>Food Products, including Drinks &amp; Tabaco</b>	
		South Korea	50.00
		<b>Textiles</b>	
		Great Britain	0.12
		Turkey	10.30
		<b>Textiles &amp; Leather Based Products</b>	
		China	99.01
		<b>Paper &amp; Publishing</b>	
		Switzerland	3.32
		<b>Rubber &amp; Plastic Production</b>	
		Kazakhstan	2.50
		<b>Production &amp; Distribution of Gas, Hot Water &amp; Electricity</b>	
		Russian Federation	2.57
		<b>Hotels &amp; Restaraunts</b>	
		Kazakhstan	0.93
		<b>Transportation &amp; Communicati</b>	288.04
		Russian Federation	201.39
		Great Britain	86.65
		<b>Real Estate Operations &amp; Services</b>	
		Russian Federation	1,827.37

Source: Original sources is from NSC and compiled by JST

### **E.1.5 The existing legal and institutional frameworks for FDI**

The Law on Foreign Investment was adopted in 1998 in accordance with the requirements of the World Trade Organization (WTO), to which the Kyrgyz Republic acceded in the same year. The Law (with the latest amendment in 2003) ensures national treatment of foreign investors and provides guarantees and requirements of international standards such as guarantees of protection from expropriation and guarantees for the free use of investment incomes.

The increase in FDI, however, has not been significant as described above. In a survey recently conducted by UNIDO<sup>1</sup>, 75% of the foreign investors responded that they have been experiencing performance below or well below expectations. It revealed that 90% of the respondents considered regulatory factors were impeding investment performance, while 70% attributed poor performance to market conditions. Over 90% of those surveyed said that there are too many regulations for business in the country and many of them do not provide sufficient clarity and consistency. Also, corruption was raised as a very serious issue. The regulatory barriers, or inadequacy of the regulatory system, as well as corruption of government officials are issues faced not only by foreign investors but also by domestic investors. In other words, the issue of reforming laws, regulations and institutions to promote FDI boils down to the issue of reforming the same for promoting private investment, whether foreign or domestic.

#### *(1) Investment Round Table*

Investment Round Table (IRT), formerly called FDI Secretariat, was established in the wake of the first Investment Summit in 2001 and is a forum of top government officials, representatives of the private sector (both domestic and foreign), and the international donor community to identify investment-related barriers and to provide directions for solving them. The IRT itself is a not-for-profit organization, staffed with international and national experts. At the same time it is headed by Vice-Prime Minister and thus has both flexibility to involve the private sector and the necessary political and institutional clout. It provides a unique mechanism of reviewing and developing policies through joint efforts of public and private sector representatives. Activities of the IRT are based on Matrices, which list issues and tasks to be dealt with in the specified time frames. Details of the works are undertaken by different working groups, supported by groups of experts and advisors, on different subject matters.

The latest Matrix, Matrix IV, agreed upon during the Investment Summit in 2003, has two components: deregulation and stimulating investment and investment marketing. Agendas under the first component include reviewing and reforming the state organs' inspection of businesses, the system of technical regulations, the rules and procedures for issuing licenses and permits, and the system of payments related to conducting business. For example, draft

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<sup>1</sup> Kyrgyzstan/UNIDO Investor Survey: October – December 2002, Presentation and Analysis of Results by Jim Bourke (17 December 2002).

laws on “licensing” and on “procedures of conducting control activities by the authorized control and oversight bodies” have been developed during 2003-2004 by the IRT working and expert groups and are to be submitted to the President, who will then submit the bills to the Parliament. The Matrix, in addition, aims at addressing issues with regard to financial system, bankruptcy, land use and allocation, tax legislation, judicial system and various aspects of public administration. In fact, the IRT, with the support of international donors, provides a mechanism to coordinate the government and private sector to deal with the whole range of governance issues, which will lead to the promotion of private investment. While such a quasi-governmental approach to policy making will eventually have to be replaced by more formal, government-led policy making, the IRT offers an effective avenue to address the needs of the transitional nature of economy and governance in the country.

The IRT has been addressing issues at the sub-national level as well. As part of the activities under the Matrix III (2002-2003), the IRT identified a total of 110 regulations issued by local state administration bodies, imposing licensing and permit requirements, which are outside the scope of their authorities. These “extra” regulations were subsequently removed with the involvement of the Public Prosecutor’s Office. The IRT expects that there are more of such regulations hidden at Oblast and Rayon levels.

## *(2) Investment Promotion Center*

While foreign investors are guaranteed of national treatment, they normally require assistance in understanding the local market, identifying relevant laws and regulations, and cultivating contacts. The Law on Foreign Investment provides for the creation of a governmental organ to facilitate the attraction, realization, development and protection of foreign investment (Article 10). Investment Promotion Center (IPC) of the State Committee of State Property and Direct Investments was created toward this end. Based on a Presidential Decree of February 2004, the functions of the IPC have recently been transferred to the Department of Investment Policy and Entrepreneurship of the Ministry of Economic Development, Industry and Trade (MEDIT).

The IPC provides to foreign investors a packet on i) basic information about the country and the regions and ii) legislative requirements by collating excerpts of relevant laws including the Law on Foreign Investment, the Tax Code, Labor Code, FEZ Law, Company Registration Law, Licensing Law, among others. The information is available only in Russian. It also offers a full time service of a staff member to a foreign investor with an investment intention of USD 1 million or more. The staff member will accompany the investor to visit the concerned government offices to clear necessary procedures. A government regulation requires other government bodies to provide support to the IPC and foreign investors. If any problem is encountered during the process, the IPC raises it to the attention of the IRT.

The existing budget of the IPC is not sufficient to fulfill the required tasks. For example, basic information on specific requirements and procedures to establish a business are not readily available. A folder containing comprehensive information as to the government organs, the

relevant departments and contact numbers, the requirements for certificates, licenses or permits, the procedures for obtaining them (including the required time), and the relevant laws and regulations would be highly useful and reduce transactional costs of investors. Many aspects, however, are beyond the control of the IPC. The laws, regulations and institutions with regard to the functioning of different government bodies involved in investment and business need to be revised. These are being addressed one by one by the mechanisms of the IRT as illustrated above. Also, seven other governmental bodies are said to be claiming to be a “One Stop Shop” for foreign investors. The recent transfer of the IPC into the MEDIT is expected to resolve such a confusing situation, with the MEDIT taking a lead role in assisting investors with consistent information and advice as part of its mandate to promote industry and economic development.

In order to improve the quality of service offered to investors, the creation of an Investment Promotion Agency (IPA) is currently under consideration by the government. The IPA will be independent from the government to the extent feasible and will provide advisory services, introduction of and match-making with local partners, and other functions in exchange for fees for the services that go beyond the basic mandate of the government. The establishment of the IPA depends on availability of funding and necessary technical assistance from international donors.

### *(3) Free Economic Zone (FEZ)*

Free Economic Zone (FEZ) is an important legal arrangement to attract foreign capital, technology and management in return for tax and duty free benefits. FEZ was first introduced in 1992 in the Kyrgyz Republic with the adoption of the Law on FEZ. Karakol FEZ was the first one created, followed by Bishkek FEZ. It came to be known over the years that Karakol FEZ was a major failure: there was no fence demarcating the FEZ area and the whole city was operating as FEZ giving tax and duty free benefits to businesses that were taking advantage of the arrangement to smuggle goods. In 2004 the Karakol FEZ was closed down and the Parliament passed a law to shift its location to two places in Issyk-Kul: Balykchy and Tamchy (July 2004).<sup>2</sup> In order for the new FEZ to operate properly so as to achieve the original objectives of FEZ (i.e. introduction of FDI which will lead to the development of the local economy and export promotion), the government must ensure necessary institutional and legal arrangements in addition to the provision of physical infrastructures (which is elaborated in the Sector Report J).

Table E.6 shows the essence of the current legal and regulatory framework for FEZ Bishkek, which has been reviewed with a view towards identifying necessary measures for the new FEZ in Issyk-Kul.

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<sup>2</sup> Under the agreement with IMF, the government is not able to create a new FEZ, thus the new FEZ areas in Balykchy and Tamchy are officially referred to as “Karakol FEZ.”

**Table E.6 Essence of the Current Legal & Regulatory Framework for FEZ Bishkek**

Regulated subject	Content	Law/Regulation/ Instruction
Creation & liquidation of FEZ	Decided by the Parliament	The Law on FEZ (2002)
Regulations of each FEZ	Adopted by the Government	Ditto
Appointment and removal of General Director	By the Government	Ditto
Benefits for FEZ entities	Exempt from all taxes, duties and charges	Ditto
Requirements for FEZ entities	Goods for sales in the internal market must have value added in the FEZ for 30% or more (15% for more for home appliances and electronic goods)	Ditto
	The 30% threshold has been raised to 50% in FEZ Bishkek.	Instruction of FEZ Bishkek
Operation of FEZ	General Directorate controls the entry of FEZ entities and issues instructions and orders with regard to specific aspects of the FEZ operation.	The Law on FEZ (2002)
Involvement of other state bodies	Control and inspection by state bodies require agreement of the General Director (except by Tax Inspection Special Unit and Special Department of Customs Service that operate within the FEZ)	Government Resolution on FEZ Bishkek (2001)
Fees	FEZ entities are required to pay fees for 1-2% of the turnover depending on the amount and the destination of the goods (i.e. export or domestic sales).	Instruction of General Directorate of FEZ Bishkek (2001)

While most of the key aspects of the institution and operation of the FEZ are regulated by the law and government regulations, there are other matters that are within the discretion of the General Directorate of the FEZ by means of instructions it issues and negotiations it conducts with FEZ entities and various state bodies. The entry of entities into the FEZ (point vi. in the above table) is decided by the General Director, who reviews economic feasibility of the proposed business, environmental impact, and other aspects. In some cases, the review and negotiation process takes up to two years. Once the entry is decided, registration of the business entity can be done by a foreign person presenting her/his passport to the General Directorate, which will undertake the necessary registration procedures with the Ministry of Justice, the National Statistics Committee, and the Social Fund. The entity does not have to undergo state permit and licensing requirements, either. During the operation, it does not receive any state inspection (except by the Tax Inspection Special Unit and the Special Department of Customs Service that operate within the FEZ and in emergency situations). While there are more than 20 state bodies that constantly approach the FEZ wanting to conduct inspections, the General Director retains the authority to let them enter the FEZ and conduct the inspection (point vii. in the above table). Thus, the FEZ functions as a “one stop shop” for FEZ entities in terms of procedures for starting and conducting business.<sup>3</sup>

Some of these matters that are within the authority of the FEZ can be regulated at a higher level, by government regulations or laws. While the fact that the General Director “protects”

<sup>3</sup> Relevant regulations and interviews conducted by JST.

FEZ entities from state inspections serves the purpose of efficiency for the FEZ businesses, it may place undue burden on the General Director, who very often receives and tactfully declines inspection requests. On the other hand, there may be justified and necessary state inspections that must be conducted, on which the General Directorate does not have relevant competency. For example, when there is a proposal for a large scale operation that may create some negative environmental impacts, Environmental Impact Assessment (EIA) needs to be conducted involving the Ministry of Ecology and Emergency Situations (MoEES) and the public in accordance with the relevant law and regulation (see the Sector Report B). A government regulation or law that stipulates specific authorities and responsibilities of the FEZ and concerned state bodies, striking a right balance between the business efficiency requirement and the state regulation requirement, would make the process more transparent and responsible. Moreover, such a regulation or law, which should be applied across the board to all the FEZs, can ensure uniformity of the FEZ regime.

JST understands that consolidation of FEZs under a single body as well as unification of regulations and instructions are currently under consideration by the government. This is a welcome move, as the policy and operation of FEZs require national level consideration and coordination in view of both fiscal policy and industry development and export policies. The experience of Karakol FEZ shows that Oblast is not an appropriate locus of regulating FEZ, as it does not have the responsibility of collecting customs duties and other national taxes. In doing so, it would be important to ensure appropriate roles of MEDIT for coordination with industrial, trade and economic development policies. The new FEZ in Issyk-Kul should be brought under such a uniform regime, while certain matters that require locally specific considerations may be left to the discretion of the local management body.

#### *(4) Investment related activities of the Issyk-Kul Oblast*

In the Issyk-Kul Oblast, the Center of Tourism, Investment and External Relations was created by a Decree of the Governor in April 2003. The Center collects information and data on foreign investment and collates investment proposals for dissemination to potential investors. However, the data collected by NSC at the Oblast level are not shared with the Center. This can be addressed immediately with the necessary political will. The Center wishes to engage actively in promoting investment opportunities for foreign and domestic investors but has not been able to undertake major activities due to the limitations of capacity and budget. Under the current arrangement, the activities of the Center are conducted almost independently from those of the IPC and other central government organs. The information is not shared between the Oblast and the central government. With the integration of the IPC in the MEDIT and with the possible establishment of the IPA, it is important to clarify roles and responsibilities of each level of the government for data and information gathering, promotion and advisory service activities, so as to avoid duplications and gaps.

*(5) The Law on “sustainable development of ecological and economic system Issyk-Kul”*

A new law on “sustainable development of ecological and economic system Issyk-Kul” was adopted by the Parliament and issued in August 2004. While most of the provisions are abstract based on general concepts of preserving environmental and cultural heritages, there are certain new requirements that are contradictory to existing laws and development directions of Issyk-Kul as well as the entire country. The provisions related to private investment and problems they may create are outlined below.

- That 90% of employees must be Kyrgyz citizens if resort and recreation facilities are rented by foreign persons (Article 17).

→ While the intent of this requirement is understandable (i.e. to ensure local job creation), to impose a specific condition may be detrimental to attracting FDI. The local employment issue had better be addressed during negotiation and consultation process.

- That foreign persons are prohibited from owning recreational and tourism facilities but can rent them up to 49 years upon the consent of the Parliament (Article 20).

→ This is not in line with the national treatment principle embraced in the Law on Foreign Investment and will create a major deterrent to FDI in tourism, which is very much needed in Issyk-Kul.

- That tourism infrastructure facilities are owned by the state and local self-governments and cannot be sold but can only be rented to private persons up to 50 years (Article 26).

→ While the definition of “tourism infrastructure facilities” is clear in the law, this will hinder private development and management of those facilities, which should be encouraged for tourism promotion in Issyk-Kul.

It is expected that these and other issues regarding the law will be dealt with through the IRT mechanism and solved in the near future. Politics is obviously behind the passage of this law but it also illustrates still existing lapses in the law-making process in the Kyrgyz Republic, that is, insufficiency of consultation and quality control.

### **E.1.6 Illustration of problems encountered by investors**

Legal and regulatory problems encountered by investors are numerous and will not be thoroughly reviewed in this report (as doing so would be repeating the regulatory review and reform work coordinated by the IRT).<sup>4</sup> However, in order to ensure common understanding as to the extent of the problems, some important aspects are illustrated below: registration, obtaining permits and licenses, receiving state inspections, and the tax system.

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<sup>4</sup> For details of the work coordinated by the IRT, visit <http://www.investment.kg>.

*(1) Registration*

Legal enterprises are required to register with the Ministry of Justice (MoJ), the National Statistics Committee (NSC), the State Tax Inspectorate (STI), and the Social Fund. Individual entrepreneurs are required to register only with NSC and STI. MoJ registration takes up to ten days, while NSC takes two days. But for small businesses and individual entrepreneurs without connections or influence in these bodies, absence of officials in the respective local bodies in the rayon office and their unfriendly and unresponsive attitudes often create difficulties. A couple of hundred soms are required as fees, which works as another hurdle for micro entrepreneurs.

*(2) Patent*

Registration of individual entrepreneurs with STI takes the form of the entrepreneurs purchasing “patent.” Patent must be bought every month and the charge (around 300-1,200 soms) is based on the size of the business as assessed by STI officials. The assessment is often conducted in arbitrary manners and the monthly renewal is too frequent. Rationalization of the patent system is imminent for promoting micro and small enterprises.

*(3) Obtaining permits and licenses*

Different licenses and permits are required for different industries and types of businesses. A new version of the Law on Licensing and other relevant laws and regulations are currently under preparation to specify which state bodies are responsible for and are authorized on which licenses and/or permits and for what purposes. Fee schedules, if fees are charged, will be specified and published as well.<sup>5</sup>

In the area of construction approval, which many investors and entrepreneurs need to obtain, there has been an improvement by a new regulation. But it requires further elaboration and coordination with relevant procedures of various state bodies other than SCAC. The new regulation and the improvements it requires are described below.

The government issued the Regulation on the Procedure for Realization of Investment and Construction Intentions in February 2004.<sup>6</sup> The Regulation provides a streamlined and transparent procedure for investors to apply for and receive construction permits, which is a remarkable improvement from the previous arrangement, where investors were required to visit each of nine or ten concerned government bodies to apply for and obtain the permits and were often asked for bribes during the processes. Under this new Regulation, a local body of SCAC serves as a “one stop shop,” which accepts applications, exercises state construction

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<sup>5</sup> In principle, fees can be charged when the concerned state body offers services. If the work of the state body is part of exercising its regulatory functions, it is unreasonable to charge fees and necessary costs should be covered by the state revenue generated from taxes.

<sup>6</sup> The Resolution of the Government of the Kyrgyz Republic of 5 February 2004, #57 (the Regulation was adopted by this Resolution). The drafting of the Regulation was assisted by USAID.



expertise, coordinates with relevant government bodies, and issues permits. A separate body named “Urban Development Council,” instituted at the relevant level of local government, is responsible for reviewing the recommendation of the local body of SCAC and therefore has the ultimate approval authority.

This new mechanism is currently being introduced in ten cities including Karakol, Balykchy, and Cholpon Ata with the assistance of a USAID-funded project. The installation of the new system, however, will necessitate changes in the relevant regulations and institutions under which government bodies other than SCAC operate. The bodies that were/are involved in the construction approval process are: SCAC, State Register, Environmental Protection, Sanitary and Epidemiologic Inspectorate, Fire Brigade, Agriculture, Telecom, Electricity.<sup>7</sup> To the knowledge of JST, the Oblast Division of Environmental Protection is not aware of the new arrangement and follows the previous procedure, under which each construction proposal is reviewed by them as well. Another aspect is that while the same Regulation applies to construction on land plots other than those under the jurisdiction of cities (i.e. land plots in Aiyl Okmotu and state-owned lands) as well, the necessary institutions and capacity at the relevant level(s) of sub-national government need to be developed in order to effectuate the new mechanism. Until and unless appropriate institutions are in place, investors/constructors will continue to face lengthy procedures and uncertainty.

#### *(4) State inspections*

Legal enterprises and individual businesses often encounter visits and inspections by various state bodies. While some of them are authorized and justified, others are not or lack legal or regulatory bases. (There are cases where inspections are authorized but their legal or regulatory bases are not justifiable.) A study funded by the World Bank in 2002 conducted in-depth surveys and identified administrative barriers experienced by dairy and dairy processing industries.<sup>8</sup> The state bodies mentioned in the study are: Sanitary Epidemiological Service (of the Ministry of Healthcare), Veterinary Inspectorate (of the Ministry of Agriculture and Water Resources), Tax Inspectorate (of the Ministry of Finance), Kyrgyz Standard (of the State Inspectorate on Standardization and Metrology), Traffic Police, and Agriculture Research Institute (a private body that monopolistically serves the government, particularly the Ministry of Agriculture and Water Resources). The frequency and costs of inspections by these bodies are often not defined, or even if they are defined, they are not followed. In the case of Kyrgyz Standard, inspectors from different departments of the same organization visit the same enterprises without coordination and constantly duplicate each

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<sup>7</sup> The bodies form Land Distribution Committee at each Rayon, headed by the deputy head of the Rayon. Head of Aiyl Okmotu participates if the land is located in the jurisdiction of Aiyl Okmotu. With the introduction of this Regulation and the Regulation on the Procedures and Conditions for Chargeable Allocation of Ownership Rights to or Lease of Land Parcels in Urban Areas (model regulation adopted by a Government Resolution on 5 February 2004), Land Distribution Committee will be dissolved and replaced by Commission on Land Development and Land Use.

<sup>8</sup> “Barriers to Competitiveness: An Analysis of Principal Factors Inhibiting the Competitiveness of Kyrgyz Republic,” prepared for the World Bank by Global Development Solutions, LLC (USA), July 2002.

other. The study concluded that small to medium dairy processing firms can reduce 33% of their cost by having administrative barriers in the form of unjustified inspections and requirements removed.

The issue of unjustified and uncoordinated inspections has also been on the agenda of the IRT. As a result of its efforts, a new law on “the procedure for conducting inspections of businesses by authorized bodies” is expected to be adopted in the near future, which will provide a step forward in the right direction.

*(5) The tax system*

Under the current tax system, there are too many tax and fee items and the total burden on businesses is significant. These taxes and fees are collected monthly or quarterly and on different dates. A full schedule of taxes and fees applicable to a particular business is not readily available and an investor often requires the knowledge of local persons, who can collect the information via word of mouths as well as publications. Also, the purposes of taxes and fees are often not clear and do not appear to be related to particular policy objectives. For example, retail tax is an obvious duplication of VAT. Emergency tax is collected but is not tied to the budget for emergency response purposes. An example of a schedule of taxes and fees applicable to a hotel in Bishkek (as of June 2004) is given below in Table E.7.

Rationalization of the tax system will obviously provide an easier and more predictable environment for business and will lead to the promotion of investment. GOK, under the guidance of IMF and USAID-supported fiscal reform projects, is currently in the process of reforming the tax system, which necessitates corresponding structural changes in the government bodies and therefore requires an enormous amount of work, coordination and political will (see also Sector Report A).

**Table E.7 The schedule of taxes and fees applicable to a hotel in Bishkek**

Type of Tax/Fee		Rate/Remarks	Date of payment
National Tax	VAT	20% on turnover	Monthly, by 30 <sup>th</sup>
	Road Tax	0.8% on turnover	Quarterly, by 20 <sup>th</sup>
	Emergency Tax	1.5% on turnover	Same
	Patents	Necessary to purchase a "patent" if the hotel has recreational facilities like a sauna for which it charges to guests.	
	Import and Export tax	Depends on the goods and services.	
Shared Tax (National & Local)	Profit Tax	20% on profit	Annually, by 1 <sup>st</sup> March
	Income Tax	From 10 to 20% depending on the income level of the employees	Monthly, by 15th
	Excise Duties	Depends on the items	
Local Tax and Fee	Retail Tax	4% on turnover	Monthly, by 20 <sup>th</sup>
	Hotel Tax	2% on turnover of hotel services	Same
	Tourist tax	20% of the number of tourists leaving CIS times the minimum wage	Same
	Land Tax	per hector amount fixed by legislation	Same
	Property Tax	To be introduced soon*	
	Advertisement Tax	3% of the payment	
	Ecology fees	About 2,000 soms in total per year (for contributions to the Local Fund for Environmental Protection)	
	Waste collection fee	25% of the minimum wage of staff members	
	Electricity generation fee	Imposed in accordance with the installed capacity (paid to a generation company)	
Social Fund payments		33% of the salary (8% born by the employer)	Monthly, by 15th

Source: interviews by JST in June 2004

\* The law on introduction of property tax has been adopted and the regulation for its implementation is currently under consideration.

### **E.1.7 Measures that can be adopted for the promotion of private investment in Issyk-Kul**

#### *(1) Rationalization of the government structures on FDI data and promotion*

Analyzing the FDI trends in the past is a basis for formulating policies and specific activities for attracting further FDI. The official FDI data is currently based on the survey conducted by NSC, which does not have a regular mechanism to share detailed information with other relevant government bodies. Upon request, summarized information is available from the NSC, but it requires time. The MEDIT Investment Promotion staff who are focal points for investors abroad also request the data to the NSC case by case as they themselves don't obtain the detailed information. This is due to the law stipulating that NSC not to disclose the data

provided, but only in summary type<sup>9</sup>. The summarized data on FDI doesn't specify the sector and the origin of the countries in regional level. The MEDIT regional office in Issyk-Kul, who is supposed to be a focal point for potential investors themselves, has difficulty to analyze the past record and thus to assess the potentials of the investment in the region. The immediate step that must be taken is to review the survey systems of investment, which force investors to submit detailed forms quarterly. The information collected needs to be reconsidered. Some data such as volume of investment, sector, and origin of investment need to be shared among the stakeholders for the purpose of policy making. Then, the sorted data have to be distributed to the Center of Tourism, Investment and External Relations at the Oblast level. In addition, the current method of relying on the NSC survey needs to be reviewed. The creation of a single registration point for new and additional investments would be ideal. It is recommended that NSC, MEDIT, the Oblast, and other concerned government organs work together to review and reform the existing structures and methods.

Also, FDI promotion and advisory activities that are carried out by different government bodies and are not coordinated need to be systematized. With the recent transfer of IPC into MEDIT, the structure in the central government is expected to be rationalized. In addition, the roles and responsibilities of MEDIT in the central government, MEDIT in the Oblast, and the Center of Tourism, Investment and External Relations need to be clearly demarcated.

### *(2) Proper operation of FEZ*

The FEZ in Karakol, which turned out to be a failure with little investment in manufacturing but companies just intended to get benefit to tax incentives, has recently been replaced by the proposed two FEZ parcels in Balykchy and Tamchy. In order to ensure that the new FEZ regime will attract FDI, while inducing value-added to the local economy, detailed operational modalities and procedures based on the Law on FEZ (with the latest amendments in 2003) need to be worked out and implemented.

### *(3) "Barrier Free Zone"*

A system of exemption from taxes and duties is available for trade-oriented companies that will be located in the FEZ. Whether a similar system should be introduced to encourage other types of investment, particularly tourism-related businesses, is often discussed in policy circles. However, in view of the demand forecast for private investment in the tourism sector, such an arrangement may not be important. Instead, and in view of the voices of investors that

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<sup>9</sup> The Law on State Statistics (1994, latest amendments in 2002), Article 13. Guarantees for Legal and Physical Entities describes as follows:

It is guaranteed that commercial secrecy of statistical data provided by legal and physical entities are not disclosed. Collected statistical data on citizens are used only anonymously or in summary type. Users of statistical data are not allowed to sell or distribute to anyone the data without the consent of the statistical office that provided the data. Officials of state statistical offices are responsible for submitting unreliable and untimely statistical information, as well as for the disclosure of state and commercial secrecy in accordance with the legislation of the Kyrgyz Republic.

regulatory factors are perhaps the greatest impediment, it is recommended that the Oblast government mobilize efforts to streamline regulatory mechanisms to the extent feasible under the existing national frameworks and to ensure a regulatory environment that would promote investment. In other words, making Issyk-Kul “barrier free” would have a higher priority than introducing additional “tax/duty free” arrangements.

One of the activities that can be carried out by the Oblast government is to accelerate the reform of the existing institutions to implement the new Regulation on the Procedure for Realization of Investment and Construction Intentions, so as to ensure a transparent, predictable, and efficient approval process for investors/constructors.

Another area of activities is to create an Oblast-level working group to monitor regulatory activities of Oblast and Rayon state administration bodies. The working group can model after the way the IRT operates by inviting private sector stakeholders and will be responsible for identifying “extra-mandatory” activities of state bodies and any other aspects that can be solved at the Oblast level with a view towards promoting private entrepreneurship and investment. Any aspects that require solutions at the national level can be brought to the attention of the central government through the IRT.

#### *(4) Defining the roles of the government*

GOK as well as Oblast and Rayon governments place significant emphasis on investment activities. Looking at various programs or action plans prepared so far, however, it is often unclear as to the role of the government as opposed to that of the private sector. For example, according to a program of tourism development for 2004-2005 recently compiled by Issyk-Kul Oblast, Rayon state administrations plan to construct hotels, a ski lodge, an aqua park, and other recreational facilities. Investment in these facilities should be done by the private sector, as opposed to infrastructures and other “public goods,” in which government investment is necessary. The roles of the government with regard to recreational facilities are to i) plan and guide appropriate uses of the land, ii) induce private investment by providing an appropriate regulatory environment, and iii) ensure minimizing environmental impacts, among others. It is very important that the relevant government bodies develop solid understanding of their own roles and plan their activities accordingly so as not to send wrong signals to the private sector and to themselves.

With regard to formerly state-owned recreational facilities in Issyk-Kul, about 90% of them have already been privatized. Two of the remaining facilities are owned by the Presidential Administration, which will be included in the future privatization plan of the State Property Fund. The rest are four accommodations, three in Cholpon-Ata and one in Jeti-Oguz, owned by the labor unions of public sector employees. These facilities are used by labor union members (i.e. government and SoE employees) but are offered to other guests as well whenever vacancies are available. The government can play a major role here by negotiating with the labor unions schemes to introduce private operators for management and, if appropriate, renovation, in order to increase attractiveness of the facilities.

## **E.2 Financial Sector Issues**

### **E.2.1 Overview of the Financial System**

The emerging financial system of the Kyrgyz Republic has been slowly but steadily developing since the introduction of the laws on the National Bank of Kyrgyz Republic (NBKR) and on commercial banks in 1992. However, the financial system only partially fulfils its functions, and the top priority for years to come is to augment the efficiency of financial intermediation through ongoing and continuous institutional, legal and regulatory reform, which will ultimately lead to improvements in savings mobilization and resource allocation based on quality competition. Only achievement of these objectives will ensure confidence in the future economic development of the country.

The financial landscape of the Kyrgyz Republic can be best described as an emerging bank-centered system. Other institutions include non-bank financial intermediaries that are mostly donor funded to support micro and small enterprises, the Kyrgyz Stock Exchange, investment funds, leasing companies, insurance and pension sectors that are not systemically significant.

Regarding the functioning of the capital market, the first securities exchange was opened in 1995 and the securities exchange commission was established in 1997. The number of listed companies is 18 and the total capitalization is 1.2 million soms as of the end of 2003. Considering that a matured capital market exists only in a small number of countries in the world, it may be too early to expect the country to make major progress in this area. Rather, the focus should be on development of a sound and efficient banking system and sustainable microfinance operations.

The current situations of the banking system show that options are narrow for both lenders and borrowers, the cost of intermediation is too high, and safe borrowers may be deterred because of high interest rates. The system is based on short-term structures and inefficient allocation of financial resources. The banking sector, therefore, does not yet play the role it should.

In order to achieve efficient allocation of financial resources, the price structure should be reasonable, which in turn requires symmetric information in the market through proper disclosure and competition. The agenda for further development of the financial system that has been defined by a number of development institutions and international donors could be best summarized as follows:

- Consolidation and rationalization of the banking sector with involvement of foreign banks
- Compliance with capital requirements in the banking sector
- Improvement of risk management practices and introduction of Basel (risk-weighted capital) requirements

- Strengthening of banking and securities regulations
- Introduction of International Accounting Standards in financial reporting
- Legal framework for the relief of financially distressed companies (bankruptcy law, etc.)
- Choosing the most efficient form of financial intermediary for foreign lending assistance

### **E.2.2 Banking Sector**

The banking system in the Kyrgyz Republic is composed of three groups, differing from each other in their legal form, ownership structure, and goals, but competing with each other in all sections of the financial market. The three groups are: i) commercial banks and branches of foreign banks, ii) state-owned banks, and iii) non-bank finance institutions and credit cooperatives.<sup>10</sup>

The first group of commercial banks embraces the following types of financial institutions: 11 commercial banks with local shareholder background, six commercial banks with international shareholder background, and one branch of a foreign bank. It is important to note that two out of the six banks with international shareholder background have the participation of international financial and developmental institutions. Kyrgyz Investment and Credit Bank (KICB) was established jointly by IFC, EBRD, Aga Khan Fund for Economic Development, the German Bank for Reconstruction (DEG), and GOKR. Demir Kyrgyz International Bank is 70 percent owned by Turkish companies and 15 percent by each IFC and EBRD. These banks are under the ownership of private individuals and firms and pursue profit-oriented objectives in their operations.

The banks in the second group are Kairat Bank and Settlement & Savings Company (SSC), which together represent about 12 percent of total assets of the banking sector. They have limited banking license with activities restricted to inter-bank lending, government securities transactions, deposit-taking, and payment services. Both banks are under public ownership and basically pursue public welfare goals. Current efforts include privatization of these banks.

The most basic approach to analyze these two groups of banks would be to take a look at selected data of funding and lending sides of their banking business. The table below shows the total volume of assets, outstanding loans, deposits and capital.

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<sup>10</sup> Non-banking institutions are not banks according to the definition of the NBKR and the relevant laws of the Kyrgyz Republic. However, since they in fact compete with banks in many respects and some of them are even allowed to take deposits, we include them in the analysis of the banking sector.

**Table E.8 Funding and Lending Sides of the Commercial and State-owned Banks**

(unit: million soms)

	Assets	Loans	Deposits	Deposits - current accounts	Capital
End 2003	11,274	2,990	7,856	7,013	1,897
June 2004	12,386	4,210	8,571	7,592	2,031

Source: Banking Bulletin, July 2004, National Bank of Kyrgyz Republic

On the funding side, the total capital of the banking system as of June 2004 is 2.0 billion soms, but bank-wise, detailed information is not publicly available. The largest banks in terms of capital are Kyrgyz Investment Credit Bank (KICB), Asia Universal Bank, JSCB “Kyrgyzstan”, JSC “Kyrgyzpromstroibank”, and SSC. Banks with a substantial branch network are SSC (49 branches), JSCB “Kyrgyzstan” (28 branches) and JSC “Kyrgyzpromstroibank” with 29 branches. With the introduction of more stringent capital requirements (minimum of USD 540,000), which was not available when the existing banks were established, it may be presumed that many banks are undercapitalized. Consolidation of the banks, therefore, will be an inevitable process.

Also on the funding side, the total deposits as of June 2004 is 8.6 billion soms, an increase of 0.7 billion soms since the end of 2003. At about 10% of GDP, this level of deposits is still low if compared with the level of broad money, which was 17% of GDP at the end of 2003. In addition, a quick look at the structure of the deposits reveals that nearly 90% of them are in current accounts. This short-term structure on the funding side constrains capability on the lending side.

On the lending side, the total loan portfolio at the end of 2003 was 3.0 billion soms, or 3.6% of GDP, while the total assets reached 11.3 billion soms, or 13.5% of GDP. The loans at the end of June 2004 increased to 4.2 billion soms, but most loans remain short-term (from 6 to 12 months). In addition, the relatively weak corporate sector and a high proportion of foreign currency lending impose risks on the banks. Mobilization of local currency deposits are necessary to increase local currency lending, which in turn requires more trust in the local currency. Other assets are invested in government securities and inter-bank placements, rather than loans.

The figures cited above are much lower than comparable numbers of other economies in transition, clearly indicating that the Kyrgyz economy is under lent and lacks trust in the banking sector. The Russian financial crisis in 1998, which led to the bankruptcy of three banks, has not restored confidence in the banking sector yet.

Moreover, the cost of intermediation is high as represented in big spreads between the interest on deposits and loans, thus lending rates are high (around 18-20% for US dollar loans and 24-28% for domestic currency loans), which, given the inflation rates of 2-5%, clearly exceed the possible returns on real investments and this may cause undue distress on the part of borrowers. It is widely known that bank managers often require kick-backs on loans, making



effective interest rates even higher than the officially reported figures. The high cost of intermediation also contributes to the low levels of savings and real investment in the economy.

A considerable amount of money is held outside the banking system in the informal financial sector, a proper assessment of which has not yet been done.<sup>11</sup> Therefore as confidence in the system improves, bank deposits are expected to increase substantially.

The third group consists of non-banking financial institutions, which compete with banks on the lending side. To improve access to finance by small entrepreneurs, the non-banking sector has been developing since the late 1990s. The main players are Kyrgyz Agriculture Finance Corporation (KAFC) and Financial Company for Support and Development of Credit Unions (FCCU). There are 303 credit unions, which are organized under the umbrella of FCCU and are allowed to take deposits if certain conditions are met. In addition, 72 Microfinance Organizations (MFOs) operate throughout the country. These non-banking institutions are supervised by NBKR as well and their total assets are 2.5% of GDP. Their total loan portfolio reaches 1.5% of GDP, comparable with the size of the total loan portfolio of banks. Details of this financial arena are provided in the next section. These non-banking institutions are supervised by the Division of Supervision of Non-Banking Institutions of NBKR, while the commercial banks are supervised by their Banking Supervision Department.

Reform of the banking sector must include improvement of regulatory environment to achieve a safe and sound banking system with level playing field. This task is very challenging since the only constant will be change. The process of revising banking laws and regulations is on-going. NBKR supervision capacity shall be strengthened given that the scope of regulation is growing. NBKR's bank supervision department currently has 30 employees and staff turnover is high. The introduction of increased capital requirements, the Basel Accord rules, and ultimately consolidation and rationalization of the banking sector will set a stringent agenda for bank supervision.

As part of the agenda for the banking sector reform NBKR has made financial statements based on International Accounting Standards compulsory for banks beginning with the 2003 statements. However, it must be noted that none of the local banks have yet been audited by international accounting standards nor rated by rating agencies. In addition to the strengthening of the NBKR supervision capacity and the regulatory environment, risk management, internal control and audit, and other business functions of commercial banks require improvement.

Another important development is the consideration of a deposit insurance scheme. Although the authorities are keen for its introduction, IMF experts argue that the timing is premature and that preconditions include strong bank supervision, healthy banking system, improved data reporting and adequate funding of such a scheme.

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<sup>11</sup> KAFC estimates that the savings outside the banking system amounts to 8 billion soms.

### **E.2.3 Micro & SME Financing**

Growth of micro, small and medium enterprises is a key to poverty reduction and economic development of the country. At present four types of Micro and/or SME (Small Medium Enterprise) financing are identified in the Kyrgyz Republic: i) by Kyrgyz Agriculture Finance Corporation (KAFC); ii) through Savings and Credit Unions (SCUs) under the umbrella of the Financial Company for Support and Development of Savings and Credit Unions (FCCU); iii) by microfinance organizations (MFOs); and iv) by commercial banks supported by the EBRD-IFC Micro and Small Enterprise Finance Facility (MSFF).

KAFC and FCCU were established by special regulations of the government, are owned by the government and have received concessionary donor loans. KAFC is by far the largest operation in the country, having a share of 63% in the Micro & SME financing market and 25% in the entire financial sector of the country in terms of outstanding loan portfolio. KAFC plans to obtain a banking license in the near future so as to engage in deposit taking and other financial services. KAFC is now finalizing a business plan till 2010 as well as a privatization plan. FCCU, on the other hand, has modest operation with a 13% share in the Micro & SME financing market. There are at the moment a total of 303 SCUs throughout the country operating under the FCCU umbrella, of which about one third show strong performance. As consolidation of weaker SCUs into stronger ones will be inevitable, facilitating the process as well as further institutional strengthening are the main agenda for FCCU.

Microfinance organizations (MFOs) are established and supervised in accordance with the Law on Microfinance Organization adopted in 2002. There are the following three categories of MFOs:

- Microfinance Company, that can engage in deposit taking and settlement;
- Microcredit Company, that can engage only in lending; and
- Microcredit Agency, that is a not-for-profit organization and can engage only in lending

Currently there are 16 Microcredit Companies and 56 Microcredit Agencies. There is no Microfinance Company established yet. It may be pointed out here that this category of MFOs overlaps with banks and when an organization is ready to become a Microfinance Company it had better obtain a banking license for the provision of a wider ranges of services and for, most importantly, better supervision by NBKR. The largest MFOs are Foundation for International Communities Assistance (FINCA), supported by IFC, and Mercy Corps International (MCI), a U.S. non-profit agency, and Bai Tushum Financial Foundation (BTEF), a non-profit agency established by Swiss CARITAS. These MFOs charge annualized interest rates ranging from 28% to 54%, much higher than the rates charged by KAFC and FCCU (see below), with loan terms from 3 to 24 months depending on the loan size and the use.

MSFF began operation in 2002 and offers an innovative approach to Micro & SME financing by working with commercial banks. The technical assistance recruits and trains loan officers, who will be taken over by participating banks during the initial period of 6 to 12 months. While interest rates range from 24% to 35%, higher than the level offered by KAFC, higher

speed in appraising and processing loans and meeting urgent needs of customers have been leading to a rapid increase in disbursement, with the latest share of 12% in the Micro & SME financing market.

A comparison of these different types of organizations in terms of the total loan outstanding and the number of organizations (and branches) for both the entire nation and the Issyk-Kul region is given in Table E.9

**Table E.9 Overview of Micro & SME Financing**

(as of January-February 2004)

(unit of the outstanding loans : 1,000 soms)

Institution	Nation-wide		Issyk-Kul	
	Total loan outstanding	No. of institutions	Total loan outstanding	No. of institutions
Savings and Credit Unions	288,840	303	55,101	47
KAFC	1,279,296	1 (42 offices)	218,192	1 branch in Karakol and 1 office in each rayon
Pawn shops	8,029	108	n.a	n.a
Microfinance organizations	434,124	72	49,376	15
<b>Total non-banking sector</b>	<b>2,010,289</b>		<b>322,669</b> (excl. pawn shops)	
EBRD MSFF (via commercial banks)	260,202	4 banks	4,422	2 bank branches in Karakol
<b>Total Micro &amp; SME financing</b>	<b>2,270,491</b>		<b>327,091</b> (excl. pawn shops)	
<b>Total (Banks &amp; non-banks)</b>	<b>5,057,000</b>			

Source: National Bank of Kyrgyz Republic, FCCU, KAFC and the MSFF project

Note: The total loan outstanding for SCUs and KAFC in Issyk-Kul is as of April 2004 and June 2004 respectively. The total loan outstanding for MFSS in the entire nation and Issyk-Kul is as of June 2004.

## E.2.4 Needs for Technical and Capital Assistance

Technical assistance and loan projects in the financial sector supported by various donors are summarized in Table E.10.

**Table E.10 Donor-Supported TA and Projects in the Financial Sector**

(recently completed and on-going)

Area	TA/Project	Donor	Scope/Remarks
Strengthening of NBKR	TA for NBKR to promote financial sector reform	ADB	(To be completed in October 2004.) A new project, "Financial Sector Development II," will launched based on the results of this TA.
	Support to NBKR's banking division (on regulation of commercial banks)	USAID	Currently on the draft law on deposit insurance.
Strengthening of commercial banks	Financial intermediation and resource mobilization	ADB	(Recently completed.) Support to commercial banks, development of state bond and stock markets.
	TA Loan: Commercial bank audits	ADB	(Recently completed.)
	Investment in Kyrgyz Investment and Credit Bank (KICB)	IFC, EBRD, Aga Khan, etc.	
	Investment in Demir Kyrgyz International Bank	IFC, EBRD, etc.	
Agricultural finance	Rural Finance II	World Bank	a credit line to KAFC a special credit line for small farmers including group based lending capacity bldg of KAFC
	Farm Development Fund	IFAD	Equity financing to KAFC
	Loan to KAFC	ADB	In Chui Oblast (US\$10 mil.)
	TA to KAFC	TACIS	Development of a business plan and a privatization plan
Savings and Credit Unions (SCUs)	Establishing and financing FCCU	ADB	
	TA for FCCU on risk-rating system and capacity building	GTZ	
Microfinance	Support to write the Microfinance Law	USAID	
	Support to FINCA Kyrgyzstan and Mercy Corps	USAID, IFC	
	Micro and Small Enterprises Finance Facility (MSFF)	EBRD w/ IFC, Swiss, USAID, and TACIS	Via four commercial banks. Guarantee provided by the Swiss Government. TA is provided by USAID & TACIS
Leasing	TA for the development of a leasing law and related regulations	IFC	(Completed.)
	Central Asian Leasing Facility	IFC	
Mortgage finance	TA for the development of the legal framework for mortgage finance	IFC	

Source: Various websites and interviews with NBKR and the donors.

At this stage additional capital assistance to the banking sector by donors in the form of loans would not produce meaningful results. The banking system is not yet ready to receive funding, before risk weighted capital rules are firmly installed and cost of intermediation is reduced. Instead, technical assistance is likely to yield more benefits for the development of a healthy and sustainable financial system.

ADB is currently preparing a new project for further development of the financial sector, which will focus most likely on improving legal and regulatory frameworks, the central bank supervision, and the capacity of commercial banks. Assistance of international expert advice is required in these areas and additional technical assistance may be provided in coordination with the new ADB project, particularly with respect to commercial bank business functions such as risk management, internal control and audit, loan appraisal, EDP systems, trade finance and etc.

Strengthening of institutions of FCCU and SCUs is another area where additional technical assistance would be required. While the rate of growth of SCUs would not be as fast as that of KAFC or MSFF and the consolidation of SCUs will be inevitable, they have a role to play in

terms of being close to the customers and fostering economic as well as social linkages in the localities.

Also, Micro & SME financing may continue to require donor loans or equity partnership. Provisions of subsidized loans, however, must be done carefully so as not to undermine the institution's efforts to attain operational and financial sustainability, while ensuring the fundamental strength of its strategy and operation. Due diligence during the selection process of appropriate disbursement structures will be indispensable.

**Appendix: The operation and schemes of KAFC, FCCU and MSFF as well as the issues facing them**

*(1) Kyrgyz Agricultural Finance Corporation (KAFC)*

KAFC was established in 1996 with the support of the World Bank, which has provided two loans: Rural Finance I (US\$16 million) and since 2001 Rural Finance II (US\$15 million). ADB has provided finance as well. With the total loan outstanding of about 1.3 billion soms, it is the largest financial institution and larger than the aggregation of the top five banks in the country in terms of the loan portfolio. It is owned by the government and the Board of Directors consists of top government officials including Ministers, KAFC Executive Director and three private sector representatives. A recent legislative change will remove the government officials from the composition of the Board. It is supervised by NBKR under the 1997 Rules on Regulating Activity of Agricultural Finance Company.

While Rural Finance I targeted only the agriculture sector, Rural Finance II provides finance to non-agricultural SMEs as well.<sup>12</sup> At the end of 2003, 80% of the portfolio was concentrated in agriculture, 70% of which was in livestock production and most of them being individual farmers.

KAFC offers two types of lending:

**Commercial lending and group (social-collateral) lending.**

Types	Targets	Collateral & conditions	Terms, etc.
Commercial	Farmers, agro-businesses, SMEs, and SCUs	Collateral (mobile or immobile) no less than 130% of the loan amount required. Working capital loans requires the borrower's contribution of 20% or more. Investment loans (construction, machinery procurement, etc.) requires the borrower's contribution of 30% or more.	Average interest rate: 17% Repayment period: Up to 7 years Average loan size: 50,000-60,000 soms Loan processing time: 3 weeks in average
Group	Farmers groups (or Self-Help Groups) of 5-10 farmers and entrepreneurs that have been mobilized and trained by a UNDP supported project	Social collateral. In addition savings in the amount of not less than 2.5% (initial credit) or 5% (subsequent credits) need to be placed in a deposit account.	

Note that the use of the word “commercial” follows the terminology used by KAFC. In fact, KAFC has received subsidized donor loans, which enables it to provide loans with more favorable terms than market terms. World Bank lending and on-lending terms are as follows:

<sup>12</sup> KAFC does not finance tobacco production, strong alcoholic drinks production, purchase and rent of land, and refinancing of existing debts.

**World Bank Lending and On-lending Terms**

	World Bank (IDA2) →	MoF →	KAFC →	Clients
Interest rate:	0.75% + commitment fee 0.5%		7.3%	Avg. 17%
Repayment period:	35 years		15 years	Up to 7 years
Grace period:	10 years		5 years	

Under the commercial lending scheme, KAFC provided loans to agriculture cooperatives but with deteriorating repayment rates has decided to close this credit line. In these cooperatives, most farmers now prefer taking loans individually. On the other hand, KAFC provides loans to Savings and Credit Unions (SCUs) and wishes to expand such wholesale lending.

Portfolio at risk (PAR)<sup>13</sup> as of the end of 2003 is 3.1%, registering a decrease from 5.6% in the previous year. When bad loans that have been written off but are still being pursued for collection are included, the PAR increases to 6.4%, which is still an acceptable level.

Organizational Structure

The strength of KAFC lies in its wide network across the country with 11 branches and 47 offices. In Issyk-Kul, there is a branch in Karakol and one office in each Rayon. A Rayon office is staffed with two credit specialists, who advise potential customers, receive loan requests, and sign and monitor loan contracts. Loan requests are reviewed and approved by the branch office up to the amount of 200,000 soms. Consulting and training to KAFC staff are offered by several international organizations including Rabobank (Netherlands), Japanese Agricultural Finance Corporation, Asia-Pacific Rural and Agricultural Credit Association, and Swiss Cooperation Office.

Future Plans

The World Bank supported project will end in June 2005. In response to a growing demand for agricultural loans and other services and with a view towards tapping into domestic resources rather than donor finance, KAFC plans to obtain a bank license, change the name to “Village Bank,” and start deposit-taking, settlement, leasing and other services. A business plan for the period of 2004-2010 has recently been worked out with the assistance of an international consultancy (funded by TACIS), in which three scenarios for 2010 are presented:

Total Deposit Market (soms): Three Scenarios	KAFC's Deposit Market Share (%)	Lending from KAFC Deposits (70% of KAFC Deposits)	Long term donor loans already received by KAFC (soms)	Own Capital (soms)	Total Funds available for lending (soms)
6.3 billion	5.0%	220 million	948 million	528 million	1.7 billion
7.5 billion	7.5%	395 million	948 million	541 million	1.8 billion
8.7 billion	10.0%	600 million	948 million	560 million	2.1 billion

Source: KAFC Business Plan 2004-2010, Part 1: Strategy and Financial Consequences (June 2004)

<sup>13</sup> Total outstanding loan balance on delinquent loans divided by gross portfolio outstanding.

The above projection shows that KAFC's loan portfolio will grow from its 2003 level of KSG 1.3 billion to 1.7-2.1 billion soms in 2010, with an annual growth rate of 4% to 7%. A separate simulation on financial performance shows that it will maintain its financial health. Thus, the business plan concludes KAFC can attain financial viability without receiving additional donor funds. However, it will obviously depend on the size of deposits. Also, fresh donor funds may be required for deepening its financial outreach at a much faster speed.

Another important factor for the future of KAFC is a privatization plan, which is currently under consideration. International organizations such as EBRD, IFC, and Aga Khan Fund may be interested in participating. The completion of privatization is expected to take at least 4 to 5 years.

*(2) Financial Company for Support and Development of Credit Unions (FCCU) and Savings and Credit Unions (SCUs)*

The system of Savings and Credit Unions (SCUs) was established in 1997 with the support of ADB. The Financial Company for Support and Development of Credit Unions (FCCU), wholly owned by NBKR, is an apex organization providing sub-loans, technical support and supervision. ADB has provided a loan of US\$3.7 million. GTZ and DGRV (German Cooperative Bankers Association) have been providing technical assistance. SCUs are regulated by the 1999 Law on Savings and Credit Unions and the 2002 Rules on Regulating Activities of Credit Unions.

An SCU is established when 10 or more members get together, place 30,000 soms or more of equity, and meet other criteria. At its peak, there were 450 SCUs across the country but the number has now reduced to 303. The total loan outstanding of SCUs is 320 million soms, of which 145 million soms was provided by FCCU as loans and the rest from SCUs' own savings and capital. In total, there are more than 25,000 active members at present.

ADB lending and on-lending terms are as follows:

	ADB →	MoF →	FCCU →	SCUs →	members
Interest rate:	1%		6.5%	15-20%	24-36%
Repayment period:	40 years		15 years	1-4 years	6 months – 2 years
Grade period:	10 years		7 years	(Determined based on the performance rating system)	

Organizational Structure

FCCU is responsible for developing and supervising SCUs. For its off-site supervision, a performance and risk rating system has recently been introduced with the assistance of GTZ/DGRV. The terms and conditions for the loans from FCCU to SCUs are determined based on the assessed risks. Its on-site supervision is conducted by its branch offices in Oblasts. FCCU has one branch in each Oblast. In Issyk-Kul, the branch is located in Karakol, staffed with a manager, a credit specialist, and an office manager, and is responsible for supervising 47 SCUs in the Oblast.



An SCU has on average 88 members and is headed by a chairperson who is elected by the SCU members every 5 – 6 years. Staff with specialties such as accounting and cash management are hired from outside. A credit committee is constituted in each SCU, which reviews and approves loan requests from members in accordance with the criteria set by FCCU. The loan processing time takes one week to one month.

In 2002 and 2003 FCCU faced serious repayment problems particularly in the Southern region of Osh. FCCU replaced 60% of its regional office staff, introduced a legal department in its headquarters, and arranged criminal prosecution of responsible SCU heads. As a result, the repayment rate has been improving, but the problem has not been entirely solved yet. As of April 2004 FCCU classified 65 SCUs as having problems, making up 17.6% of the total FCCU loan portfolio. FCCU has been taking actions on these SCUs including court proceedings.

#### Future Directions

The greatest challenge facing the SCU system is to deal with problem and weaker SCUs. Currently about one third of SCUs are considered to be well performing and these stronger SCUs are expected to absorb weaker ones. Also, instead of establishing new SCUs, an option of branching out from existing, stronger SCUs is being considered. Hence, consolidation and expansion of the system focusing on stronger SCUs are the main agenda for FCCU.

Another challenge is a rapidly growing demand from the SCU members, which is becoming beyond the supply capacity of FCCU and SCUs. Many members have already started to access other financial institutions such as KAFC. In order to increase attractiveness of the SCU system to its members, FCCU has recently introduced new services such as deposit-taking, leasing and mortgage financing. These are allowed only for certain SCUs that meet the required criteria. For example, only 10 SCUs including 2 in Issyk-Kul (in Balykchy and Ananiva Village) have started to take deposits on a pilot basis.

Another demand from the members is the need for business ideas and technical support. Currently GTZ provides support, through another project, to the development of commercial cooperatives and turning SCUs into commercial cooperatives, while maintaining the status and functions of SCUs, are under consideration.

Another issue is privatization. It has already been agreed between NBKR and ADB that the FCCU will be privatized by 2005. This is in response to the recent change in the legislation by which NBKR is not allowed to have a wholly-owned subsidiary. NBKR expects to invite a foreign strategic partner, who will be the majority shareholder, and the rest to be owned by SCUs and domestic institutions. In view of the fact that the most important needs at hand are consolidation and institutional strengthening, a full-fledged privatization may be premature. The current GTZ TA will continue till November 2005, and it is obvious additional technical assistance will be required in order to follow through the current agenda. It remains to be seen whether the SCU system can continue to offer attractive services to its clients while making progress toward attaining financial and institutional viability.

*(3) EBRD MSFF (Micro and Small Enterprise Finance Facility)*

EBRD earlier provided support to SME financing through commercial banks (“SME I”), based on which a follow-up project (“SME II”) was developed when many of the sub-loans under SME I were damaged following the Russian financial crisis of 1998. SME II was then restructured into a MSE (micro and small enterprise) credit line, to provide more focused support to a smaller scale of domestic enterprises that are less vulnerable to external shocks. MSFF was thus developed with the joint financing of EBRD and IFC for the amount of US\$15 million and additional funds provided by EU and USAID for technical assistance. In addition, the Swiss Government provides the guarantee, which was not possible to obtain from the GOK.

Currently MSFF works with four partner commercial banks: IneximBank, AKB Kyrgyzstan, Kazkommercbank Kyrgyzstan, and Energobank<sup>14</sup> in a total number of 26 of their offices, mostly in Bishkek and Osh. AKB Kyrgyzstan is the most active, with 45% of the total outstanding loan portfolio of all the partner banks. It aims at increasing the share of micro and small loans to 50% of its portfolio in the next couple of years. In Issyk-Kul, the operation was started in autumn, 2003 with the branch offices of AKB Kyrgyzstan and Energobank in Karakol.<sup>15</sup> New branches of these banks may be opened in Balykchy and Cholpon Ata soon. IPC, a German consulting company, under the technical assistance component conducts training of loan officers and works with the participating banks to reform internal loan processing procedures. In Issyk-Kul, 8 loan officers for AKB Kyrgyzstan and 7 for Energobank are currently receiving on the job training by an IPC consultant in Karakol.

Three types of loans are available under MSFF:

**Express Loans, Micro Loans and Small Loans.**

Loan type	Maximum amount (US\$)	Interest rate (per annum)	Repayment period (maximum)	Loan processing time	Outstanding portfolio (US\$)*	Average loan size (US\$)
Express Loans	2,000	24%	12 months	2 days	4,249,821	1,118
Micro Loans	10,000	US\$: 25%	24 months	3-5 days		
Small Loans	100,000	Soms: 35%	36 months	7-15 days	1,406,736	17,584

\*as of May 2004

As mentioned before, the attractiveness of loans through MSFF is the speed of loan processing. For Express Loans, the presentation of a passport and a trade patent and a personal guarantee of a third person are sufficient conditions for the loan approval. For Micro and Small Loans, collateral in the form of immobile or mobile property is required. The total

<sup>14</sup> Among these four banks, Kazkommercbank and Energobank have Kazakh capital and experience in working with MSFF in Kazakhstan. Demir Kyrgyz International Bank was a partner bank, too, until recently but withdrew from the arrangement.

<sup>15</sup> The microcredit component of the EU-TACIS project on regional development in Issyk-kul facilitates SMEs’ access to finance and has so far worked only with these two banks (in addition to KAFC and some MFOs), while the project continuously explores opportunities with other banks.

arrears as a percentage of the total portfolio is 0.3% in terms of the number of loans and 0.1% in terms of the volume of loans. EBRD is currently considering raising the loan ceiling to US\$200,000, which will in effect convert the facility into a Micro and SME financing scheme.

The clients of MSFF are engaged in commerce, trade, tourism, cattle breeding, and agriculture. There are areas where MSFF compete with KAFC, but given the current loan terms, the client niche of MSFF may be service-oriented industry, rather than production industry.

The current technical assistance will continue for another three years, which may have to be extended in light of experience in other countries.<sup>16</sup> Medium to long-term challenges for the participating commercial banks include increasing operational efficiency, as the costs of the services that they are currently receiving from the MSFF will have to be internalized. In addition, internal reforms of the banks must be pursued in order to attract more deposits, which will provide further sources of micro and small loans.

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<sup>16</sup> The similar scheme has been operating in Russia for 12 years, in Ukraine for 8 years, and in Kazakhstan for six years with continuing technical assistance while transferring more responsibilities to the partner banks.

## **SECTOR F**

# **AGRICULTURE DEVELOPMENT PLAN**

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## F. AGRICULTURE DEVELOPMENT PLAN

### F.1 Present Situation of Agriculture

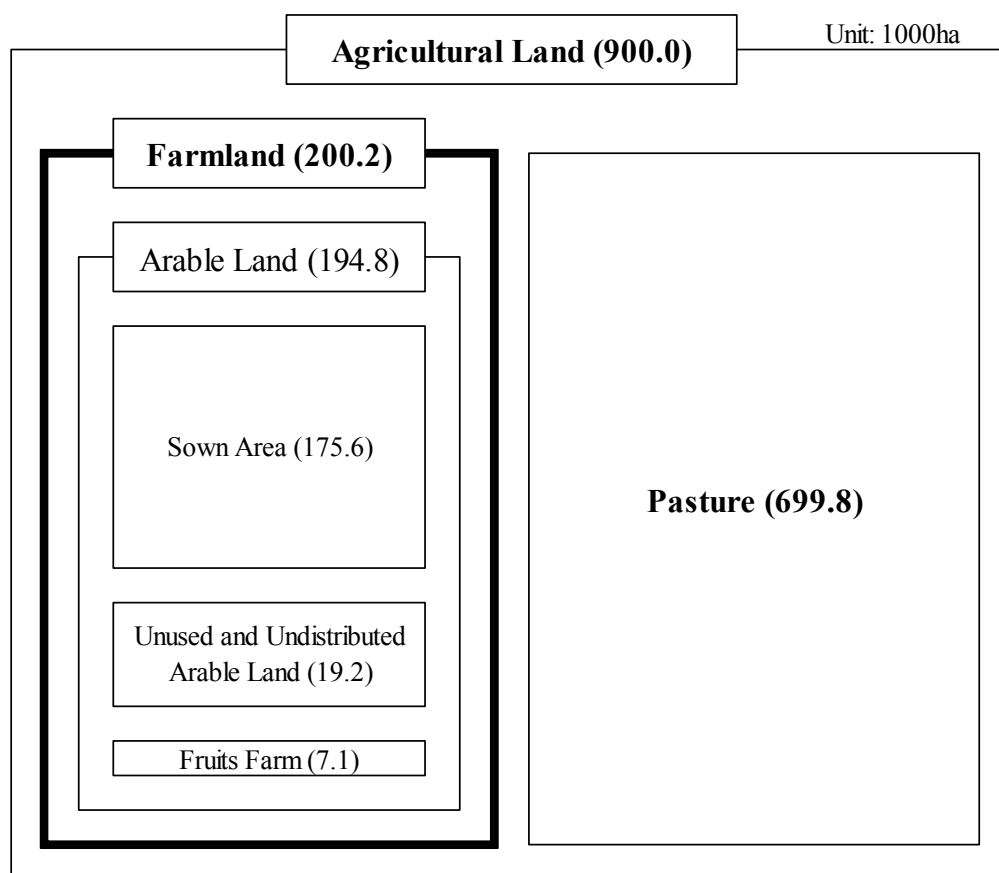
In 2002, arable land area used for agricultural production was 1,306,787 ha in Kyrgyzstan. During the last ten years, the arable land area has been reduced by 39,300 ha (or 2.8%). Of total arable land, 1,085,600 ha (83.0%) are under agricultural crops, 12,922 ha (1.1%) nursery gardens/fallows, and 208,265 ha (15.9%) are unused and/or undistributed. Arable land is distributed over the country, i.e. 33% of arable land (435,863 ha) is in Chui oblast, 194,931 ha (15%) in Issyk-Kul, 190,748 ha (15%) in Osh, 168,458 ha (13%) in Jalal-Abad, and 1,456 ha (0.1%) in Bishkek. In Issyk-Kul Oblast, sown area is 175,600 ha (90.2% of arable land), unused arable land is 6,699ha (3.4%), and undistributed arable land in aiyl okmotu is 12,484 ha (6.4%). The proportion of the sown area is the highest in all Oblast, and the Issyk-Kul zone played a significant role in the Kyrgyz agricultural development.

The agricultural population in Issyk-Kul Oblast was 74,298 in 2002, having decreased by 14.6 % from 85,973 in 1999. It represents 55% of the employed population (decrease from 62% in 1999). On the other hand, the populations employed in trade, construction, transport and communications, and manufacturing have increased substantially.

**Table F.1 Agricultural Population in Issyk-Kul Oblast**

		1999		2002	
A	Total Population	413,149		420,600	
B	Employed Population	138,683	B/A 33.6%	136,284	B/A 32.4%
C	Agriculture, Hunting, Forestry	85,973	C/B 62.0%	74,298	C/B 54.5%

The agricultural land in the study area is estimated to be around 900,000 ha, based on the data available in Issyk-Kul Oblast. The structure of agricultural land is illustrated in the figure below.



Source: Results of the First Agricultural Census of the Kyrgyz Republic of 2002 2003  
National Statistical Committee of the Kyrgyz Republic  
Material of Ministry of Agriculture, Water Resources and Processing Industry  
**Figure F.1 Structure of Agricultural Land in Study Area (2002)**

## F.2 Development Issues and Basic Concept of the Agricultural Sector

The development issues are analyzed and targets on agricultural development are set from two points of view:

- Viewpoint of regional planning; and
- Viewpoint of farmers.

The targets are also set with the views directed towards attainment of the following:

- Development of High Value-added Agriculture including Linkage with Tourism (from a viewpoint of regional planning); and
- Improvement of Livelihood of Farmers (from a viewpoint of farmers).

### Issues from Viewpoint of Regional Planning

From a viewpoint of development of high value-added agriculture, including linkage with tourism, the following issues are demarcated:

*(1) Mono-Culture*

The major crops are wheat, forages, potatoes and barley, accounting for 98.8% of the sown area. The sown area of cereals is 66%, industrial crops (tobacco, sugar beet, oil crops) are 1.9%, and vegetables are 0.7%. The fruits are cultivated in 7,100 ha. This mono-culture type is one of the reasons for low value-added in agriculture.

*(2) Low Value-Added*

There are some fruit processing factories in Issyk-Kul Oblast. Although juice and jam are made in factories, they cannot fully operate due mainly to lack of qualified raw fruits in Issyk-Kul Oblast. Further, the processing machines are absolute. Although high quality fruits (30%) are exported to Kazakhstan, Russia etc., other fruits should be processed. However, most are used for feed of livestock because of their low quality. Therefore, the value-added to agricultural products is quite low.

*(3) Lack of Linkage with Tourism*

Most of the products are currently sold to merchants/visiting dealers, and farmers do not have wholesale routes or direct sales routes to hotels/retail stores as they are not organized for marketing. There is no linkage between the tourism industry and marketing.

To overcome these constraints, major issues to be addressed by the integrated regional development will include the following:

*1) Cultivation of Suitable Crops for Tourism and Processing/Export;*

It is necessary to diversify the crops in order to add value by processing and linkage with tourism and export. To realize this, the sown area of cereals (wheat and barley) will be decreased, while the sown area of industrial crops will be increased for processing. Likewise, the number of fruit farms will be increased to meet the demand of processing, exports and tourism. The vegetables area will also be increased to meet the demand from tourism. The forage area will be increased to improve production of livestock, especially cow breeding. Provisionally, sown areas in 2002 (actual) and 2025 (tentative) are summarized in the table below, for reference. The proposed shift will be realized through extension and technical assistance to farmers' organizations.



Table F.2 Sown Areas by Crops in Study Area

Unit: Thousand ha

	2002	2025	Volume of increase/decrease
Total Sown Area	179.0	183.7	4.7
Cereals	115.2	92.2	-23.0
Wheat	96.6	77.3	-19.3
Barley	17.8	14.2	-3.6
Others (Buckwheat, Corn etc.)	0.1	0.7	0.7
Industrial Crops	3.3	14.8	11.5
Herbs	0.0	1.0	1.0
Sugar Beet	0.6	0.6	0.0
Oil Crops	2.6	13.2	10.6
Potatoes, Vegetables Melons	22.1	24.8	2.7
Potatoes	20.8	20.8	0.0
Vegetables	1.3	4.0	2.7
Forages	38.4	51.9	13.5
Fruits (not included in sown area)	7.1	14.2	7.1

### 2) *Processing to Enhance Value Added*

Processing factories will be established/renewed to process industrial crops/fruits and livestock products, based on the increased production. In this context, establishment/strengthening of farmers' organizations are of prime importance as their ownership is a key for success.

### 3) *Development of New Markets*

It is necessary to develop new markets in tourism/exporting. For example, it is expected to find markets of raw/processed products in hotels/stores. To develop the new markets, it is desirable to establish an "information & marketing center", with the following:

- (i) exhibition of products;
- (ii) dissemination of commodity information to customers and obtaining information from the customers;
- (iii) direct retail for local people and tourists;
- (iv) wholesale to hotels/stores;
- (v) opening of new wholesale routes and exports.

As noted above, the establishment/strengthening of farmers' organization associations is a key component to realize the paradigm shift in sown area, processing to enhance value added and development of new markets.

### Issues from Viewpoint of Farmers

Through the questionnaire survey to farmers, major issues on agricultural production have been clarified as follows:

(1) *Shortage of Irrigation Water*

Irrigation facilities had been constructed for 163,500 ha, or 84% of arable areas in 2002 (194,900 ha). However, 58% of farmers noted that irrigation water is limited for cultivation, due mainly to water leakage in decrepit irrigation facilities. The loss of intake water in 2002 was reported to be as high as 32%. Irrigation accounts for 76% of intake water. Therefore, the aging irrigation facilities should be rehabilitated.

(2) *Lack of Funds for Inputs/Machinery*

More than 40% of farmers noted difficulties in financial arrangements for farming. The private organization, Bai-Tushum operated micro-finance for farmers, but it is no longer in operation. Financing at the level of 100,000 som/family/year is required. Micro-finance previously operated in Ak-Suu Rayon had interest rates of 25% to 35% per annum with a return rate of more than 90%.

(3) *Low Quality Seeds*

The questionnaire survey revealed that 90% of farmers highlighted high prices of seeds and 70% noted low quality of seeds, the implication being that the shortage of funds will lead to low quality seeds and low productivity.

(4) *Lack of Technical Assistance*

Some 10% of farmers noted the shortage of technical assistance, while 12% pointed out inadequate application of fertilizers. Only three farmers out of 59 replied that they actually received technical assistance.

**Table F.3 Major Issues for Agricultural Production (Results of Social Survey)**

	Number of Answers	Percentage of the 59 Farmers (%)
Shortage of irrigation water	34	57.6
Lack of fund	26	44.1
High taxes for owned land	19	32.2
High prices of seeds	11	18.6
Low quality of seeds	10	16.9
Inadequate application of fertilizer	7	11.9
Lack of technical information	6	10.2
Lack of machines, fuel and lubricants	6	10.2
Damage by wild animals or insects	4	6.8
Weed damage	3	5.1
Salinity of soil	2	3.4

Source: Social Survey for the Comprehensive Development Plan of the Issyk-Kul Oblast, 2004

*(5) Low Selling Prices*

Around 68% farmers, or 40 out of 59 farmers, indicated low selling prices in marketing. Most farmers (98%) sell products to merchants/visiting dealers, which has resulted in low selling prices. Also, they do not have any wholesale routes with high margins, such as direct sales to hotels/sanatoriums.

The productivity of cereals has been decreasing since 1999. It appears that the shortage of irrigation water, lack of funds for inputs/machinery and lack of technical assistance are major reasons for this. Low selling prices and the resultant low income invite vicious cycles. The household net income is only about \$180/year.

Under such circumstances, major issues to be addressed from the farmer's viewpoint are:

*1) Rehabilitation of Irrigation Facilities*

The agricultural census in 2002 demonstrated that the irrigated area was 142,000 ha out of 163,500 ha of irrigation facilities. This implies that 21,500 ha, or 13% of the constructed area, are out of service and rehabilitation is necessary.

*2) Establishment/Strengthening of Farmers Organization*

For agricultural financing, technical assistance and marketing, the establishment and strengthening of a farmers organization would be indispensable. At present, the Association of Private Farmers of Ak-Suu Rayon, "Ak-Suu Baba-Dyikany" is established (in 2004). There is no farmers organization in other Rayons. One possible type of organization would be a farmers company or enterprise in which the farmers set up their own enterprise. Such farmer's enterprises are federated at the oblast level.

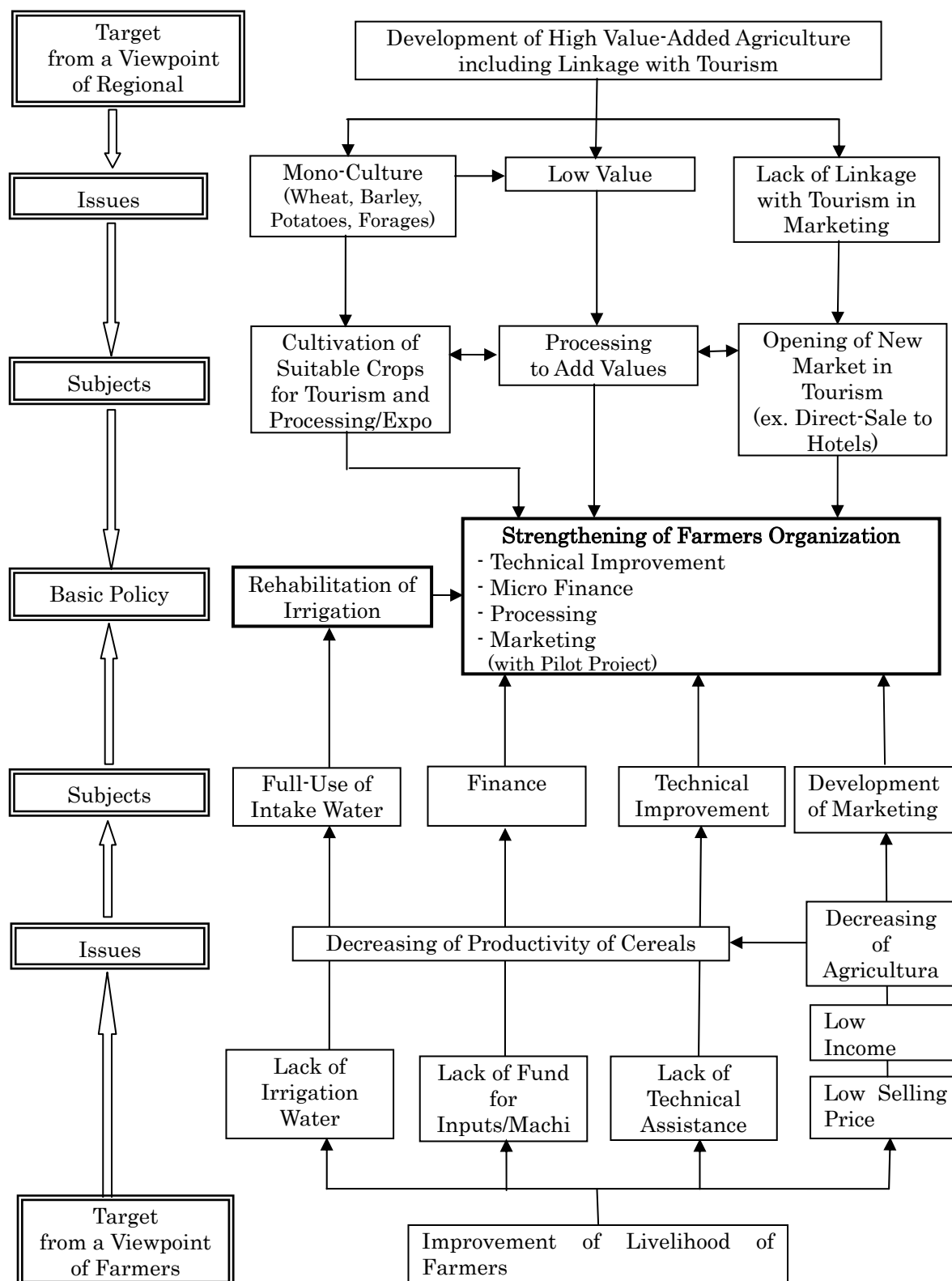


Figure F.2 Development Concept of the Agricultural Sector in Issyk-Kul zone

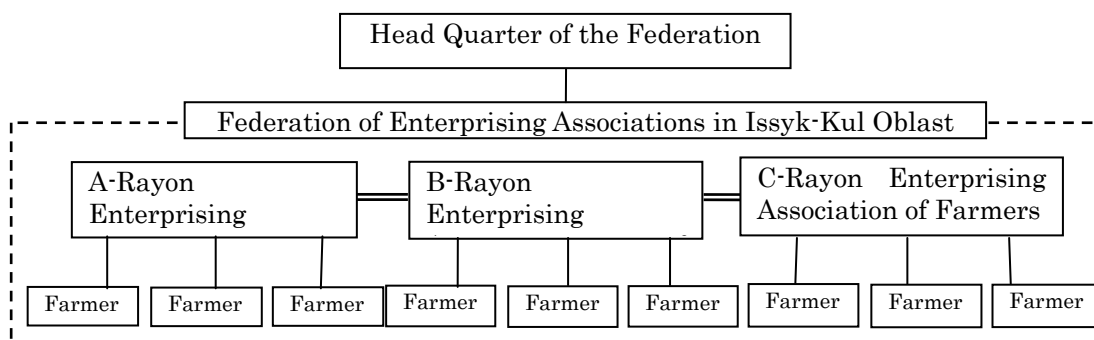


Figure F.3 Alternative Structure of Enterprising Association of Farmers

The functions and facilities of the federation are shown in the figure below. The federation will operate agro-business by/for/of farmers. The functions will cover micro-finance, extension/technical improvement, marketing and processing.

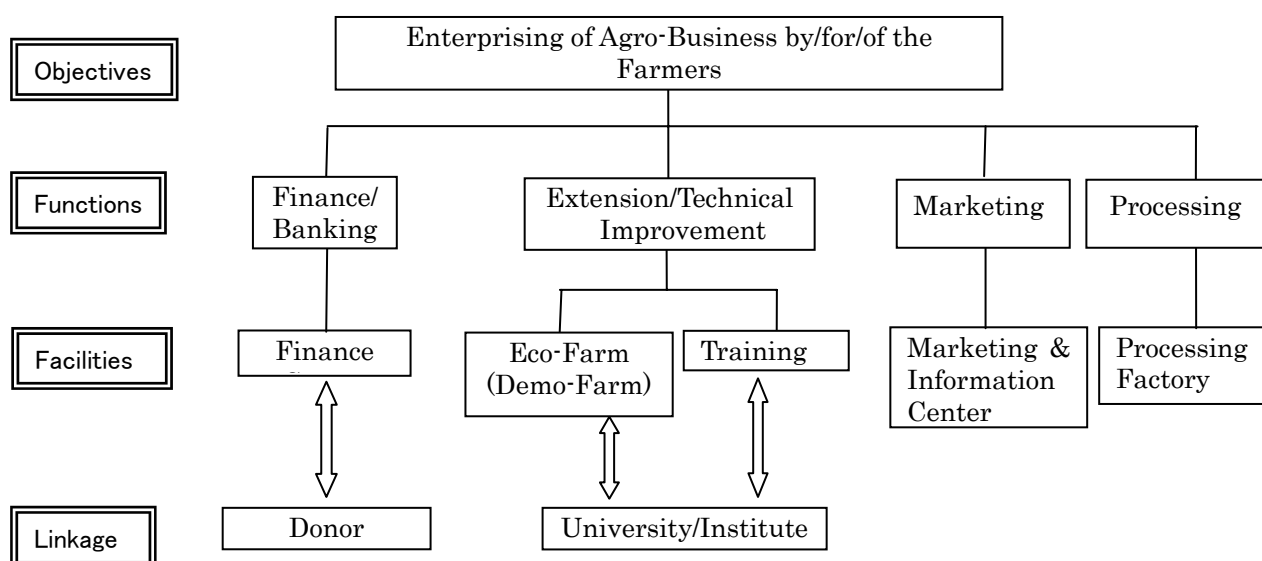


Figure F.4 Functions of Federation of Enterprising Association of Farmers

The alternative organization will be further discussed and examined in the course of the Study.

## F.3 Master Plan for Agricultural Sector

### F.3.1 Development Frame of Agricultural Sector

#### (1) Agricultural Population

The agricultural population decreased from 86,000 in 1999 to 74,000 in 2002 (decline of 4.5%/year). Also, the population employed in agriculture compared to total employment decreased from 62% in 1999 to 55% in 2002. On the other hand, the populations of trade, construction and manufacturing increased from 1999 to 2002.

The outlook for the agricultural population is shown in the table below. Based on the trend of the employment as a share of population, employment is estimated to be 74,000 in 2010 (45% of overall employed population), and 70,000 in 2025 (36%).

**Table F.4 Outlook for Agricultural Population in Issyk-Kul Oblast**

		Unit: Thousand							
		1999		2002		2010		2025	
A	Total Population	415.5		420.6		490.0		580.0	
B	Employed Population	138.7	B/A 33.4%	136.3	B/A 32.4%	165.0	B/A 33.7%	195.0	B/A 33.6%
C	Agricultural Population	86.0	C/B 62.0%	74.3	C/B 54.5%	74.0	C/B 44.8%	70.0	C/B 35.9%

#### (2) Livestock

The number of cattle, pigs, horses and poultry increased from 1998 to 2002. However, the number of sheep and goats decreased around the same time. The structure of livestock has been changing from breeding of sheep and goats to cattle. The outlook of the livestock in 2010 and 2025 is estimated as listed in the table below. This is estimated based on the observed trend from 1998 to 2002, excluding horses, which increased during the period. However, the horses will be replaced by agricultural machinery and so it is estimated the present number will be maintained.

**Table F.5 Outlook for Livestock and Poultry in Issyk-Kul Oblast**

		Unit: Thousand Units							
		1994	1998	1999	2000	2001	2002	2010	2025
	Cattle	150.8	110.8	117.9	121.0	126.9	129.0	166.5	234.6
	Pigs	N.A.	12.8	13.3	15.0	16.4	15.8	23.8	37.4
	Sheep and Goats	1414.4	625.4	634.8	615.0	590.6	599.3	516.6	372.0
	Horses	50.7	50.8	56.4	59.7	61.0	63.2	63.2	63.2
	Poultry	N.A.	263.5	298.3	325.5	337.8	474.8	802.1	1495.2

Source: Report on Livestock in Kyrgyzstan 1994 TACIS (data in 1994)  
Agriculture of the Kyrgyz Republic 2003 National Statistic Committee of the Kyrgyz Republic

*(3) Agricultural Land Use in the Study Area*

Agricultural land in the survey area totaled 900,000 ha in 2002. This will decrease by 4,000 ha by 2025 because of the change from agricultural land to urban land use (city/resort). The sown area will increase from 175,600 ha in 2002 to 183,700 ha in 2025 because the unused and undistributed arable land will reduce for full-use of the arable land. The area of fruit farms will increase from 7,100 ha in 2002 to 14,200 ha in 2025 by changing from arable land to fruits farm (the self-sufficiency in fruits was only 54% in Kyrgyzstan in 2002). Also, fruits can be a value-added product through processing and consumption will increase owing to the development of tourism.

The structure of agricultural land and estimated change of areas are shown in the table below.

**Table F.6 Outlook for Agricultural Land in Study Area**

Unit: Thousand ha

	1998	1999	2000	2001	2002	2010	2025
<b>Agricultural Land</b>					900.0	897.5	896.0
<b>1. Farm Land</b>					200.2	197.7	196.2
1) Arable Land					194.8	192.3	183.7
a) Sown Area	170.3	176.2	187.0	188.9	175.6	179.8	183.7
b) Unused and Undistributed Arable Land					19.2	12.5	0.0
2) Fruits Farm					7.1	9.6	14.2
<b>2. Pasture</b>					699.8	699.8	699.8

Source: Result of the First Agricultural Census of the Kyrgyz Republic of 2002-2003 National Statistical Committee  
Agriculture of the Kyrgyz Republic 2003 National Statistic Committee of the Kyrgyz Republic  
Materials of Ministry of Agriculture, Water Resources and Processing Industry

The sown areas estimated for 2010 and 2025 are also shown.

The sown area of cereals is estimated to decrease according to “Agrarian Policy Concept of the Kyrgyz Republic to 2010” (Water Resources and Processing Industry division of the Ministry of Agriculture). The sown area of cereals will be reduced 10% by 2010 and 20% by 2025. The yield of potatoes was excessive in 2003 and 2004. However, potatoes can be processed into chips, starches and dry mashed potatoes etc. Therefore, it is estimated the sown area will be retained and part of the production will be processed. To counteract the decrease in cereals, production of vegetables, industrial crops such as herbs and oil crops, and forages will be increased. The consumption level of vegetables is estimated to increase in line with tourism development. Industrial crops can be high-value added product by processing. Also, demand is estimated to increase because the products of food processing are increasing at a national level, especially sugar, fruit, vegetable and oil. The consumption of forages is estimated to increase in accordance with larger numbers of cattle.

**Table F.7 Outlook for Sown Areas by Crops in Study Area**

Unit: Thousand ha

	1998	1999	2000	2001	2002	2010	2025
Total Sown Area	170.3	176.2	187.0	188.9	179.0	179.8	183.7
Cereals	99.5	100.9	111.6	115.8	115.2	103.7	92.2
Wheat	81.9	81.6	91.0	97.2	96.6	86.9	77.3
Barley	17.0	18.6	20.1	17.8	17.8	16.0	14.2
Others (Buckwheat, Corn etc.)	N.A.	N.A.	N.A.	N.A.	0.1	0.8	0.7
Industrial Crops	1.1	2.4	4.8	5.0	3.3	8.0	14.8
Tobacco Herbs	0.0	0.0	0.0	0.0	0.0	0.3	1.0
Sugar Beet	0.1	0.0	0.0	0.1	0.6	0.6	0.6
Oil Crops	0.9	2.3	4.8	4.7	2.6	7.1	13.2
Potatoes, Vegetables	22.0	25.3	27.3	27.6	22.1	23.8	24.8
Potatoes	19.6	22.6	24.1	24.1	20.8	20.8	20.8
Vegetables	2.4	2.7	3.2	3.5	1.3	3.5	4.0
Forages	47.7	47.6	43.3	40.5	38.4	44.3	51.9

Source: Agriculture of the Kyrgyz Republic 2003 National Statistic Committee of the Kyrgyz Republic

#### *(4) Demand for Irrigation Water*

Irrigation water is used in sown areas of cereals, potatoes and forages. The total sown area of these crops in 2002 was 174,400 ha. The irrigation facilities had been constructed across some 163,500 ha for these crops. The intake water from rivers was 529.12 million m<sup>3</sup> in 2002.

The total sown area of these crops will decrease in 2025 to an estimated 165,200 ha. This is almost the same as the area over which irrigation facilities extend. Therefore, the demand for irrigation water in 2025 is estimated to remain similar to that in 2002, namely 529.12 million m<sup>3</sup>.

Due to the extremely poor condition of constructed facilities, the loss of intake water was estimated to be approximately 30% in 2002. Thus rehabilitation of the facilities is important.



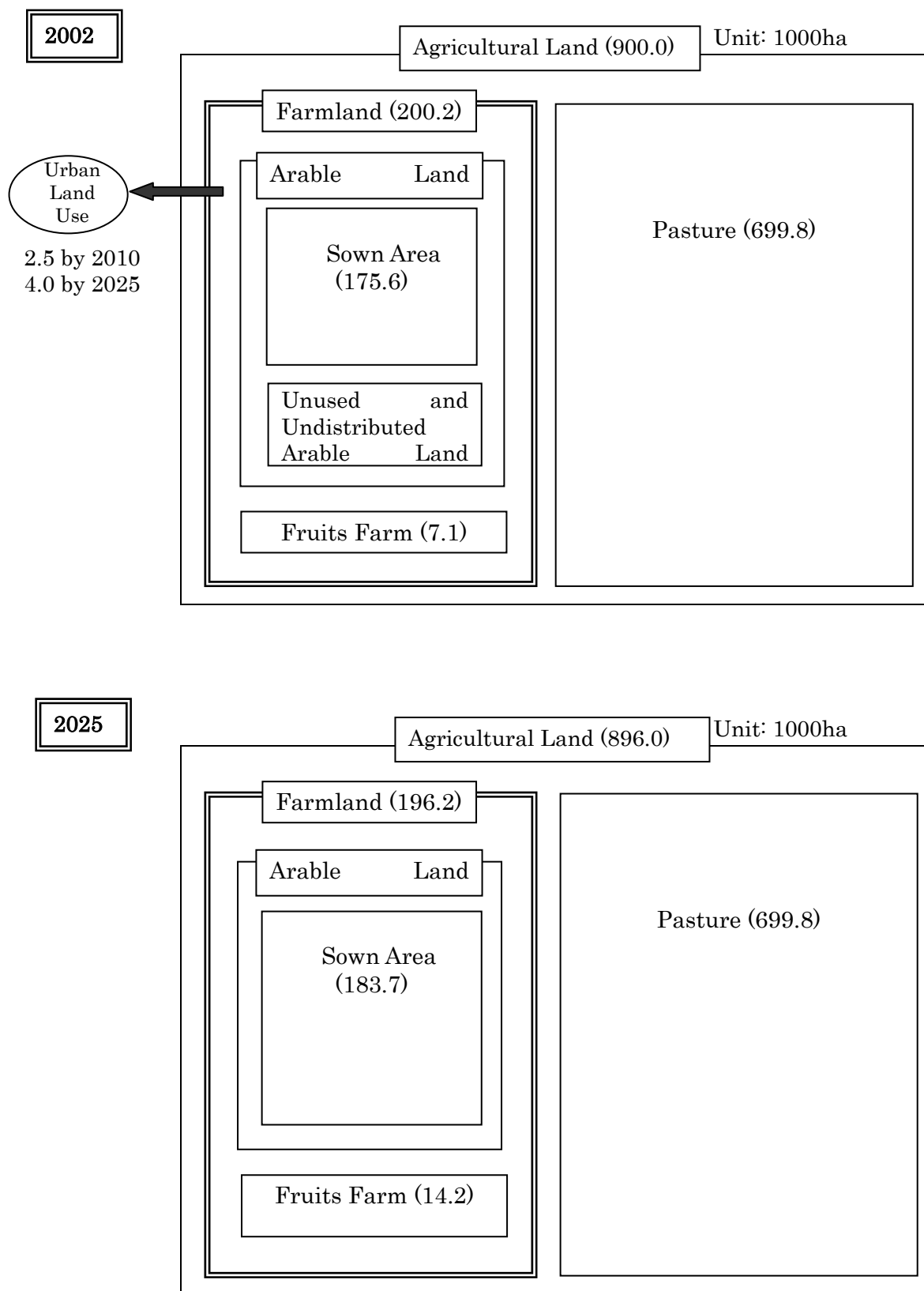


Figure F.5 Structure of Agricultural Land in Study Area

## F.3.2 Development Policies

### (1) Targets for Farmland Area and Gross Output

#### 1) Targets on Farmland Area and Gross Output on the Oblast

The targets of farmland area and gross output in the oblast are shown in the tables below. The growth rates (2025/2002) are also shown.

The estimation of the farmland area is based on the outlook of the sown areas. (Refer to 4. Development Frame on Agricultural Sector). The total farmland area will be maintained (the gross rate 2025/2002 is 0.99). The farmland areas will be increased in terms of industrial crops (the gross rate 2025/2002 is 4.48), vegetables (3.08), and fruits (2.00). On the other hand, it will decrease for cereals (0.80). The area of potatoes will be unchanged (1.00).

Based on the farmland area and crop productivities (refer to 4) Targets on Productivity), gross outputs of agriculture in 2010 and 2025 have been estimated. The gross output of livestock was also estimated based on gross output in 2002 and the estimation of livestock numbers. The gross output will increase with the growth rate of gross output (sum of agriculture and livestock) being around 2.35 (2025/2002). The rate for agriculture is estimated to be 2.21 and for livestock is 2.63.

**Table F.8 Targets of Farmland Area and Gross Output on Issyk-Kul Oblast**

	2002			2010			2025			Growth Rates (2025/2002)		
	FA	GO	GO/ha	FA	GO	GO/ha	FA	GO	GO/ha	FA	GO	GO/ha
Cereals	115.2	1857	16.1	103.7	2006	19.3	92.2	1932	21.0	0.80	1.04	1.3
Wheat	96.6	-	-	86.9	-	-	77.3	-	-	-	-	-
Barley	17.8	-	-	16.0	-	-	14.2	-	-	-	-	-
Corn	0.1	-	-	0.8	-	-	0.7	-	-	-	-	-
Industrial Crops	3.3	27	-	8.0	85	-	14.8	216	-	4.48	7.94	-
Herbs	0.0	0	10.0	0.3	6	20.0	1.0	40	40.0	-	-	4.0
Sugar Beet	0.6	5	8.5	0.6	6	10.2	0.6	8	12.8	1.00	1.50	1.5
Oil Crops	2.6	22	8.5	7.1	73	10.2	13.2	169	12.8	5.08	7.62	1.5
Potatoes, Vegetables	22.1	2152	-	24.3	2960	-	24.8	4375	-	1.12	2.03	-
Potatoes	20.8	1791	86.1	20.8	1791	86.1	20.8	2149	103.3	1.00	1.20	1.2
Vegetables	1.3	362	278.3	3.5	1169	334.0	4.0	2226	556.6	3.08	6.15	2.0
Fruits	7.1	499	70.2	9.6	1214	126.4	14.2	3491	245.8	2.00	7.00	3.5
<b>Sub-Total of Agriculture</b>	<b>147.7</b>	<b>4536</b>	<b>-</b>	<b>145.6</b>	<b>6264</b>	<b>-</b>	<b>146.0</b>	<b>10015</b>	<b>-</b>	<b>0.99</b>	<b>2.21</b>	<b>-</b>
Livestock	-	2283	-	-	3159	-	-	6010	-	-	2.63	-
<b>Total Gross Output</b>	<b>-</b>	<b>6819</b>	<b>-</b>	<b>-</b>	<b>9423</b>	<b>-</b>	<b>-</b>	<b>16025</b>	<b>-</b>	<b>-</b>	<b>2.35</b>	<b>-</b>

Abbreviation: FA (Farmland Area), GO (Gross Output)

Unit: Farmland Area (Thousand ha), Gross Output (Million Som), Gross Output/ha (Thousand Som)

Source of Sown Area 2002 : Agriculture of the Kyrgyz Republic 2003 National Statistic Committee of the Kyrgyz Republic

Source of Total Gross Output 2002 : Ministry of Finance

Note : Gross Output of Oil Crops and Herbs 2002 are estimated.

### 2) Targets on Farmland Area by Rayon

The farmland areas by rayon in 2002 are shown in the table below.

The top rayons showing the percentage of farmland area of each crop in 2002 are also listed below, highlighting the rayon characteristics in 2002:

Jety-Ogzu: Potatoes (15.7%)--average of entire oblast is 11.3%  
 Issyk-Kul: Fruits (8.1%)--average 3.8%, Vegetables (1.1%)--average 0.7%  
 Tong: Forages (28.4%)--average 19.9%,  
 Industrial Crops (4.8%)--average 1.7%  
 Tup Rayon: Cereals (77.8%)--average 62.5%  
 Ak-Suu: None (potato farm land with the area of 60.8 km<sup>2</sup> is the largest)

**Table F.9 Farmland Area by Rayon in 2002**

	Ak-Suu Rayon		Jety-Oguz Rayon		Issyk-Kul Rayon		Tong Rayon		Tup Rayon		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
1 Cereals	31,875	67.4%	19,495	51.6%	14,155	49.2%	10,166	51.5%	39,501	77.8%	115,193	62.5%
Wheat	28,399	60.0%	16,122	42.7%	11,801	41.0%	8,830	44.7%	31,397	61.9%	96,548	52.4%
Barley	3,476	7.3%	3,374	8.9%	2,355	8.2%	1,336	6.8%	8,104	16.0%	18,645	10.1%
2 Industrial Crops	430	0.9%	468	1.2%	763	2.7%	939	4.8%	599	1.2%	3,200	1.7%
Sugar Beet	81	0.2%	88	0.2%	143	0.5%	176	0.9%	112	0.2%	600	0.3%
Oil Crops	349	0.7%	380	1.0%	620	2.2%	763	3.9%	487	1.0%	2,600	1.4%
3 Potatoes, Vegetables	6,304	13.3%	6,174	16.3%	3,598	12.5%	2,257	11.4%	3,796	7.5%	22,129	12.0%
Potatoes	6,082	12.9%	5,918	15.7%	3,276	11.4%	2,077	10.5%	3,488	6.9%	20,841	11.3%
Vegetables	222	0.5%	256	0.7%	322	1.1%	180	0.9%	308	0.6%	1,288	0.7%
4 Forages	6,750	14.3%	10,271	27.2%	7,916	27.5%	5,621	28.4%	6,175	12.2%	36,733	19.9%
5 Fruits	1,944	4.1%	1,356	3.6%	2,323	8.1%	776	3.9%	686	1.4%	7,085	3.8%
Total	47,302	100%	37,765	100%	28,756	100%	19,759	100%	50,758	100%	184,340	100%

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry

Note: Industrial Crops are estimated.

The targets for farmland areas in 2025 are shown in the table below. The farmland areas by rayon are estimated based on the areas in 2002 (rayon level), while the estimated areas in 2025 are based on oblast level.

The total farmlands are estimated to increase in Issyk-kul rayon by 3500ha and Tong rayon by 2900ha to maintain the growth in gross output. Therefore, it will be desirable to develop new farmlands in these rayons, if possible. On the other hand, total farmlands are estimated to decrease in Tup rayon by 5000ha and Ak-Suu rayon by 2700ha. It may not, however, be necessary to reduce the farmland in these rayons as they could provide the additional farmlands to achieve the targeted gross outputs.

Based on the farmland targets by rayon, the top rayons in terms of percentage of farmland area of each crop in 2025 are shown below. These show the characteristics of the rayon in 2025:

Jety-Ogzu: Potatoes (14.4%)--average 10.7%,  
 Forages (33.7%)--average 25.4%  
 Issyk-Kul: Fruits (13.5%)--average 7.2%, Vegetables (2.9%)--average 2.0%  
 Tong: Industrial Crops (17.4%)--average 7.6%  
 Tup: Cereals (65.0%)--average 47.1%  
 Ak-Suu: None

**Table F.10 Target of Farmland Area by Rayon in 2025**

												Unit: ha	
	Ak-Suu Rayon		Jety-Oguz Rayon		Issyk-Kul Rayon		Tong Rayon		Tup Rayon		Total		
1 Cereals	23,980	53.8%	14,667	37.9%	10,649	33.0%	7,648	33.8%	29,718	65.0%	86,663	47.1%	
Wheat	21,361	47.9%	12,127	31.3%	8,876	27.5%	6,642	29.3%	23,617	51.7%	72,623	39.5%	
Barley	2,619	5.9%	2,540	6.6%	1,773	5.5%	1,006	4.4%	6,101	13.3%	14,040	7.6%	
2 Industrial Crops	1,992	4.5%	2,148	5.5%	3,219	10.0%	3,933	17.4%	2,680	5.9%	13,972	7.6%	
Herbs	250	0.6%	250	0.6%	125	0.4%	125	0.6%	250	0.5%	1,000	0.5%	
Sugar Beet	76	0.2%	83	0.2%	135	0.4%	166	0.7%	106	0.2%	564	0.3%	
Oil Crops	1,666	3.7%	1,815	4.7%	2,959	9.2%	3,642	16.1%	2,324	5.1%	12,408	6.7%	
3 Potatoes, Vegetables	6,358	14.3%	6,303	16.3%	4,011	12.4%	2,473	10.9%	4,170	9.1%	23,316	12.7%	
Potatoes	5,717	12.8%	5,563	14.4%	3,080	9.5%	1,952	8.6%	3,278	7.2%	19,590	10.7%	
Vegetables	641	1.4%	740	1.9%	931	2.9%	521	2.3%	892	2.0%	3,726	2.0%	
4 Forages	8,575	19.2%	13,049	33.7%	10,057	31.1%	7,141	31.5%	7,846	17.2%	46,668	25.4%	
5 Fruits	3,655	8.2%	2,549	6.6%	4,367	13.5%	1,459	6.4%	1,290	2.8%	13,320	7.2%	
Total	44,561	100%	38,717	100%	32,304	100%	22,654	100%	45,703	100%	183,939	100%	

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry

### 3) Targets on Gross Output by Rayon

The gross output by rayon in 2002 is shown in the table below.

The top rayons as a percentage of the gross output of each crop in 2002 are shown below. This outlines the characteristics of the rayon in 2002:

Jety-Ogzu: Potatoes (34.2%) -- average of entire oblast is 26.3%  
 Issyk-Kul: Fruits (13.3%)--average 7.3%, Vegetables (7.3%)--average 5.3%  
 Tong: Livestock (38.5%)--average 33.5%,  
 Industrial Crops (1.1%)--average 0.4%  
 Tup: Cereals (41.0%)--average 27.2%  
 Ak-Suu: None

**Table F.11 Gross Output by Rayon in 2002**

												Unit: Million Som	
	Ak-Suu Rayon		Jety-Oguz Rayon		Issyk-Kul Rayon		Tong Rayon		Tup Rayon		Total		
Cereals	513.2	28.4%	313.9	21.1%	227.9	18.6%	163.7	22.1%	636.0	41.0%	1,854.6	27.2%	
Industrial Crops	3.7	0.2%	4.0	0.3%	6.5	0.5%	8.0	1.1%	5.1	0.3%	27.2	0.4%	
Sugar Beet	0.7	0.0%	0.7	0.1%	1.2	0.1%	1.5	0.2%	1.0	0.1%	5.1	0.1%	
Oil Crops	3.0	0.2%	3.2	0.2%	5.3	0.4%	6.5	0.9%	4.1	0.3%	22.1	0.3%	
Potatoes, Vegetables	585.4	32.4%	580.8	39.0%	371.7	30.4%	228.9	30.9%	386.1	24.9%	2,152.9	31.6%	
Potatoes	523.7	29.0%	509.5	34.2%	282.1	23.0%	178.8	24.2%	300.3	19.3%	1,794.4	26.3%	
Vegetables	61.7	3.4%	71.2	4.8%	89.6	7.3%	50.1	6.8%	85.8	5.5%	358.5	5.3%	
Fruits	136.5	7.5%	95.2	6.4%	163.1	13.3%	54.5	7.4%	48.2	3.1%	497.4	7.3%	
Sub-Total of Agriculture	1238.7	68.5%	993.8	66.7%	769.2	62.8%	455.1	61.5%	1075.3	69.3%	4,532.0	66.5%	
Livestock	569.8	31.5%	496.3	33.3%	455.2	37.2%	285.1	38.5%	477.1	30.7%	2,283.7	33.5%	
Total Gross Output	1808.5	100.0%	1490.1	100.0%	1224.4	100.0%	740.2	100.0%	1552.5	100.0%	6,815.7	100.0%	

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry, and Ministry of Finance

Note: Gross Output of Industrial Crops in 2002 is estimated.

The targets of the gross output in 2025 are shown in the table below. They are estimated based on the gross output in 2002 and the growth rate for crops/livestock.

Based on the targets of the gross output by rayon, the top rayons as a percentage of the gross output of each crop in 2025 are shown below. This outlines the characteristics of the rayon in 2025:

Jety-Ogzu: Potatoes (18.1%) -- average of entire oblast is 13.5%  
 Issyk-Kul: Fruits (32.5%)--average 21.8%,  
 Tong: Livestock (39.9%)--average 37.6%,  
 Industrial Crops (3.0%)--average 1.3%  
 Tup: Cereals (22.6%)--average 12.1%,  
 Vegetables (16.6%)--average 13.8%  
 Ak-Suu: None

**Table F.12 Outlook of Gross Output by Rayon in 2025**

Unit: Million Som

	Ak-Suu Rayon		Jety-Oguz Rayon		Issyk-Kul Rayon		Tong Rayon		Tup Rayon		Total	
Cereals	533.9	13.2%	326.6	9.6%	237.1	6.7%	170.3	9.0%	661.7	20.8%	1,929.6	12.1%
Industrial Crops	33.6	0.8%	35.7	1.1%	47.0	1.3%	56.6	3.0%	43.0	1.3%	216.0	1.3%
Herbs	10.0	0.2%	10.0	0.3%	5.0	0.1%	5.0	0.3%	10.0	0.3%	40.0	0.3%
Sugar Beet	1.0	0.0%	1.1	0.0%	1.8	0.1%	2.2	0.1%	1.4	0.0%	7.7	0.0%
Oil Crops	22.6	0.6%	24.6	0.7%	40.1	1.1%	49.4	2.6%	31.5	1.0%	168.3	1.1%
Potatoes, Vegetables	1008.2	25.0%	1049.7	31.0%	890.0	25.3%	523.1	27.8%	888.3	27.9%	4,359.3	27.2%
Potatoes	628.4	15.6%	611.5	18.1%	338.5	9.6%	214.5	11.4%	360.3	11.3%	2,153.2	13.5%
Vegetables	379.8	9.4%	438.3	12.9%	551.5	15.7%	308.5	16.4%	528.0	16.6%	2,206.0	13.8%
Fruits	955.3	23.7%	666.3	19.7%	1141.5	32.5%	381.3	20.3%	337.1	10.6%	3,481.6	21.8%
Sub-Total of Agriculture	2531.0	62.8%	2078.4	61.4%	2315.6	65.9%	1131.3	60.1%	1930.1	60.6%	9,986.4	62.4%
Livestock	1500.1	37.2%	1306.6	38.6%	1198.4	34.1%	750.6	39.9%	1256.1	39.4%	6,011.8	37.6%
Total Gross Output	4031.1	100.0%	3385.0	100.0%	3514.0	100.0%	1882.0	100.0%	3186.2	100.0%	15,998.2	100.0%

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry, and Ministry of Finance

#### 4) Targets on Productivity

The productivity (ton/ha) of the crops by rayon in 2002 is shown in the table below. The productivity of cereals are generally similar in each rayon, however, it is slightly lower in Ak-Suu. For potatoes, Jety-Ogzu rayon has a higher productivity and larger percentage of sown area. Therefore, Jety-Oguz rayon has a high percentage of the gross output of potatoes. Tong rayon has a higher productivity of forages (perennial), which is linked to its higher livestock production. Issyk-Kul rayon has a high percentage of fruit farms and gross output of fruit, although productivity is low. Therefore, it is necessary to improve the productivity of fruits especially in Issyk-Kul rayon.

**Table F.13 Productivity of the Crops by Rayon in 2002**

	Unit : ton/ha				
	Ak-Suu	Jety-Oguz	Issyk-Kul	Tong	Tup
Cereals (total)	2.51	2.60	2.66	2.62	2.64
Wheat	2.56	2.61	2.72	2.62	2.71
Potatoes	17.40	18.00	17.32	16.30	17.20
Vegetables	14.50	17.90	12.00	13.60	16.08
Forages (Perenial)	4.62	4.63	4.33	4.79	4.14
Forages (Annual)	2.68	2.70	2.07	0.53	3.23
Fruits	3.86	5.61	3.94	5.08	6.20

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry

The productivities in Issyk-Kul oblast in 2002 and 2025 are shown in the table below. The productivities in 2025 are targets to achieve the gross output. The growth rates are higher for fruits (gross rate 2025/2002 is 1.40) and vegetables (1.30).

**Table F.14 Productivities of the Crops in Issyk-Kul Oblast in 2002 and 2025**

	Unit : ton/ha		
	2002	2025	Growth Rate (2025/2002)
Cereals (total)	2.50	2.88	1.15
Wheat	2.51	2.89	1.15
Barley	2.48	2.85	1.15
Corn	4.20	4.83	1.15
Herbs	-	-	-
Sugar Beat	8.63	10.36	1.20
Oil Crops	0.58	0.70	1.20
Potatoes	16.60	18.26	1.10
Vegetables	15.30	19.89	1.30
Forages (Perenial)	4.51	4.51	1.00
Forages (Annual)	2.47	2.47	1.00
Fruits	5.39	7.55	1.40

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry

### 5) Targets on the Livestock

The changing in livestock numbers and gross livestock output by rayon are shown in the tables below. The numbers of livestock are estimated based on numbers in 2002 and the growth rates at the oblast level. The gross outputs are estimated based on the gross output in 2002 and the growth rate.

The gross output of livestock in the oblast will increase from 2,284 million som in 2002 to 6,012 million som in 2025, based on the change in livestock numbers.

**Table F.15 Changing of the Livestock by Rayon**

(Unit: 1,000)

Kind of Livestock	Cattle			Goats and Sheep			Pigs			Horses			Poultry		
	Year	2002	2010	2025	2002	2010	2025	2002	2010	2025	2002	2010	2025	2002	2010
Ak-Suu	26,292	33,935	47,815	104,289	89,898	64,735	5,735	8,639	13,576	10,502	10,502	10,502	115,313	194,803	363,134
Jety-Oguz	33,057	42,666	60,117	159,347	137,358	98,911	2,090	3,148	4,947	17,696	17,696	17,696	105,505	178,234	332,248
Issyk-Kul	22,272	28,747	40,504	114,221	98,459	70,900	4,088	6,158	9,676	11,080	11,080	11,080	67,906	114,717	213,845
Tong	20,445	26,389	37,182	126,022	108,632	78,225	308	465	730	12,774	12,774	12,774	64,992	109,793	204,667
Tup	26,933	34,763	48,981	95,421	82,253	59,230	3,579	5,391	8,472	11,148	11,148	11,148	121,083	204,552	381,306
Total	129,000	166,500	234,600	599,300	516,600	372,000	15,800	23,800	37,400	63,200	63,200	63,200	474,800	802,100	1,495,200

**Table F.16 Gross Output the Livestock by Rayon in 2002 and 2025**

Unit: Million Som

	Ak-Suu Rayon	Jety-Oguz Rayon	Issyk-Kul Rayon	Tong Rayon	Tup Rayon	Total
2002	569.8	496.3	455.2	285.1	477.1	2283.7
2025	1500.1	1306.6	1198.4	750.6	1256.1	6011.8

Source: Materials of Ministry of Agriculture, Water Resources and Processing Industry, and Ministry of Finance

## *(2) Enterprising of the Agro-Business*

### *1) Resources of the Agro-Business*

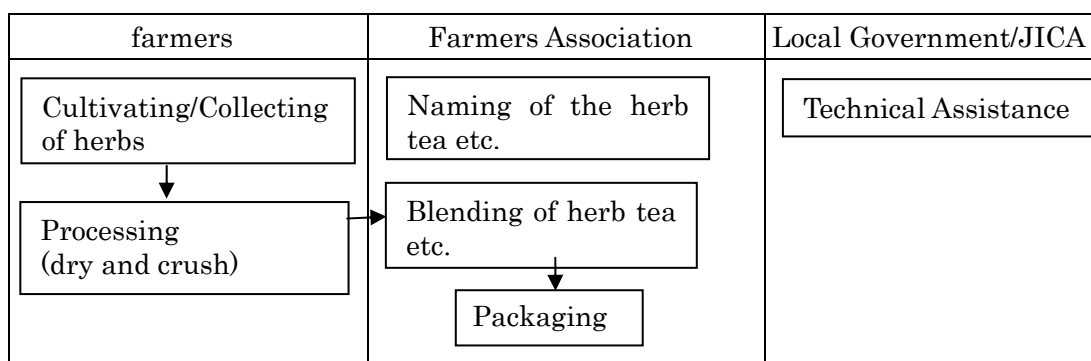
The resources of the agro-business follow.

#### Fruits

Demand for fruits (raw/dry fruits, jam, juice etc.) will increase in line with the improvement in tourism. The yield of fruits in 2002 was 38,300 ton. It will be increased to 107,210 ton in 2025. The volume of fruits for processing was estimated to be 3,300 ton per year in 2002 (9% of the yield). This will increase to 9,600 ton in 2025.

#### Herbs

Herbs can be special products of Issyk-Kul oblast. In the Soviet period, 700-800ha of herb farms existed, mainly in Ak-Suu rayon. Herb teas and natural medicines can be developed. The roles of sections to develop the herb teas are outlined below.

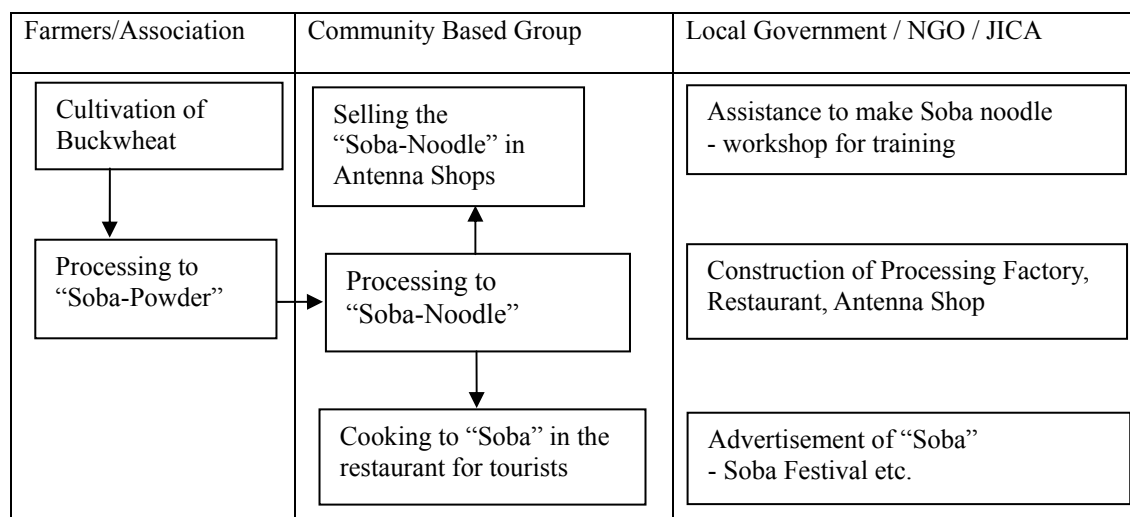


Honey

Honey is one of the main agro-products in Kyrgyzstan. It is produced from the flowers of various herbs. However, it is currently exported to Russia, Kazakhstan and Turkey only. In the Soviet period, it was exported to Japan as well. It is estimated that the demand for honey will increase, to be sold as a souvenir or consumed in hotels as tourism increases. Also, there is a possibility to expand the export market.

Processed Buckwheat (Soba Noodle)

Buckwheat is cultivated in 159ha in Issyk-Kul oblast. However, the buckwheat is not processed into noodles such as *soba noodle*. The people in Kyrgyzstan eat noodles made from flour although it is expected that they will eat *soba noodle* made from buckwheat if produced. The roles of organization to improve the popularity of Soba noodle are shown in the figure below.



Processed Potatoes

Potato production in 2003 was substantial, the excess estimated to be 13,800 tons (4% of total production) in Issyk-Kul oblast. Therefore, processing is necessary with possible products being starch, dry mashed potatoes and potato chips.



### Yak Breeding

Yaks are a special product in the mountain regions. Their breeding is also an important income source for people living in those regions. In 2000, there were 16,856 yaks in the republic and 5,885 yaks in Issyk-Kul oblast. The number is decreasing substantially. In 1990 some 16.5 thousand yaks were in the oblast but this had decreased to 11.7 thousand by 1996. However, yak breeding has the potential to expand, because it does not have competitors and yaks can withstand extreme conditions of climate and need little care, shelter and feed.

### Fishery / Fish Culture in the lake

A national company operated the fish culture (salmon) at four fish nurseries around the lake in the Soviet period. The company also processed part of the yield into smoked salmon etc. However, the fish culture and processing plants have been closed due to lack of operating funds. Some fishery specialists in the oblast have experience and technology in fish cultures and processing, therefore the possibility of its reestablishment could be researched with a view to increased yields.

### 2) Scheme of the Enterprising Associations of the Farmers

Given the fact that farmers themselves have less power in processing and marketing, it is planned that they will be guided in organizing a Producers' Association (PA) with the processing and marketing to be conducted through the establishment of an Agricultural Enterprise (AE). At the initial stage, the farmers' share of AE would be limited but could be gradually increased by their incomes. An information and marketing center will be established to facilitate marketing of products in the Issyk-Kul zone.

The PA will establish Information & Marketing Centers (IMCs). The IMCs will have the functions of marketing, extension services and financing. It will solve the following issues.

- Marketing: Address low price of farm products due to lack of access to marketing information, processing facilities, transportation, etc.;
- Extension services: Low productivity and/or low quality of farm/livelihood products due to lack of technical training; and
- Financing: Insufficient capital to implement new project/business by themselves due to limited resources.

For marketing, the IMCs will research and open markets for wholesale distribution to antenna shops in the airport etc, supermarkets, hotels, and for export. The products will deliver through the IMCs. Also, the marketing information will be supplied to the EAFs by the IMCs.

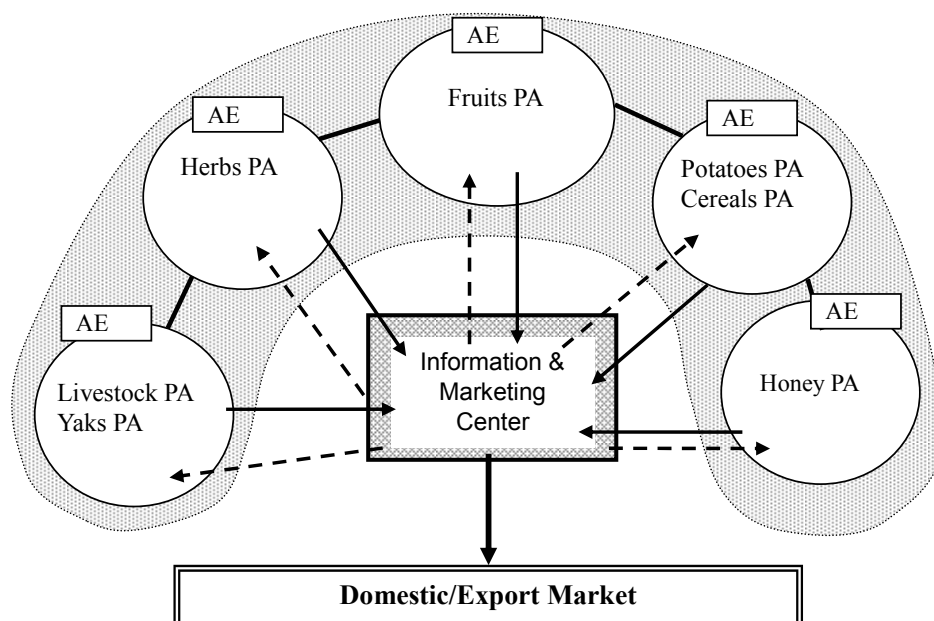


Figure F.6 Scheme of the Enterprising Associations of the Farmers

### (3) Development Policy by Rayon

#### 1) Ak-Suu Rayon

Ak-Suu rayon has an advantage in herb production. In the period of the Soviet era, 700-800ha of herb farms existed mainly in Ak-Suu rayon. Also, three kinds of herbs have been cultivated successfully in the herb farms under the pilot project for village nurseries of JST. The herbs have some possibility of being the special products of Issyk-Kul oblast. Therefore, herb farming should be expanded in this rayon, and then extended to other rayons with technical assistance for cultivation and processing.

Also, soba noodle made from buckwheat might have some possibilities as a special product in this region. Therefore, the trial to process soba-noodle from the buckwheat and improve its popularity will be necessary.

Comparing 2002 and 2025, the changes of the main items are estimated as follows:

- Gross output of agriculture and livestock: 1,809 to 4,031 million som (2025/2002 by 2.22)
- GRP per farmer: 62,004 to 153,618 som (by 2.45)

#### 2) Jetty-Oguz Rayon

Jetty-Oguz rayon had an advantage in potato cultivation in 2002. The sown area of potatoes was 5918 ha, representing 16% of the total farmland in this rayon. Also, the productivity of

the potatoes is the highest in all rayon (it produced 123 thousand ton in 2001). However, the potatoes could not be exported to Uzbekistan and Kazakhstan because the market was closed in 2003. As a result, potatoes were overproduced to the tune of an estimated 4,920 tons (4% of the total) in this rayon. Therefore, processing is urgently needed with possible products being starch, dry mashed potatoes and potato chips.

The GRP per person is the lowest in all rayons. This result is due to the low-income farmers who are engage in yaks breeding in this rayon living in the mountainous area. Their income level is lower than the farmers who are engage in farming. The number of yaks in the rayon was 1,489 in 2000. The yak breeding should be expanded and improved for the people in the mountainous area especially.

Comparing 2002 and 2025, the changes of the main items are estimated as follows.

- Gross output of agriculture and livestock: 1,490 to 3,385 million som (by 2.27)
- GRP per farmer: 36,602 to 84,130 som (by 2.30)

### 3) Issyk-Kul Rayon

Issyk-Kul rayon had an advantage in fruit and vegetable cultivation in 2002. These crops should be expanded, because they are suitable for tourism development. However, the productivity (ton/ha) of vegetables and fruit are the lowest in all rayons. Therefore, improving productivity is an important subject for this rayon. Also, processing of fruits and vegetables can be expanded and improved in this rayon mainly.

Comparing 2002 and 2025, the changes of the main items are estimated as follows:

- Fruits : 2,323 to 4,367 ha
- Vegetables : 322 to 931 ha
- Total farmland: 28,756 to 32,304 ha (by 1.12)
- Gross output of agriculture and livestock: 1,224 to 3,514 million som (by 2.87)
- GRP per farmer: 59,479 to 240,149 som (by 4.04)

### 4) Tong Rayon

Tong rayon had an advantage in industrial crops such as sugar beat, oil crops in 2002. The sown area of oil crops was 763 ha and sugar beat 176 ha, totaling 939 ha (4.8% of all farmland). The cultivation of industrial crops should be expanded because of their high value through processing. The products of the food processing industry have been increasing sharply. Growth was strongest in sugar, fruit and vegetables, meat, oils and pasta. Based on increasing the products of food processing, the sown area of the industrial crops will be expanded to 3933 ha (17% of total farmland) by 2025.

Comparing 2002 and 2025, the changes of the main items are estimated as follows:

- Industrial Crops: 939 to 3933 ha
- Gross output of agriculture and livestock: 740 to 1882 million som (by 2.54)
- GRP per farmer: 39,940 to 106,584 som (by 2.67)

5) Tup Rayon

Tup rayon had an advantage in cereals cultivation in 2002. The sown area of cereals was 78% of the total farmland in this rayon. The gross output of cereals was 59% of the total gross output of agriculture. However, the sown area of cereals should be decreased because of the low profit, and the farmland should be used for profitable crops such as vegetables and fruits.

Comparing 2002 and 2025, the changes of the main items are estimated as follows:

- Cereals: 39,501 to 29,718 ha
- Fruits: 686 to 1,290 ha
- Vegetables: 308 to 892 ha
- Gross output of agriculture and livestock: 1,552 to 3,186 million som (by 2.05)
- GRP per farmer: 55,842 to 118,770 som (by 2.13)

## **Appendix Pilot Project for Village Nurseries**

### **1. Contents of the Pilot Project**

#### *(1) Project Background and Objectives*

Fruits such as apples are one of the most important products in Issyk-Kul oblast. However, the quality and quantity of the fruits is low and insufficient. Although there are some fruit processing factories in the oblast, the factories can not operate fully due to insufficient supply of fruit in terms of quality and quantity. Also, raw fruits and processed products such as fruit juices and jam should be provided for tourists. Therefore, expansion of fruit firms and improvement of the farming technology of fruits are important.

Herbs are special products in this area. However, the farmers seldom cultivate herbs, and usually they take wild herbs from mountain areas. Therefore, it is necessary to develop a cultivation method for herbs.

Farmers usually use firewood for cooking and heating in winter because of its cheapness compared to other sources of energy such as coal, electricity, etc. Farmers cut trees illegally for firewood causing deforestation. Therefore, it is necessary to plant seedlings for the reforestation of damaged forests.

To expand the fruit firms and to plant seedlings for reforestation, the Pilot Project will establish nurseries of fruits and seedlings for reforestation. The seedlings of fruits will be distributed to farmers in the oblast. Also, the Pilot Project will establish the herb farm to try cultivation of herbs. If the herb farm is successful, herbs will be harvested, dried and packaged for sale.

The Pilot Project verifies how local communities can participate in reforestation work. There are damaged forests on the shoreline of Issyk-Kul lake because of cutting of trees for firewood. The farmers will try to reforest the damaged areas along the shore and plant the seedlings of firewood in the villages.

Through these activities, the association of private farmers will be expanded, and strengthened for assistance to the members.

#### *(2) Project Area*

Villages for implementation of the Pilot Project are shown below:

- 1) Center Nursery: in Dendro Park, Karagyz and Jergez Villages, Kerege-Tash Aiyl-Okmotu, Ak-Suu Rayon
- 2) Village Nursery North: in Bulan-Sogottu Village, Kumbel Aiyl-Okmotu, Issyk-Kul Rayon

- 3) Village Nursery South: in Kyzyl-Suu Village, Kyzyl-Suu Aiyl-Okmotu, Jety Oguz Rayon
- 4) Herb Farm: in Maman Village, Oktyabr-Maman Aiyl-Okmotu, Ak-Suu Rayon

The locations of the nurseries are shown in the figure attached.

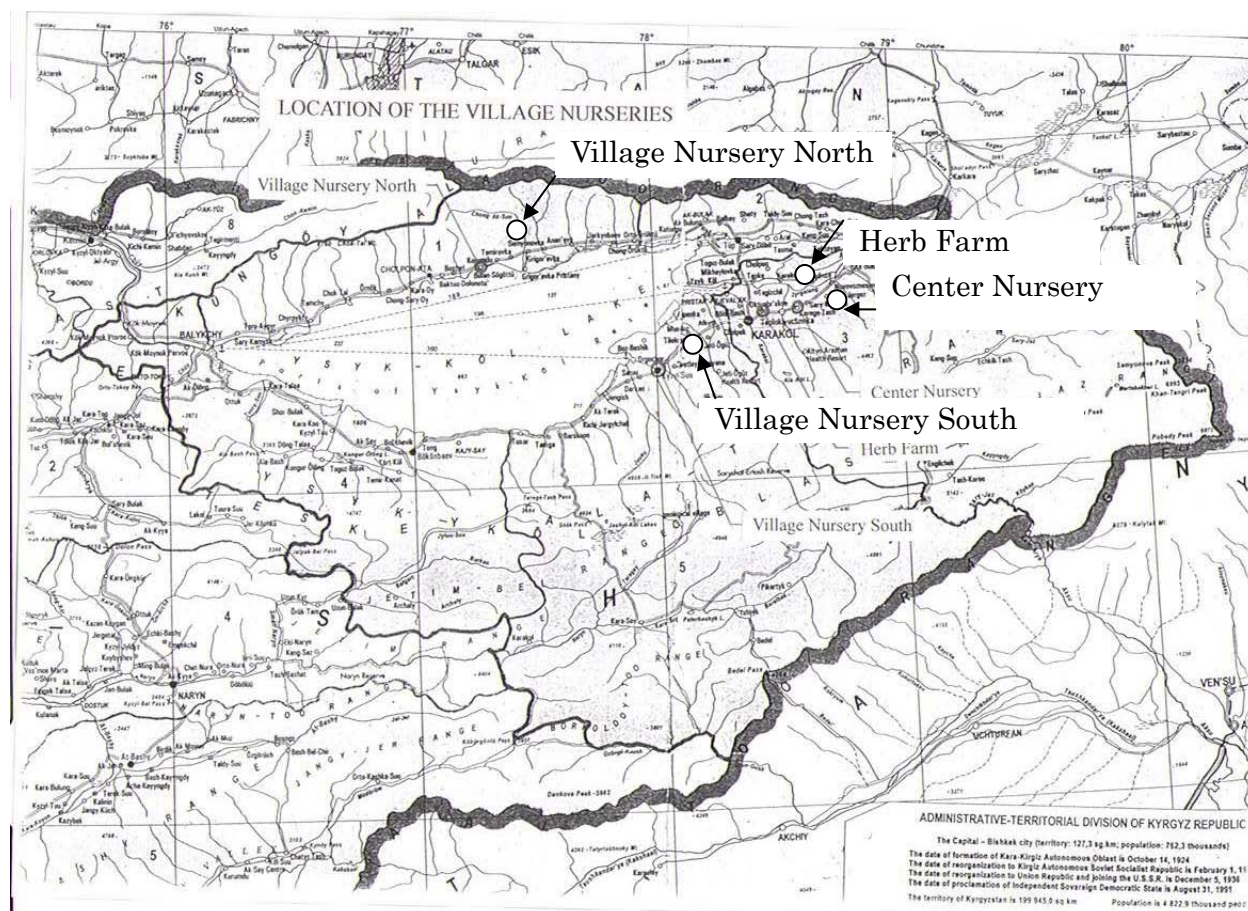


Figure 1 Location of Village Nurseries

### (3) Components and Schedule

The project components consist of the following items:

- 1) Establishment of the Center Nursery and two Village Nurseries
- 2) Establishment of the Herb Farms
- 3) Distribution of the seedlings of fruits to the farmers
- 4) Conduct of workshops for transfer of farming technology of fruits and herbs
- 5) Drying and packaging of the herbs harvested in herb farms
- 6) Making an agreement for the reforestation along the shore of the lake
- 7) Planting of seedlings for reforestation along the shore based on the agreement

The implementation schedule is shown below.

Items	2004				
	June	July	August	September	October
1. Selection of the villages for nursery and herb farm	■				
2. Establishment of the nurseries and the maintenance	■	■	■	■	
3. Establishment of the herb farms and the maintenance	■	■	■		
4. Distribution of the seedlings of fruits to the farmers					■
5. Workshop for transfer of farming technology			■	■	■
6. To dry and package the harvested herbs				■	■
7. Making of the agreement to reforestate in the shore of the lake	■	■			
8. Planting of the seedlings for reforestation in the shore		■			■

*(4) Project Design Matrix*

The project design matrix is shown in the table attached.

**Project Design Matrix on Pilot Project for Village Nurseries**

Outline of project	Indicator	Source of indicator	Important Assumption
<p><b>Overall objective :</b> The cultivation of the fruits and herbs are improved in Issyk-Kul oblast. Also, the concern of the farmers for environment is improved in Issyk-Kul oblast.</p>	<p>The area of fruits farm and sown area of herbs in Issyk-kul oblast The area where seedlings for reforestation are planted</p>	<p>Data of the Ministry of Agriculture Data of the Ministry of Agriculture /Oblast Administration</p>	<p>The farmers association and related agencies continue the activities for improvement of environmental activities, and fruits and herbs cultivation.</p>
<p><b>Objective of project :</b> The nurseries and the herb farms are established. The fruits seedlings are delivered to the farmers. The damaged forests along the shoreline of Issyk-Kul lake are restored by planting of seedlings for reforestation. Through these activities, the association of private farmers will be expanded and strengthened for assistance to the members.</p>	<p>The number of private farms of the farmers association The number and areas of established nurseries and herb farms The area of planted shore of the lake and the number of planted seedlings</p>	<p>Monitoring by Study Team Site survey for monitoring by Study Team Site survey for monitoring by Study Team</p>	<p>Experience of the pilot project is utilized for improvement of the farmers association and the activities are expanded by leadership of the farmers association and related agencies</p>
<p><b>Expected result :</b> The Center Nursery is established. More than 800 of the fruits seedlings and 600 seedlings for reforestation are planted in it. The two Village Nurseries are established in villages. 400 of the fruits seedlings and 200 of the seedlings for reforestation are planted in each nursery. Farmers try to cultivate herbs in herb farms. Seedlings of the trees for reforestation are planted at the shore of the lake in two villages. 5. The fruits seedlings are delivered to the farmers with the class for the cultivation. 6. The farming technology of fruits and herbs are improved by the workshop for the farmers 7. The harvested herbs are dried and packaged.</p>	<p>The numbers and areas of the planted seedlings in the Center Nursery The numbers and the areas of the planted seedlings in Village Nurseries The areas and kinds of the cultivated herbs and the successful rates The number of the planted seedlings at the shore and the areas The number of the fruits seedlings delivered, farmers who received the seedlings, the class for cultivation The number of the workshop of farming technology and the participants Volume of the dried, packaged herbs</p>	<p>Site Survey for monitoring by Study Team Site Survey for monitoring by Study Team The Site Survey for monitoring by Study Team Site Survey for monitoring by Study Team Certification of the delivering The Site Survey for monitoring by Study Team</p>	<p>Farmers accept the activities of the pilot project, and they cooperate to conduct the activities.</p>
<p><b>Activity :</b> Establishment of the Nurseries Establishment of the Herb Farms Planting of the trees for reforestation at the shore of the lake in the two villages Delivering of the fruits seedlings to the farmers Conduct of the workshop for farming technology Drying and packaging of the harvested herbs</p>	<p><b>Input :</b> Cost of establishment of Center Nursery Cost of establishment of two Village Nurseries Cost of establishment of Herb Farm Cost to plant the seedlings for reforestation in the shores Cost of delivering of the fruits seedlings Cost of the workshop for farming technology Cost of drying and packaging of the harvested herbs</p>	<p>The farmers association accept the pilot project</p>	<p><b>Prerequisite Condition :</b> Related agencies and authorities are cooperate each other Farmers participate the pilot project</p>



## **2. Monitoring and Evaluation**

### *(1) Monitoring Results*

Monitoring indicators are shown below.

- 1) Conditions of the Nurseries (the number of planted seedlings and success rate)
- 2) Condition of the Herb Farms (the areas of herb farms and success rate)
- 3) Condition of the distribution of the fruits seedlings (the numbers of distributed seedlings of fruits to the farmers and the number of farmers who received seedlings)
- 4) Conduct of the workshops for the transfer of farming technology of fruits and herbs (the number of workshop and participants)
- 5) Condition of packaging of the harvested herbs (the volumes of packaged herbs)
- 6) Condition of reforestation (the number of planted seedlings and area, number of village participants)
- 7) Condition of the Farmers Association (number of Private Farms of the Farmers Association)

#### *(a) Conditions of Nurseries*

The center nursery was established in Dendro Park, Ak-Suu rayon. Seedlings of apple (800 pieces) and seedlings of poplar (3500 pieces) were planted. The growth success rates are shown in the table below. The successful rate of apple seedlings in center nursery is low because the seedlings were planted at the end of June, which was too late for planting.

The two village nurseries were established in Bulan-Sogottu village, Issyk-Kul rayon (Village Nursery North) and in Kyzil-Suu village, Jety-Oguz rayon (Village Nursery South).

In the village nursery north, seedlings of apple (400 pieces) were planted. The success rate was 95%. The seedlings for reforestation are not planted because there is no land for the nursery. Instead of this, the poplar seedlings of this village (200 pieces) were planted in center nursery.

In the village nursery south, seedlings of apple (2200 pieces), seedlings of pear (600 pieces) and seedlings of wild apricot (1000 pieces) were planted. The wild apricots are suitable for reforestation along the lake shore, because wild apricot is one of the species in the natural forest beside the lake.

#### *(b) Conditions of Herb Farms*

The herb farms were established in Maman Village, Ak-Suu Rayon. Three herbs are cultivated, namely, Calendula(1ha), Valelian(0.5ha) and Chamomile(0.3ha). The success rates of the growth are 100%.

It was clarified in this pilot project that the cultivation of the herbs was possible in the oblast. Therefore, the farmers will try to dry and package them for sale to tourists and export.

(c) Training for the farmers to transfer the farming technology of fruits and herbs

Fruits Cultivation

- In August 2004, training on pest control and diseases of fruit crops was conducted with 26 farmers by lecture, discussion and demonstration at the fruits farm in Kyzyl-Suu village, Jety Oguz rayon.

- In September 2004, training on fruit tree nursing was conducted with 29 farmers by lecture, discussion and demonstration at the fruits farm in Kyzyl-Suu village, Jety Oguz rayon.

Herb Cultivation

- In September 2004, training on cultivating and drying of herbs was conducted with 25 farmers by lecture, discussion and demonstration at the herb farm in Maman village, Ak-Suu rayon.



Training for Fruit Cultivation

Training for Herb Cultivation

(d) Condition of the packaging of the harvested herbs

The harvested and collected herbs were packaged for sale in domestic markets and for export by farmers association. Calendula, Chamomile, Mint, Rose Hip, Mint Flower, Saw Grass, Dandelion and Plantain were packaged. The one package is around 40g. Some 100 packages were made for each kind of herb.

Buckthorn Berry Jam, Berberis Jam and honey were also bottled for domestic market and export.



Bottling of Jam and Honey

Herb Processing



Rose Hip Processing

Jam Sterilization

(e) Conditions of the Reforestation

On the two villages of village nursery projects, the villagers, the Aiyl Okmotu (which administrate the land along the shore) and the Farmers Association agreed to plant the seedlings for reforestation (wild apricot and poplar) in the damaged forests along the lake shore in August 2004. The seedlings will be delivered from the established Nurseries.

In Kyzyl-Suu village, Jety-Ogz rayon, seedlings of poplar (200 pieces) and willow (100 pieces) were planted beside the small irrigation canal in the village. The success rate of growth is 70%.

**Success Rate of the Planted Seedlings/Herbs**

	Species	Pieces	ha	Success Rate of the Growth (2004)			
				24-Jun	8-Jul	30-Jul	Oct
<b>Nurseries</b>							
<i>Center Nursery (Dendro Park, Kerege-Tash Aiyl-Okmotu, Ak-Suu Rayon)</i>							
CN-1	Apple	800	2	50%	-	30%	20%
CN-2	Poplar	3500	3	95%	-	90%	90%
<i>Village Nursery North (Bulan-Sogottu Village, Kumbel Aiyl-Okmotu, Issyk-Kul Rayon)</i>							
VNN-1	Apple	400	1	95%	95%	-	95%
<i>Village Nursery South (Kyzyl-Suu Village, Kyzyl-Suu Aiyl-Okmotu, Jety-Oguz Rayon)</i>							
VNS-1-a	Apple	400	1	90%	90%	-	90%
VNS-1-b	Pear	400	0.05	95%	95%	-	90%
VNS-1-c	Apple	1600	0.03	80%	80%	-	80%
VNS-2-a	Pear	200	0.1	95%	95%	95%	95%
VNS-2-b	Apple	200	0.2	100%	100%	100%	100%
VNS-2-c	Wild Apricot	1000	0.6	100%	100%	100%	100%
<b>Herb Farms (Maman Village, Oktyabr-Maman Aiyl-Okmotu, Ak-Suu Rayon)</b>							
HF-1	Calendula	-	1	100%	100%	100%	100%
HF-2	Chamomile	-	0.3	100%	100%	-	100%
HF-3	Valerian	-	0.5	100%	100%	100%	100%

(f) Number of Private Farms of the Farmers Association

The number of private farms of the farmers association (Ak-Suu Baba-Dyikany) is expanding through the activities of the pilot project as shown in the table below.

**Number of Private Farms of the Farmers Association**

	14-Jun	5th-Aug	23th-Oct
Ak-Suu	41	50	52
Issyk-Kul	3	5	5
Jety-Oguz	9	11	11
Tup	6	12	12
Total	59	78	80

*(2) Evaluation*

1) Relevance

Herb Cultivation

The farmers cultivate herbs only at Maman Village in Ak-Suu rayon at present. However, they cultivated herbs on 600 ha of farms in Ak-Suu rayon in the Soviet period. Therefore, they have the experience to cultivate herbs. It was clarified in this pilot project that cultivation of herbs is not so difficult for them because of their experience. For farmers with insufficient experience, training was performed by experienced farmers.

However, farmers sell the products to jobbers at a cheap price, so the income of farmers is low. Therefore, it is necessary to improve the sale system. In this pilot project, the farmers developed the herb products and products were sold as a trial in local shops, these being established by the community empowerment pilot project. Many tourists bought the products. Also, products will be exported to Japan and sold as a trial.

Fruit Cultivation

It was clarified that the establishment of the nursery of fruits is not too difficult for experienced farmers. The fruit seedlings in the nurseries were delivered to farmers with training in order to expand fruit cultivation. The expansion and improvement of fruit cultivation is necessary because of:

- expected expansion in demand for raw and processed fruits such as juice, jam and dry fruits according to the expansion of tourists; and
- lack of qualified fruits for processing, raw consumption and export.

The number of seedlings delivered to and planted for the purpose of reforestation is summarized in the table below.

	Poplar	Apple	Apricot	Pear	Total
Reforestation in northern coast	225	-	75	-	300
Reforestation of southern coast	300	-	-	-	300
Delivered to northern farmers	-	250		-	250
Delivered to southern farmers	-	200	-	-	200
Delivered to Oknok community	12	15	-	5	32
Delivered to Orkutu community	13	15	-	5	33
Total	550	480	75	10	1,115

### Reforestation at the shore of the lake

The natural forests at the shore are cut down and damaged because farmers need firewood in winter, despite prohibition by law. Farmers have planted seedlings to restore the forests in this pilot project.



### Strengthening of Farmers Association

It is clarified that the farmers association, which is the subcontractor of this project, is very primitive as an organization. The study team has been directed to strengthen it, however, the association is still too weak to realize the proposed programs/projects in this master plan. Therefore, the proposed priority program to strengthen the farmers association should be conducted immediately.

As mentioned above, it can be concluded that this project was relevant.

## 2) Effectiveness

### Successful cultivation of herbs

The three types of herbs were cultivated and harvested successfully. The harvests are estimated as follows:

- Calendula 1400kg (dry);
- Chamomile 600kg (dry); and
- Valerian 1400kg (dry) (not yet harvested, because it takes two years to harvest).

### Packaging of harvested herbs

A part of the harvested herbs was packaged in order to try to export and sell in Japan.

The packaged herbs to export to Japan are as follows:

- Calendula; 100 packs (40g/pack)
- Chamomile; 100 packs (40g/pack)

### Successful establishment of the nurseries

The center nursery and two village nurseries were established successfully. The seedlings nursed are as follows:

- Fruits seedlings; Apple (3500pieces), Pear (600pieces)
- Seedlings for reforestation; Poplar (3500pieces), Wild Apricot (1000pieces)

### 3) Impact

#### Export and sale of agricultural products in Japan

The study team proposed to the farmers association the export of harvested herbs, jam and honey to Japan and the association agreed. The study team introduced the farmers association to the associations of shops in Japan and they agreed to import and sell the products.

If the products will be sold in Japan at an appropriate price, the fund will be established by the sale.

The economic impact of expanding herb cultivation and export to Japan is estimated as shown in the table below. If herb cultivation is expanded, and herbs are exported to Japan and sold successfully, the GRP/farmer on the Oblast will achieve the 2010 target within three years.

**Economic Impact of the Expansion of Herbs Cultivation and Export to Japan**

	Area (ha)	Harvest (ton)	Gross Output of Herbs by Export (USD)	GRP/farmer on the Oblast (som)
Year 1	100	140	16,750,000	55,035
Year 2	200	280	33,500,000	60,242
Year 3	400	560	67,000,000	70,658

GRP/farmer in 2002 (present) : 49,827 som

GRP/farmer in 2010 (target) : 70,223 som

### Development of Herb Products

The farmers association developed herb products such as herb natural medicines, herb teas, etc. The farmers association linked with the University in Karakol (the College of Pharmacy) and has been developing several herb medicines. Some were sold in the shops established by the community empowerment pilot project.

Also, the association tried to develop herb teas by themselves. They developed two types of the tea for relaxation.

### Increasing of jobs for women

Women harvested the Calendula flowers in the farm of this project. Also, the packaging will be undertaken by women. Therefore, herb cultivation will contribute to increasing the income of women.

## 4) Sustainability

### Expansion of Herb Cultivation

Expansion of herb cultivation depends on demand. If the export and sale of herbs in Japan is successful and is expanded, herb cultivation will also be able to expand.

### Expansion of the Fruit Cultivation

To expand fruit cultivation, technical training and distribution of seedlings from village nurseries will be necessary. Therefore, the fund should be established by the sale of herbs, which produces high benefits through export to Japan. The village nurseries will have sustainability by this fund.

### Expansion of the reforestation

To expand reforestation, supply of seedlings from center nursery/village nurseries will be necessary. The nurseries will have sustainability by the fund established through export of herbs to Japan.

## 5) Conclusion and Recommendation

### Strengthening of Farmers Associations

The farmers association is not sufficiently organized. In order to conduct the proposed projects/programs, strengthening of the associations is necessary. It is recommended that the proposed priority project for strengthening of the farmers association be conducted.

Farmers associations should be organized as community-based organizations. They will be organized on rayon level, aiyl-okmotu level or village level, according to the objectives of the association. Each association will be a cluster, and the associations will be federated on oblast level to function over the entire oblast.

### Improving of the processing of herbs

Herbs can be processed into essential oils. A part of the herbs should be processed into essential oil to add value and reduce transportation costs.

### Development of the sale routes and establishment of the Information & Marketing Center

In order to expand sales, it is necessary to open new sale routes such as export markets or shops in hotels/airports. It is recommended that the Information & Marketing Center be established to open the new market.

### Establishment of the fund and the useful operation

The fund for the farmers association should be established by export and sale of products in Japan. The fund should be used for the activities such as:

- procurement of the processing equipment
- establishment of the new village nurseries and distribution of the fruits seedlings
- reforestation of the shore of the lake, damaged natural forest, and planting in the villages



## **SECTOR G**

# **TOURISM DEVELOPMENT PLAN**

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## G. TOURISM DEVELOPMENT PLAN

### G.1 Kyrgyzstan Tourism Today

#### G.1.1 Present Conditions of Kyrgyz Tourism

The Kyrgyz Tourism shall be studied from the view point of the Central Asia Tourism Network, including Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan, and Tajikistan. This reflects the composition of the present tour programs in which Kyrgyzstan forms part of a multiple-destination package in Central Asia being marketed for potential tourism to people from other major countries. There are few tour programs specifying Kyrgyzstan as a single destination, apart from very limited SIT programs. Therefore, regional cooperation in promotion and marketing is essential for the prosperity of Kyrgyz tourism.

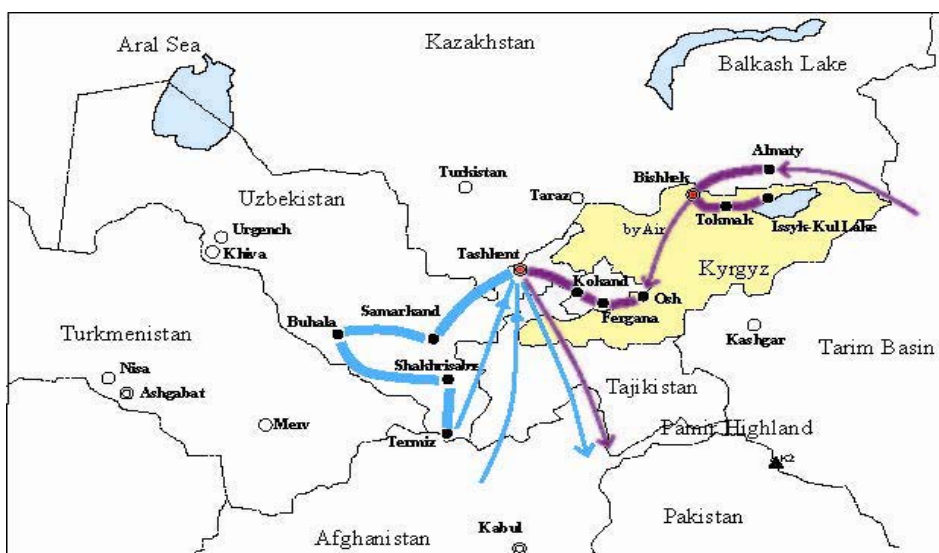


Figure G.1 International Tourist Route in the Central Asia

#### (1) Tourist Arrivals in Kyrgyzstan

Issyk-kul Lake was a prohibited military zone during the Soviet era, but it was at the same time one of the most famous lakeside recreational tourism destinations, comparable to Yalta on the Black Sea. During the Soviet era, one and a half million recreational tourists and those seeking medical treatment visited Issyk-kul annually in compliance with the national recreation program of the Government. Therefore the government of The Kyrgyz Autonomous Republic did not need to undertake any marketing or promotional activities but only handle the arriving tourists. Following the collapse of the USSR, tourism in Issyk-kul fell suddenly because of the absence of experience and knowledge of its marketing.

After the independence of the Kyrgyz Republic in August 1991, the country has been opened for domestic and international tourists. It was the actual start of market-oriented tourism in Kyrgyzstan. However, the Russian economic crisis, high inflation and political instability (such as the kidnapping of foreign aid workers) affected Kyrgyz tourism and arrivals again dropped sharply from 1998 to 1999. In 2001, tourist arrivals started to recover and numbers have increased favorably. The number of foreign visitor arrivals is shown in Table G.1.

**Table G.1 Visitor Arrival into Kyrgyz Republic**

	1997	1998	1999	2000	2001	2002	2003
Total Arrival	87,386	59,363	48,272	58,756	98,558	139,589	190,852
Increase Ratio	-	33.2%	-18.7%	21.7%	67.7%	41.6%	36.7%
CIS Visitors	72,202	42,027	31,180	40,355	68,279	80,475	130,015
CIS visitors in %	82.6	70.8	64.6	68.7	69.3	57.7	68.1
Non CIS Visitors	15,184	17,336	17,092	18,401	30,279	59,132	60837
Non CIS Visitors in %	17.4	29.2	35.4	31.3	30.7	42.3	31.9

Source: The State Committee for National statistics,  
The State Committee for Sports, Tourism and Youth policy

The Table shows that the CIS countries are the main tourist markets. The increase in visitors from the CIS from 2002 to 2003 has been in excess of 60% and it is predicted that this will remain the main tourist market into the future. Considering the unique geographic and natural conditions, Issyk-kul is an attractive resort destination for people in Uzbekistan, Kazakhstan and Turkmenistan.

Table G.2 shows the number of CIS visitors and their percentages in the CIS market groups. With good diplomatic relations and higher GDP per capita in both Kazakhstan and Russia, Kazakh and Russian visitors have topped the numbers since 2002. Difficult diplomatic relations and visa procedures in Uzbekistan prevent increases in tourist numbers to Issyk-kul resort zone from that country.

**Table G.2 Major CIS Tourist Arrivals**

	2001	2002	2003	GDP/Capita 2002
CIS Total	68,279 (100. %)	80,475(100%)	130,015(100%)	\$ 6,560
Kazakhstan	47,173(69.1%)	51,893(64.5%)	63,635(48.9%)	7,416
Russia	1,374(2.0%)	14,548(18.1%)	40,186(30.9%)	2,531
Uzbekistan	8,076(11.8%)	9,271(11.5%)	16,717(12.9%)	-
Others	11,656(17.1%)	4,763(5.9%)	9,477(7.3%)	

Source: The State Committee for National statistics, The State Committee for Sports, Tourism and Youth policy

Table G.3 shows the arrivals of major non-CIS visitors. They include long haul visitors from USA, Europe, Asia and Oceania. However, the arrivals from USA and Europe include multi-national UN peace-keeping service men transiting from Afghanistan.

**Table G.3 Major non-CIS Tourist Arrivals**

	2001	2002	2003
1. USA	3,979	10,833	13,076
2. China	5,240	7,495	8,966
3. Germany	3,039	6,820	7,979
4. Turkey	3,261	5,864	7,230
5. France	1,106	4,462	1,451
6. UK	1,888	2,958	2,083
7. Korea	1,053	1,689	2,696
8. Netherlands	628	1,102	1,543
9. India	358	1,590	1,486
10. Canada	409	1,053	1,036
11. Japan	1,645	1,463	639
Others	7,673	6,810	22,815

Source: The State Committee for National statistics,  
The State Committee for Sports, Tourism and Youth policy

Populous neighbors such as China, India and Korea will become important tourist markets in the near future.

According to the study for The State Committee of Tourism, Sports and Youth Policy in 2002, 64% of arrivals are holiday tourists and 29% are business-related visitors who may participate in tourism activities while in Kyrgyzstan. This implies 93% of the arrivals will be involved to some extent in tourism. The main interests of long haul tourists are mostly associated with nature, such as trekking, mountaineering and eco-tourism. Nomads' lives are only a cultural tourism art at present.

The length of stay varies according to the tour programs and nationality. The average length of stay of tourists overall was 6.3 days in 2003.

### G.1.2 Present Conditions of Issyk-Kul Tourism

#### (1) Tourist Arrivals

Absence of reliable tourism data is a critical problem to assess Issyk-Kul tourism. Karakol municipality submits annual tourist records to the National Statistics Committee every year. They are based on the declaration of hotels and sanatoria. However, only 20% of these submit their guest registration records while no private houses or Bed and Breakfast(B&B) guest houses do likewise. Another source of data is the number of vehicles passing through the Eco-post gate at Balykchy. This was constructed with GTZ cooperation in 2001, but the gate does not issue receipts to all those passing.

Arrivals in Issyk-Kul Lake zone are summarized in Table G.4. The deregulation to establish the tourism enterprise in 2000 encouraged tourism businesses with tourist arrivals increasing markedly by more than 6 times in comparison to previous years.

**Table G. 4 Tourist Arrivals in Issyk-Kul Oblast**

	1998	1999	2000	2001	2002	2003
Arrivals in Issyk-Kul	7,710	14,460	90,230	147,060	162,740	248,000
Increase Ratio / An. (%)	-	(87.5)	(523.9)	(62.9)	(10.6)	(52.3)

Source: National Statistic Committee, The State Committee of Tourism, Sport and Youth policy

The above figures show the number of tourists who lodged in resort hotels and sanatoria. Tourists lodging in B&B houses, mountain cottages, lodges, private houses and yurtas in the rural and mountain areas are not, however, included. Average length of stay in Issyk-Kul is estimated to be 1 to 3 days for non-CIS foreign tourists, 4-6 days for CIS tourists and more than 6 days for domestic tourists.

#### (2) Tourism Supply

##### 1) Tourism Resources

The most characteristic feature of the tourism resources in Issyk-Kul Zone is nature. Resort activities in Issyk-kul zone have therefore focused on health and treatment family resort holidays in the clean and beautiful natural setting.

Major existing tourism resources in Issyk-Kul Zone are:

##### Natural Resources

- Issyk-Kul lake and beach
- Biosphere reserve area around the lake

- Sarytash-Ertash Reserve Area
- Chon Aksuu Gorge
- Gregor'evka Gorge
- Karakol Valley
- Altin Arashan hot spring
- Jeti-Ogz Gorge and hot spring
- Jili Suu hot spring
- Juuku Gorge

### Cultural and Historical Resources

The culture tourism resources are especially important for tourists of other cultural backgrounds. The potential culture tourism resources include:

- Architectural monuments, such as museums, churches and mosques,
- Archaeological remains such as Stone men, petroglyph and ancient Scythians graves, monuments of heroes (both Soviet and fallen soldiers),
- Underwater ruins of an ancient city in the lake,
- Hawk hunting, and
- Views of Nomad's lives.

### 2) Tourism Products

Issyk-kul tourism has been offering mostly nature-based tourism products using the unique natural conditions of the Issyk-kul zone as follows:

#### Nature Tourism Products

- Mountaineering,
- Trekking,
- Camping,
- Skiing,
- Swimming and water sports,
- Cruising,
- Sailing, and
- Scuba diving.

#### Ecological Tourism Products

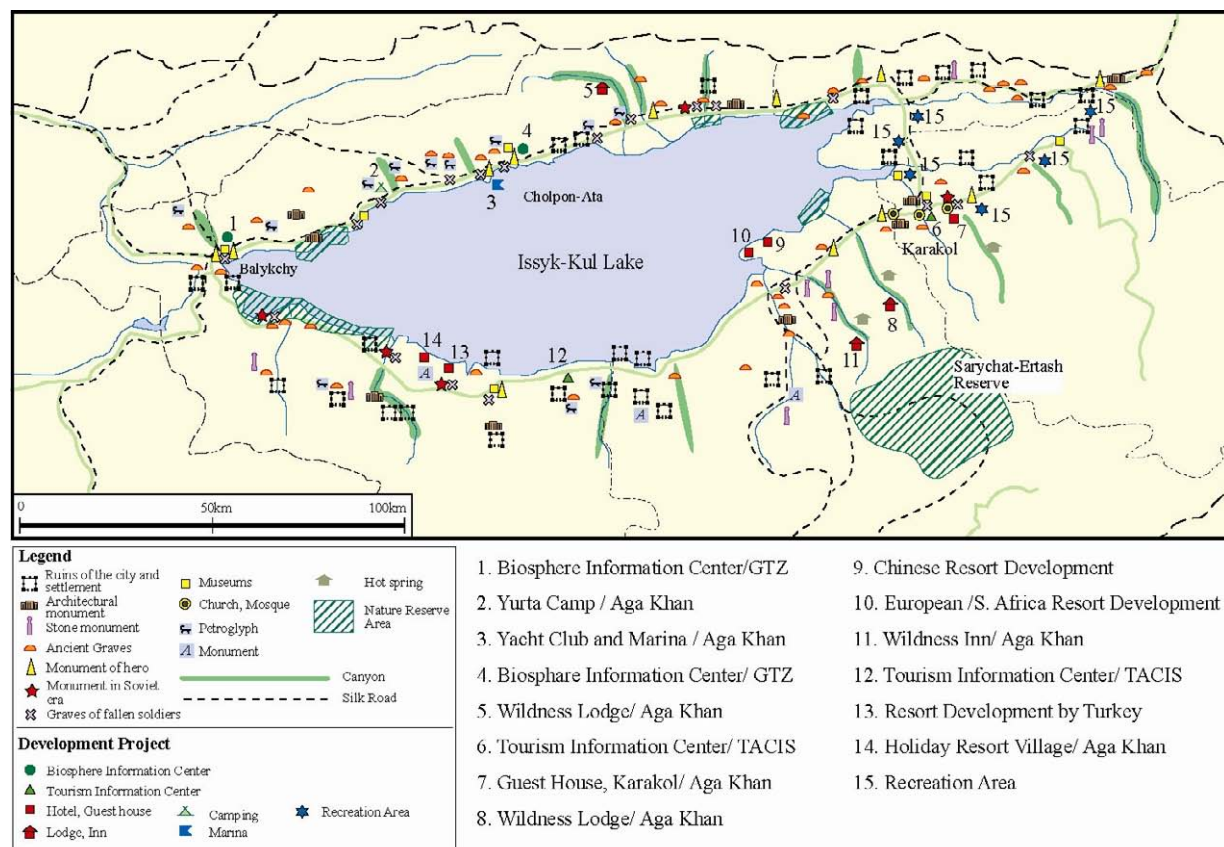
- Nature reserve observation,
- Biosphere reserve observation,
- Bird watching observation,
- Botanical reserve observation, and
- Ecological study tours.

#### Adventure Tourism Products

- Rock climbing,
- Rafting,
- Silk Road caravan, and
- Hunting.

*Cultural and Historic Tourism Products*

- Visiting architectural monuments, such as museums, churches and mosques.
- Eagle hunting and visit to view lives of nomads,
- Diving to visit ancient underwater archaeological sites, ruins of ancient cities, and
- Archaeological survey around the lake.



**Figure G.2 Existing Tourism Resources and Development Projects**

*3) Tourism Facilities / Hotels and Accommodation*

According to the statistical data of the National Statistical Committee and Economic Development Center of Issyk-Kul Oblast, there were 132 facilities for accommodation in the Oblast as of January 2002. Of these, 100 were owned by the public sector and 32 (24.2%) by private companies. In 2003 accommodation in Issyk-Kul Oblast had decreased to 130 at the end of the year although the number of private accommodations increased to 41 (31.5%). The number of beds also decreased from 26,547 in 2002 to 26,100 in 2003. The total number of rooms in the Issyk-Kul zone was reported to be approximately 8,000 by the oblast in 2002.

**Table G.5 Hotels and Accommodation in Issyk-Kul Oblast**

	2002	2003
Number of Hotels and other Accommodation	132	130
Public Owned	100	89
Private Owned	32	41
Number of Rooms	8,000	na
Number of Beds	26,547	26,101

Source: National Statistic Committee, Issyk-kul Oblast

There are several development projects proposed in the Issyk-Kul zone. The biggest resort development project, over an area of 800 ha and with 400 rooms, is by a Chinese company. The Aga Kahn Foundation proposes 7 projects, including a holiday resort hotel with 200 rooms. Another resort hotel development project (200 rooms) is proposed by a European company with experience in resort development in South Africa, while a Turkish company and Kazakh Gas company are also studying the construction of a resort hotel of 200 rooms. The Swiss Corporation Bureau is undertaking promotion of CBT (Community Based Tourism) development through Helvetas in Karakol. Other than those, TACIS proposes tourism information offices in Karakol, Kajy Say and Balykchy. GTZ has built two Biosphere Information Centers in Cholpon Ata and Balykchy in cooperation with TACIS.

#### 4) Human Resource Development

The lack of human resource is the most serious constraint for Issyk-kul tourism. Absence of a welcoming attitude and poor service orientation of employees, especially in the airport, hotels and restaurants, are generating negative images of Kyrgyz tourism with those tourists arriving. Although, there are 15 tourism educational institutions in Kyrgyzstan (e.g. tourism academy and universities) and 2,500 students are studying tourism-related courses, most teaching staff have only USSR service education. Few also have knowledge and experience of modern international tourism services.

In Issyk-kul oblast, Issyk-Kul State University in Karakol has a Faculty of Tourism, with 1 professor, 9 assistants and 331 enrolled students. The Professional High school No.14 has 5 trainers and 55 students.

The human resource development division of The State Committee of Tourism, Sports and Youth Policy has carried out tourism seminars in cooperation with the Solos foundation, Merrilyne foundation and Helvetas. In 2001, the Committee held a human resource development seminar for CBT supported by Helvetas.

Since the Government abandoned the licensing system of tourism guides in 1999, the Alpinist Federation has been practically acting as a training and qualification organization for mountaineering guides for the safety of climbers. However, ordinary tour guides are not requested to be licensed.

#### 5) Tourism Marketing and Promotion

The State Committee of Tourism, Sports and Youth Policy is taking initiatives in international and domestic marketing. The Committee has 12 staff and an annual budget of US\$100,000 allocated through the national budget. Major activities of the Committee are to collect information, hold promotional events, produce brochures, pamphlets, CDs, videos, and to participate in international tourism fairs in Berlin and London. Until now there has been no regional cooperation in marketing with neighboring countries, apart from cooperation in the regional tourism fairs held in Kazakhstan and Uzbekistan and the business fair in Issyk-Kul.

#### 6) Community Participation in Tourism

##### Handicrafts

There are no specifically attractive handicrafts in Kyrgyzstan, as ethnic characteristics were not respected during the Soviet regime. Some traditional handicrafts disappeared during that period but nowadays revival of traditional handicrafts production is underway, such as participation of foreign tourists in felt making.



In order to promote the handicrafts industry and increase local incomes, it is necessary to modernize the designs and enhance production skills to ensure the products are acceptable for use in the daily life of foreign tourists (e.g., house shoes, tapestries and lamp shades with modern but traditional cultural design motifs).

#### Local participation in tourism activities

The local traditional culture of a nomad's life will be one of the important tourism attractions. Horse riding, yak riding, visiting yak farms and fruits garden and CBT are local income-generating attractions and contribute to increase employment in the local tourism industry. Association of CBT has been established by Helvetas, and training in basic knowledge required for promotion and management has been conducted in many regions in Kyrgyzstan.

#### Agricultural production for tourism

Agriculture is one of the most important industries related to tourism. Supply of organic vegetables, fresh fruits, fresh meat, processed meat products, milk products, herbs, honey, and other products will support tourism and generate local incomes. The requirements for quality and quantity of products provide good incentives to upgrade farming technology and marketing and distribution systems in the local community.

### **G.1.3 Analysis of Issyk-Kul Tourism**

#### *(1) SWOT Analysis of Issyk-kul Tourism*

##### 1) Strengths

- Abundant untouched unique natural settings are big attractions for nature tourism, eco-tourism and adventure tourism.
- Reputation of Issyk-Kul Lake as a resort zone is still high in CIS countries.
- There are complementary attractions of tourism resources and products with neighboring countries, which will serve to produce diversified tour products.
- The Issyk-Kul region has 300 sunshine days a year, which is quite attractive for the resort area.
- Tourism facilities and basic infrastructure are still usable with appropriate rehabilitation.
- The Issyk-Kul region is easily accessible from potential tourist markets (e.g., China, India and Kazakhstan).

##### 2) Weaknesses

- Tourism products are too narrowly oriented to nature tourism.
- Resort tourism has been developed individually without appropriate guidance and collective efforts to generate an attractive atmosphere in the resort area.
- New resort destinations have been developed in the gulf countries and Mediterranean region resulting in Issyk-Kul tourism facing a tough marketing competition.
- Services systems associated with the USSR still remain in many hotels and restaurants, which discourage tourists.

- Tourism transport services are limited for potential domestic and FIT tourists.
- Access for skiing and mountaineering is inconvenient for small tourist groups.
- International access to Kyrgyzstan is still inconvenient for non-CIS long haul tourists.
- There is an absence in cooperation of local communities in tourism promotion.
- Difficulties of visa procedures among regional countries prevent easy crossing of borders and access to Issyk-Kul Lake.

### 3) Opportunities

- With diversified tourism products, Kyrgyzstan and the Issyk-Kul tourism zone will become more attractive.
- The favorable interrelation among resort facilities, if established, will make the Issyk-Kul lake zone more enjoyable.
- If service quality and hospitality are internationalized, the Issyk-Kul holiday tourism zone will become one of the best resort zones in the CIS region.
- With the improvement of the tourism transport system, more domestic resort tourists will be attracted to the Issyk-Kul zone.
- With improved international access, Kyrgyzstan will be regarded as one of the attractive destinations of average travel distance.
- With the favorable political and diplomatic relations among the regional countries, especially with Uzbekistan and Turkmenistan, Issyk-Kul Lake will be the one of the top resort destinations for the regional tourist market.

### 4) Threats

- Social instability and unrest in some neighboring countries (e.g., Afghanistan and Pakistan) may become a threat for the development of Central Asia tourism.

## **G.1.4 Major Issues to be discussed for Tourism Development**

### *(1) Regional Issues*

#### Improvement of regional image

Central Asia is still regarded as “a dangerous region” in the image of many tourist markets because of Islamic fundamentalism. It is therefore essential to show obvious improvements in regional safety and security to the market countries and send correct regional images to the world.

#### Regional cooperation

The growth of Kyrgyz tourism is fully dependent on the growth of regional tourism. Therefore, active participation in regional tourism promotion should be encouraged for the prosperity of Kyrgyz tourism.

#### Improvement of regional IQC system

- As Central Asia is regarded as one tourism zone, it is desirable to issue a regional multiple visa or easy border pass for tourists in order to develop more attractive and marketable

tour programs.

-In order to change the first impression and image of the region, attitude of immigration officers in Central Asia should change and a more welcoming atmosphere created.

### Competitive pricing

In order to face marketing competition of other tourism destinations, target tourist groups should be better identified and attractive pricing offered.

## *(2) Issues for Issyk-Kul tourism*

### Diversification of tourism resources

To broaden tourism resources, cultural performance, self-experiencing of handicrafts and local cultural life should be promoted.

### Diversification of tourism products

The current tourism products should be diversified in such a manner to fit the wider requests of tourists. In particular, healthy and healing tourist products using unique resources and products of the Issyk-Kul lake zone (e.g., spa therapy resort, organic agricultural produce and herbs) should be developed.

### Upgrading of tourism services and human resource

Staff of hotels, restaurants and other tourism facilities with poor service mentality and hospitality should be re-trained to offer a pleasant tourism environment. Further, in order to ensure safety of tourists, it is desirable to establish appropriate licensing systems and certify capability of language, rescue and hospitality techniques.

### Reinforcement of marketing

Active cooperative regional marketing should be encouraged in order to increase tourist arrivals in the regional areas. Participation in international tourism exhibitions is effective in building up the image of the region.

### Upgrading of statistics

Statistics is the most important tool for planning of tourism development. The unreliable statistics come from a poor understanding of tourism planning and weak establishment of organizations. Improvement of the statistics system should occur irrespective of the taxation system.

### Improvement of tourism infrastructure

One of the critical defects in tourism development in Kyrgyzstan is the high price of international telecommunications. It must be noted that the high communication costs will be added onto the price of tour programs and so affect price competitiveness.

### Participation of Local Communities

The tourism development should be aimed at economic and social development of the local community in the Issyk-kul zone through procurement of local products and employment in

the tourism sector. Tourism will be a motor for improvement of the local economy and to encourage community empowerment.

## **G.2 Future Tourism Demand in Issyk-Kul**

The forecast of future demand has been studied in three Growth Scenarios as outlined below.

### **G.2.1 Development Scenarios**

#### *(1) Advanced Growth Scenario*

This scenario is based on the concept of developing the Issyk-kul tourism zone to be one of the strongpoints for tourism destinations in the Central Asia tourism network in order to attract more variety in regional and long haul international tourists. In addition to the traditional natural and cultural tourism products, new pleasure tourism opportunities will be introduced for the new tourist market. Active development of resort hotels, pensions and B+B guesthouses will be emphasized in order to increase tourism supply capacity. The development will be oriented to diversify the Issyk-kul tourism zone away from the health and healing tourism destination into a more commercialized revenue-generating form of tourism to contribute to the local economy. The expected markets for amusement tourism include leisure tourists and weekend family tourists from Bishkek and surrounding countries. The government should emphasize promotion of investment for tourism development. According to a study of environmental impacts for the Advanced Growth Case based on the SEA method, no significant hazard has been identified.

#### *(2) Moderate Growth Scenario*

This scenario is based on the concept of developing the Issyk-kul tourism area to become a health-oriented healing and treatment, nature and culture tourism destination in the regional tourism network and also to promote tourism as a major income-generating industry in the Kyrgyz Republic. As the Issyk-kul zone was one of the main recreational and treatment tourism destinations in the Soviet era, the innovation of Issyk-kul tourism should be emphasized to develop more diversified tourism products and facilities and to attract more tourists, especially from CIS countries and domestically. In addition to investments for accommodation, development of recreational parks and nature observatories will be emphasized for development to attract new markets such as family day trippers and weekend tourists from Bishkek and neighboring countries. The interests of Chinese and Indian tourist operators in Issyk-kul tourism should be properly developed based on the new potential tourist markets. According to a study of environmental impacts for the Moderate Growth Scenario based on the SEA method, no significant hazard has been identified.

#### *(3) Low Growth Scenario*

This scenario is based on the Oblast and State governments carrying out tourism development and marketing focused on the traditional nature-oriented tourism products associated with recreational leisure tourism, eco-tourism and CBT. Only some Chinese investments for resort development and private small-scale development will be implemented. According to a study of environmental impacts for the Low Growth Case based on the SEA method, no significant hazard has been identified.

According to the evaluation of the above three scenarios, the Study team selected the Moderate Growth scenario as the most appropriate development method to progress tourism

development within existing resources and natural environment around the lake. The evaluation criteria were attractiveness, development goals, proposed investment projects, land development capacity, appropriateness in the size and type of markets, marketing power to new tourist markets in CIS and environmental impacts of the development.

## G.2.2 Forecast of Tourist Arrivals

### (1) Forecast of Tourist Arrivals in Issyk-Kul Zone by Growth Scenarios

The forecast of tourist arrivals is based on previous arrivals during the USSR period, namely 1.5 million annually, the growth in tourism since 2000 when tourism businesses have been liberalized, increased arrivals to Issyk-Kul zone, proposed investment projects by Aga Khan Foundation and private investors, and expected growth of GDP per capita in Kyrgyzstan, Kazakhstan, Russia and other regional countries.

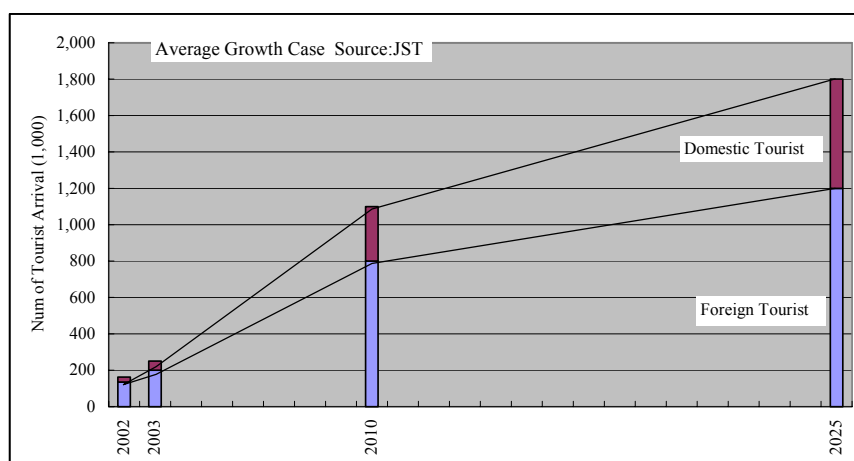
**Table G.6 Forecast of Tourist Arrivals in Issyk-Kul zone by Growth Alternatives**

	Present (1,000)			Projection (1,000)					
				Advanced Growth Scenario		Moderate Growth Scenario		Low Growth Scenario	
	1999	2002	2003	2010	2025	2010	2025	2010	2025
Tourist Arrival (1,000)	56.8	163	248	1,600	2,500	1,100	1,800	700	1,100
Increase of Tourist Arrival		106.2	85.0	1,437	900	937	700	537	400
Annual Growth Rate of Tourist Arrival		42.1%	52.1%	33.0%	12.6%	27.0%	11.0%	20.0%	8.7%

Source: JST estimation in cooperation with The State Committee of Tourism, Sports and Youth Policies.

### (2) Forecast of Foreign and Domestic Tourist Arrivals in Issyk-Kul Zone

The forecast growth in the tourist segments is produced basically in consideration of the growth of GDP per capita of domestic, Kazakh and Russian tourists. The decrease of UN peace-keeping officers, competition with other resort destinations and stabilization of the world political situations are included in the analysis for the long-term forecast.

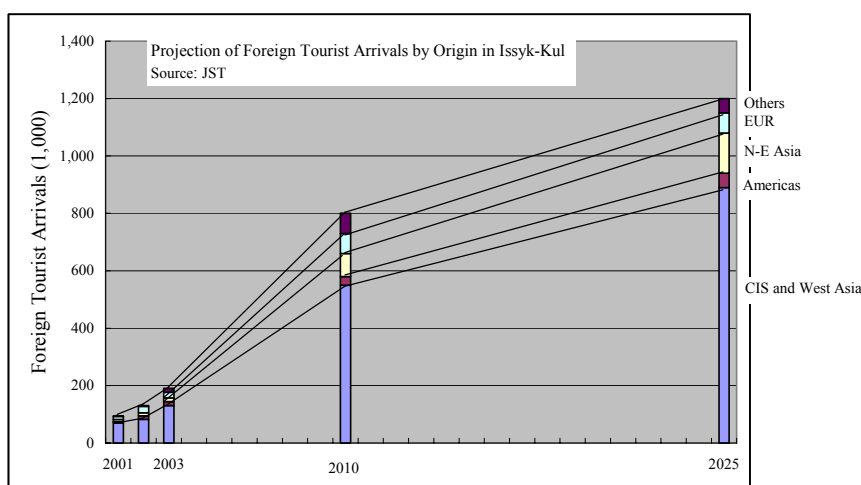


**Figure G.3 Forecast of Foreign and Domestic Tourist Arrivals in Issyk-Kul zone (Moderate Growth Scenario)**

*(3) Projection of Tourist Arrivals in Issyk-Kul Zone by Origin*

According to the analysis of tourist arrival records and tour operator surveys in Bishkek, Alma-Ata and Ulmuchy, the Study Team considered that CIS is the most important and biggest market for Issyk-Kul tourism. Active market promotion, increase of GDP per capita in Kazakhstan and Russia, and the fame of Issyk-Kul Lake are the strong forces for tourist generation in the CIS.

Development policy of the Chinese government emphasizing expansion of the Western Region is considered to be a favorable factor to increase the number of Chinese tourists to Issyk-Kul zone, particularly if the Kyrgyz Government is able to take the appropriate measures for Foreign Direct Investment.



**Figure G.4 Projection of Tourist Arrivals in Issyk-Kul zone by Origin (Moderate Growth Scenario)**

### G.3 Tourism Development Plan

#### G.3.1 Overall Development Concept

The Study aimed at formulation of a master plan to outline the multi-sector economic and social development of Issyk-Kul zone from the view point of development of the Central Asian Region. Tourism is expected to be the driving force for economic and social development in the Issyk-kul zone by integrating related industrial and regional clusters. Therefore participation of the local community and related industries are especially important for the development of the Study Area in 2025.

The goal of tourism development is to establish a “HEALTH UTOPIA IN CENTRAL ASIA” using rich natural resources, accumulation of facilities and know-how of health resorts such as sanatoria, hot springs, treatment, sports and leisure activities and convention zones. The development of advanced high-tech medical treatment, new rehabilitation programs, sports and health care services, and organic and macrobiotic foods should be promoted to emphasize higher value added tourism.

#### G.3.2 Target Tourist Markets

The Study Team prepared probable statistical data and established, through many discussions and examinations with relevant organizations, forecasts of tourist arrivals in 2010 and 2025.

These defined the TARGET NUMBERS for the Development Framework, which were then agreed by The State Tourism Committee.

In order to draw the most appropriate and balanced future development picture for Issyk-kul tourism in 2025, the study premised three development alternative cases, the “Advanced Growth Case”, “Moderate Growth Case” and “Low Growth Case”. Development frameworks for each scenario were then studied.

**Table G.7 Tourist Demand Target**

Scenario		Target Market	2010	2025
Advanced Growth Case	Develop Issyk-kul zone to be a major strongpoint of the Central Asian tourism network and attract not only CIS but also populous neighbors and long haul markets tourists by creation of new attractions and products	In addition to CIS countries, strong promotion in China, India, Europe, Americas and other Asian countries should be undertaken.	1,600	2,500
Moderate Growth case	To establish Issyk-kul as the regional major destination for health and healing resort. Develop cultural, historical, educational, convention, and nature watching amusement and recreational tourism products in order to attract new family tourists, weekend and business trippers, and educational tourists.	Main targets are CIS and domestic markets. Promotion and marketing to new potential China, India, and other Asian markets should be strengthening.	1,100	1,800
Low Growth Case	Retaining present nature tourism. No new actions for promotion and marketing are taken. The development is focused on traditional nature oriented tourism, eco-tourism, recreational and leisure tourism.	Traditional CIS tourists, Chinese and domestic markets and limited European and American SIT tourists.	700	1,100

Source: JST

The main targets of the tourist markets are the CIS and domestic tourists. This is because of the composition of nationalities of the arriving tourists and their interests. The name of Issyk-Kul Lake retains an image as a traditional selected resort area and is still a strong magnet to attract tourists from CIS countries. Therefore, it is also essential to emphasis the fame of Issyk-Kul Lake as a major attraction for CIS markets in the future. In addition, there are recent proposals by Chinese, Turkish and European investors and interests of Indian tour operators in New Delhi. Those proposals by the populous tourist countries are a sign of the strong development potential and advantageous impacts of promoting internationalization of Issyk-Kul tourism.

On the other hand, important consideration should be given to the recent open door policy of CIS countries, which generate tourist groups currently selecting other developed tourist destinations where they are able to enjoy pleasant environments, facilities and services that are better value for money. Strong interest in overseas travel of the upper middle income group of people is changing the traditional tourist flow to many attractive sea-side resort destinations in Mediterranean and Gulf countries, such as Turkey, Sardinia, Malta, Tunisia and Dubai.

According to the tourism operator survey conducted by the Study Team in Bishkek, Alma-Ata and Ulmuchy in June 2004, promotion of Issyk-Kul tourism is targeted at the middle income group tourist markets, which are regarded to be the most likely markets. The beautiful mountain landscape, clean natural environment, sunny lake side, Russian language, moderate travel price, short distance and easy access are the major reasons for Kazakh tourists selecting Issyk-Kul as the ideal resort destination. Some operators in Alma-Ata have already started promotion of Issyk-Kul tourism in Siberia and East Russia as the next new potential tourist market.

**Table G.8 Projection of Tourist Arrivals in Issyk-Kul Zone by Origin (Moderate Growth Scenario)**

Issyk-Kul	2003		2010		2025		Remarks	Annual Growth Rate (%)	
				%		%		2003-2010	2010-2025
CIS	120,200	100.0%	480,000	100%	720,000	100%			
Kazakhstan	60,500	50.3%	230,400	48%	324,000	45%		21.0%	2.3%
Uzbekistan	15,000	12.5%	67,200	14%	108,000	15%		23.9%	3.2%
Russia	36,200	30.1%	144,000	30%	230,400	32%		21.8%	3.2%
Others	8,500	7.1%	38,400	8%	57,600	8%		24.0%	2.7%
Non CIS	48,400	100%	320,000	100%	480,000	100%		31.0%	2.7%
Europe	16,500	34%	50,000	16%	70,000	15%	EU	17.2%	2.3%
Americas	5,600	12%	40,000	13%	50,000	10%	USA+Canada	32.4%	1.5%
West Asia	9,000	19%	40,000	13%	50,000	10%	Excl. India	23.8%	1.5%
North East Asia	12,300	25%	110,000	34%	200,000	42%	Japan+Korea+China	36.7%	4.1%
South Asia	1,300	3%	40,000	13%	60,000	13%	India +	63.2%	2.7%
Others	3,700	8%	40,000	13%	50,000	10%		40.5%	1.5%
Foreign total	168,600		800,000		1,200,000		CIS+ non CIS total	24.9%	2.7%
Domestic	81,400		300,000		600,000			20.5%	4.7%
Issyk-kul Total	250,000		1,100,000		1,800,000			23.6%	3.3%

Source

2003: The State Committee for National Statistics, The State Committee for Sports, Tourism and Youth Policy

2010,2025: JICA Study Team

### G.3.3 Development Plan and Strategy

#### *(1) Spatial Development Plan*

According to the analysis of existing tourism attractions and development potential, the Study team proposed formulating the tourism development plans based on the following four zones. In order to create the most appropriate resort development and satisfy tourists and increase likelihood of their returning, it is essential to supply a wide variety of high value tourism services, such as facilities, atmosphere, services, meals, and possible resort activities. These should be matched to the requests of each tourist group. Therefore, development of each zone will be characterized by the development directions and goals.

The development directions of each proposed each zone and development strategies shall be harmonized with development concepts such as Balykchy as Tourist Gateway, Northern Coast as Active Leisure Tourism Zone, Southern Coast as Peaceful Healthy and Healing Resort Zone and Karakol as the Nature Tourism Base.

#### *1) Balykchy Tourist Gateway*

##### *To develop Balykchy as the economic center for commercial and industrial activities*

Balykchy is the gateway for travelers arriving from Bishkek, the Chinese border through Naryn, Kochkor and Karakol. This is the first oasis for travelers along the Silk Road. Accumulation of urban and commercial functions is essential for the travelers such as tourists, merchants and businessmen. Development of shopping centers, restaurants and rest facilities will be very much appreciated by the frequent travelers.



To integrate railway station, bus terminal and taxi station

The railway station, taxi and bus terminal should be linked together for the convenience of passengers. It is suggested that the National Railway Company relocate the station to the port side area and contribute a piece of land for development of an integrated terminal for regional transport, such as buses and taxis. The upgrade of transport functions will attract more train passengers.

One stop service area for rest and shopping opportunities

This will be helpful for tourists, especially international and domestic FIT (Free Individual Tourism) travelers.

A hotel with 11 rooms is to be constructed by the Kazakh investor where holiday tourists and business trippers travel. One more additional business hotel for industry and commerce is required in Balykchy.

Another important tourism attraction in Balykchy is the biosphere reserve area on the lake, which has been designated as a strict preservation area with the strong support of GTZ since 1997. This was again enforced in 2003. It is one of the most important attractions for biosphere SIT tourism.

2) Northern Coastal Leisure Tourism Belt

Upgrade of accommodation facilities

Many of the resort facilities were constructed during the Soviet period and reconstruction and renovation of the aged buildings are essential to provide a good reputation for the Issyk-Kul Lake resort.

Development of active tourism center in Cholpon-Ata

The northern coast of the lake has been regarded as the most suitable zone for the active leisure tourism resort area. Nowadays Cholpon – Ata is the central core of the northern coast resort area and attracts many short stay visitors, weekend and one day trippers. Tourist squares with amenity facilities and cultural exhibitions are requested by many resort tourists visiting Cholpon-Ata.

According to the tour operator survey in Bishkek and Alma – Ata, insufficient amenities in Cholpon-Ata was identified as the critical complaint of their customers. It was proposed to develop more amenities such as family parks and amusement parks in order to maintain the fame of Issyk-Kul tourism as a pleasant resort destination.

A Tourism Free Zone in Tamchy area

In order to establish a modern international standard resort area on the northern coastal area, development of a Tourism Free Zone is proposed, to be linked with the upgrade of Tamchy airport and Free Economic Zone. The development should be supported by special incentives in order to develop an individual resort area of international standard.

3) Southern Coast Resort Zone

The southern coastal area of Issyk-Kul Lake is at present mostly untouched. Clean lake water, calm and untouched nature, beautiful views to the lake and a chain of mountains on the northern coast are precious resources for resort development of a healthy utopia. At present

some big scale resort development projects are being proposed to develop high-grade resort hotels by FDI.

#### 4) Karakol Nature Tourism Base

Karakol Nature Tourism Base is located at the foot of Tien Shan Mountains and is regarded as the base for alpine activities, trekking and skiing. Some tour operators are specialized in mountaineering, rock climbing, rafting and skiing. They are able to supply rental mountaineering and skiing gear at the request of tourists. Camping, picnic and hiking in nature areas are the most popular leisure activities for domestic tourists.

In addition to those nature tourism possibilities, mineral hot-springs are the promised natural resources in this zone. It will be the important resource for development of a health utopia tourism sector with “Roten-buro” (outdoor open air bath) in Issyk-Kul zone.

#### *(2) Tourism Resources*

Development of cultural tourism resources is essential for diversification of Issyk-Kul tourism. In addition to the existing limited variety of nature tourism products, development of cultural tourism resources is expected to broaden the development of possible new tourism products and invite more variety in tourists groups. The Oblast administration has to make efforts to promote local cultural attractions in cooperation with the initiatives of each village and district.

#### *(3) Tourism Products*

It is essential to develop new tourism products which offer a wider range of resort pleasure and generate more tourism income, such as:

##### 1) To emphasize Convention Tourism Products

Issyk-Kul is already one of the most popular destinations for convention tourism. There are many international and domestic meetings, seminars and workshops held in Issyk-Kul. Existing large-scale conference facilities and sufficient capacity of accommodation for the participants attract many MICE (Meeting, Incentives, Convention and Exhibition) tourism organizers. No other destinations can compete with Issyk-Kul for MICE tourism in Kyrgyz Republic. A beautiful landscape and clean natural environment are also suitable after-convention tourist aspects. The convention tourism will be the most promised and strongly marketable tourism product of Issyk-Kul tourism.

##### 2) Diversification of tourism pleasure

###### i) Development of Tourism Farm

Fruit gardens, flower gardens and herb gardens with healthy food restaurants and tea houses will provide new tourism pleasure.

###### ii) Development of new healing health tourism

Lake water, hot springs, mineral mud, various herbs and healthy natural foods produced around the lake are the resources for the healing and health tourism products.

iii) Tourism train

Train riding from Bishkek to Balykchy will offer the beautiful natural landscape of Chui Plain and Boom Valley, which will contribute to revenue generation for the Railway Company.

iv) Tourism submarine

This will offer underwater archaeological sites and a spectacle of the underwater environment.

3) Creation of New Tourism Products to Experience Local Culture

In order to diversify the traditional resort activity of sight seeing and promote new tourism aspects, experiences of meeting local people and viewing their culture is proposed, including:

- i) To experience handicraft production, such as felt, pottery, and baskets,
- ii) To learn traditional Kyrgyz cuisine, jam, lagman, meat and fish dishes
- iii) To learn traditional music, songs, dance and games.

4) Development of Educational Tourism Products

Education tourism in the schools aims at not only increasing the number of domestic tourists but to enlighten tourism as one of the pleasures of life. It should be a long-term investment for the future development of the domestic tourist market. The railway, bus and hotel industries should cooperate with this long-term aim to better develop the future tourist market.

*(4) Tourist Facilities*

1) Basic Development Strategy

Diversion of tourists from the over-crowded northern coastal area and development of new types of resort activities are important tasks for the future of Issyk-Kul Lake resort zone. The Study proposed the development of high grade resort facilities in the Southern Coastal Area as an example for future development of Issyk-Kul resort zone.

The development will be undertaken to establish a resort area with comfortable facilities, services with a welcoming heart and healthy and sophisticated international standards, which will be operated by hotel operators from countries with advance tourism sectors.

2) Privatization of Sanatoria

By the end of 2003, 41 of 130 facilities had been privatized and 89 were still owned by the public sector, including universities, institutes, political parties, and labor unions etc., who wanted to maintain ownership. Therefore it is recommended to sublet management to private companies and decrease the annual operating debt. Based on present conditions of the facilities, it will be suitable to sublet the operation to hotel companies with 3 star credentials. Management contracts will be discussed with the owner to find the most appropriate management contract.

**Table G.9 Tourism Facility Development Plan**

Present

<b>Existing Facilities (2003)</b>	<b>1,900ha</b>	<b>19.00km<sup>2</sup></b>
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**2003-2010, Average Scenario**

Area No.	Development Facilities	Development Area	
		(ha)	(sqkm)
<b>Large Scale Development</b>			
1	Beach Resort Development Area - 1	200ha	2.00km <sup>2</sup>
2	Beach Resort Development Area - 2	200ha	2.00km <sup>2</sup>
3	Beach Resort Development Area - 3	200ha	2.00km <sup>2</sup>
4	Beach Resort Development Area - 4	200ha	2.00km <sup>2</sup>
5	Chinese Resort Development Project	800ha	8.00km <sup>2</sup>
6	Holiday Resort	200ha	2.00km <sup>2</sup>
7	Hotel Development (Completed)	100ha	1.00km <sup>2</sup>
	<b>T o t a l</b>	<b>1,900ha</b>	<b>19.00km<sup>2</sup></b>
<b>Medium Scale Development</b>			
8	Spa Resort Development Area - 1	50ha	0.50km <sup>2</sup>
9	Spa Resort Development Area - 2	50ha	0.50km <sup>2</sup>
	<b>T o t a l</b>	<b>100ha</b>	<b>1.00km<sup>2</sup></b>
<b>B+B</b>			
10	Wildness Ldge - 2	10ha	0.10km <sup>2</sup>
	<b>T o t a l</b>	<b>10ha</b>	<b>0.10km<sup>2</sup></b>
<b>Others</b>			
11	Amusement Park	10ha	0.10km <sup>2</sup>
	<b>T o t a l</b>	<b>10ha</b>	<b>0.10km<sup>2</sup></b>
	<b>Total Development Area</b>	<b>2,020ha</b>	<b>20.20km<sup>2</sup></b>

Source: JST

**2010-2025, Average Scenario**

Area No.	Development Facilities	Development Area	
		(ha)	(sqkm)
<b>Large Scale Development</b>			
12	Beach Resort Development Area - 5	200ha	2.00km <sup>2</sup>
13	Beach Resort Development Area - 6	200ha	2.00km <sup>2</sup>
14	Beach Resort Development Area - 7	200ha	2.00km <sup>2</sup>
15	Beach Resort Development Area - 8	200ha	2.00km <sup>2</sup>
16	Beach Resort Development Area - 9	200ha	2.00km <sup>2</sup>
17	Sea Side Hotel Development Area	200ha	2.00km <sup>2</sup>
18	Sea Side Hotel Development Area	200ha	2.00km <sup>2</sup>
19	Mountain resort development Area	500ha	5.00km <sup>2</sup>
	<b>T o t a l</b>	<b>1,700ha</b>	<b>17.00km<sup>2</sup></b>
<b>Medium Scale Development</b>			
20	Nature Tourist Inn	50ha	0.50km <sup>2</sup>
21	Spa Resort Development Area - 3	50ha	0.50km <sup>2</sup>
	<b>T o t a l</b>	<b>100ha</b>	<b>1.00km<sup>2</sup></b>
<b>Pension &amp; B+B</b>			
22	Wildness Ldge - 1	30ha	0.30km <sup>2</sup>
23	Yulta Camp	10ha	0.10km <sup>2</sup>
	<b>T o t a l</b>	<b>40ha</b>	<b>0.40km<sup>2</sup></b>
	<b>Total Development Area</b>	<b>1,840ha</b>	<b>18.40km<sup>2</sup></b>

**Total**

<b>2003-2025</b>	<b>5,760ha</b>	<b>57.60km<sup>2</sup></b>
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**Table G.10 Projection of Number of Beds by Rayon**

Rayon	Village	No. of Beds for Recreation			Increase of bed number	
		2003	2010	2025	2003-2010	2010-2025
Issyk-kul	A Tory Aigul	380	400	450	20	50
	B Kosh-kol	2,725	3,100	3,150	375	50
	C Tamchy	68	370	400	302	30
	D Chok-Tal	620	1,000	1,020	380	20
	E Sary-Oi	1,644	2,000	2,040	356	40
	F Kara-Oi	5,030	5,300	5,350	270	50
	G Chipon-Ata	2,600	2,800	2,900	200	100
	H Bosteri	9,010	9,100	9,150	90	50
	I Komsomol	665	700	730	35	30
	J Korumdu	1,025	1,050	1,200	25	150
	K Semenovka	80	100	110	20	10
	Ananevo	245	270	300	25	30
	Wildness Lodge	0	0	20	0	20
	<b>Total</b>	<b>24,092</b>	<b>26,190</b>	<b>26,820</b>	<b>2,098</b>	<b>630</b>
Tup	L Kudurgu	40	80	150	40	70
	M Tup	200	250	300	50	50
	N Ysyk-Koi	200	210	450	10	240
		<b>Total</b>	<b>440</b>	<b>540</b>	<b>900</b>	<b>100</b>
Ak-Suu	Total	<b>162</b>	<b>200</b>	<b>400</b>	<b>38</b>	<b>200</b>
Jety Oguz	T,V, W,U	790	850	900	60	50
	Boz-Beshik		600	2,200	600	1,600
	Lodge / Inn	0	0	50	0	50
		<b>Total</b>	<b>790</b>	<b>1,450</b>	<b>3,150</b>	<b>660</b>
Tong	X, Y	560	600	1,000	40	400
	Ton	620	650	1,000	30	350
	Others	0	300	700	300	400
		<b>Total</b>	<b>1,180</b>	<b>1,550</b>	<b>2,700</b>	<b>370</b>
Balykchy		<b>50</b>	<b>100</b>	<b>300</b>	<b>50</b>	<b>200</b>
<b>Grand Total</b>		<b>26,714</b>	<b>30,030</b>	<b>34,270</b>	<b>3,316</b>	<b>4,240</b>

Source: 2003(statistic Committee), 2010,2025(JST)

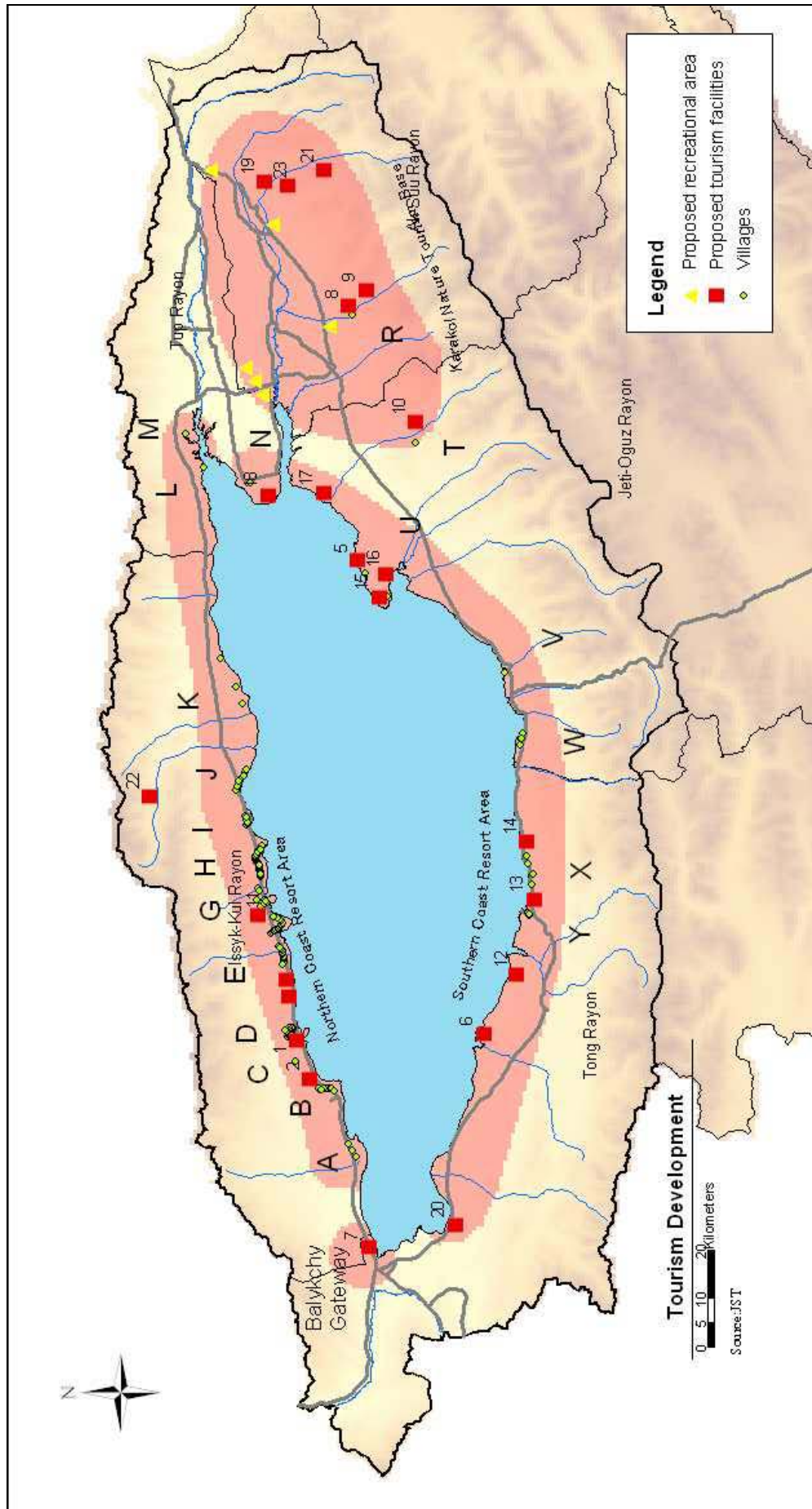


Figure G.5 Tourism Facility Distribution Plan

### 3) Investment from Kazakhstan

Issyk-kul Lake is the most famous resort destination in Kazakhstan and Gas Company. The Alma-Ata and Astana municipalities are studying investment in the Issyk-Kul Lake zone. However, the most serious barrier to investment is property rights in Kyrgyzstan. The protocol for property rights of Kazakh facilities constructed in Kyrgyzstan during the Soviet era was signed by the presidents of both countries, but has not yet been passed in parliament and Kazakh investment plans are suspended.

### *(5) Participation of Local Community*

#### 1) Local products and souvenirs

Participation of the local community is the most essential element in the development of Issyk-kul tourism. Participation in production and sale of local products are important for tourism promotion and income generation in the local community. The good reputation of the local products is more effective for advertising than posters and brochures.

The local products available for souvenirs are:

- i) Herbs, health mud and organic soap,
- ii) Honey, dried fruits, processed agricultural products, and
- iii) Handicrafts and souvenirs.

The most important direct revenue sources for the local communities from tourism are sales of local products and souvenirs. Unique local products and curio souvenirs are also important tourism attractions. However it must be understood that the strictest evaluators of products are neither producers nor sellers but tourists and buyers.

#### Local products and Handicrafts

Local products and handicrafts are souvenirs, which provide very important memories of the region and should be more worthy than the money tourists have paid. The most important points are “Uniqueness and Reminiscence” of goods tourists can purchase only in Issyk-Kul Lake.

#### Applicability to life of tourists at home

What tourists have bought in Issyk-kul should be applicable and able to be used in the daily life of tourists in their home countries. Otherwise they will be exhibited for a while, then sacked and placed in storage. The producer should understand the lives of tourists at home. It is also helpful to discuss this aspect with the tourists, staff of donors and NGOs.

#### Quality and production skill

These are the most serious issues for production of marketable souvenirs. When goods are produced as souvenirs for visitors from outside Issyk-kul zone, they are no longer tools of local daily life but memories of the resort holiday in Issyk-Kul Lake. Thus the products should be produced with unique designs, higher quality and good production skills. The producers should know the souvenirs have different requirements from that of the local residents.

### *Friendly attitude of sellers*

In Kyrgyzstan, tourists are rarely meeting sellers in shops who welcome and thank the customers, although they are friendly and hospitable people. The tradition in Soviet times still strongly remains. However, the shop owners should know that the friendly and welcoming attitude increases sales volumes and the reputation of the shop. The training in selling attitude is one of the important subjects for employees of the tourism-related industry in Kyrgyzstan.

### *2) Local Participation in Tourism*

#### *Local Procurement*

One of the most important linkages of tourism with the local community is local procurement of food, beverages and carpentry. Vegetables, meat and milk products, and fruit juice are the major items to be sold to hotels and sanatoria. The most important task for farmers and producers is to constantly provide requested quality and quantity of products. If they are able to meet the basic requirements of the consumers, tourism will bring certain levels of incomes to the local community.

#### *Employment of Local Manpower*

Tourism will generate employment opportunities for the local community. However, absence of basic service skills such as house keeping, room making, cleaning and restaurant services are serious shortcomings of local manpower. Therefore, those basic skills should be taught by experienced hotel staff and sanatoria personnel in the community centers of villages during the winter period.

#### *Participation in Community-based Tourism (CBT)*

This is a way of generating direct incomes from tourism for the local community. It is recommended to expand CBT in cooperation with Helvetas. Management, refurbishing, cooking and marketing will be taught by the Association of Community Based Tourism, which is supported by Helvetas.

### **G.3.4 Institution and Organization**

#### *(1) Tourism Administration*

It is recommended that the Tourism Administration be separated from present concurrent authority for social and political education. It should be an independent authority in charge of tourism in the economic-oriented administration, focusing its responsibility on policy making, legal support for development of the private sector and promotion of domestic and regional tourism, such as reinforcement of regional and domestic marketing for the agreement on a common visa with other regional countries.

#### *(2) Establishment of National Tourism Development Authority*

Planning and implementation of tourism development projects should be the responsibility of a semi-government organization such as National Tourism Development Authority. It has both government power and budgets for planning and implementation of public tourism investments, and guides the private tourism development, such as hotel classification, design control and safety standards for tourism facilities in order to protect natural environment, landscape and safety of tourists from fire and major disasters. It is recommended to establish the Issyk-kul branch independently from local authorities.

### *(3) Association of Tourism Suppliers*

In order to upgrade the professional reliability and responsibility of tourism operators and agencies, the associations of tourism suppliers shall guarantee the responsibility of the tourism industry in Kyrgyzstan. It is essential to reinforce cooperation among the tourism industry and strengthen the bargaining power in cooperation with the public sector and international organizations.

### **G.3.5 Marketing**

Refraining from traditional marketing is one of the reasons for the present extreme seasonal fluctuation. Limited business strategy of tourism suppliers and Issyk-Kul oblast administration, absence of information of Issyk-Kul tourism and limited tourism products only for family vacations make marketing of tour operators and agencies extremely difficult, except during the summer season. It came basically from the tradition that tourists were sent by the Soviet government and the Kyrgyz side was not required to participate in marketing themselves.

Therefore, the solution for improvement of the present problems is simply to change tourism to a market-oriented attitude as follows:

#### *(1) International Marketing and Promotion*

Major target countries for marketing and promotion are CIS, China, India, Europe, Korea and Japan, which are main tourist generating countries. However, the most critical constraint for international marketing of Issyk-Kul tourism is “Absence of Appropriate Information”. Concrete and usable information on Issyk-Kul tourism should be provided to the important markets such as Kazakhstan and Russia. The most important duty of The State Committee of Tourism, Sports and Youth Policy, and Oblast administration of Issyk-Kul should be to provide recent and detailed information to tour operators and agencies in the market countries for formulation of marketable tour programs at competitive prices.

The internet web is one of the best ways of providing information for potential tourist markets such as Europe, America and Japan, which have difficulties in obtaining guiding material. TACIS has produced a beautiful and attractive tourism guide website.

#### *(2) Regional Joint Marketing Promotion*

Regional joint marketing is essential for all countries in the Region. This is because most tour programs for Central Asia travel are composed of multi-destination programs to travel around two or three countries in the region. There are few mono-destination tour programs such as mountaineering and hunting, except SIT tourism.

According to the Workshop for Regional Tourism Promotion held by the Study Team during 12-13 July 2004 in Issyk-Kul, the problems, issues and tasks have been clarified such as visa agreements, institutional organizations, privatization of tourism business and transition to the market-oriented economy and political systems, which are important factors for regional cooperation. The result of the Workshop and conclusion to hold annual regional discussions is attached in ANNEX 3 as Issyk-kul Initiatives.

It was the first workshop where representatives of regional countries sat together to discuss common objectives, problems, solution and difficulties. The participants concluded that it was a fruitful discussion and necessary to continue this joint workshop in order to solve the regional obstacles through regional cooperation.



### **G.3.6 Human Resource Development**

#### *(1) Tourism Education in the Universities*

Re-education of professors and teaching staff in universities is the most fundamental and urgent requirement of human resource development in the Kyrgyz tourism. Absence of professors and teaching staff that have really experienced pleasant international tourist services is the most critical problem to be solved as soon as possible.

The most important training subjects are cooking of international dishes, house keeping services, services in restaurants and bars, reception service by the front office management. The cooking is included in the training programs of TACIS.

The necessary training subjects are:

- 1) House keeping: room preparation and cleaning,
- 2) Restaurant and bar: table setting, food and drink service methods,
- 3) Reception and front office: efficient and hospitable reception and front services, and
- 4) Manpower management of above 1) to 3) and kitchen

The most effective way for re-education is to invite some experts from developed tourism countries, such as Thailand, Japan and the Philippines, as teaching staff to amend the traditional curriculum and education system professors had received during the Soviet era. Dispatch of selected professors to advanced tourism countries is not recommended because they become directors or start their own business after training and their knowledge is not transferred to other professors and teaching staff after all.

#### *(2) Professional Training*

Vocational schools have similar problems to universities. Absence of capable trainers results in problems of insufficient professional skills in the hotel and restaurant industry. Effective training is at present being carried out only in the Hyatt Hotel in Bishkek. The training program is basically complied from those supplied by headquarters in Chicago. But they are allowed to include local characteristics of the social customs into the manual.

The necessary training subjects are:

- 1) House keeping: room preparation and cleaning,
- 2) Restaurant and bar: table setting, food and drink service methods, and
- 3) Reception and front office: efficient and hospitable reception and front services.

#### *(3) Employment in Issyk-Kul Resort Zone*

In addition, problems for graduates arise as many hotels and sanatoria close after the summer season, and they remain unemployed from October to May. Therefore most students do not want to stay in hotels and sanatoria in Issyk-Kul oblast. Thus the hotels and sanatoria are obliged to employ local, untrained manpower without skills and knowledge of tourist services.

The key task for upgrading manpower in Issyk-Kul tourism is to extend the tourism season and secure stable employment in Issyk-Kul resort zone. Development of new products, such as conventions, sports training, wedding parties, family Christmas parties, New Year parties, and skiing holidays is an essential requirement for the Association of Owners of Hotels and Sanatoria.

*(4) Tourism Education for the Local Residents*

It is essential to enlighten local residents of the importance of tourism to promote cooperation and participation of local residents. The education shall be started in primary school to promote the importance of tourism for the local community, to grow the consciousness of the residents of the tourism area and educate protection of nature, trees and beautiful landscape and tourism sites. It is also indispensable to welcome the tourists who bring profit to the local community.

Re-training of police officers should be especially essential in order to eradicate the sponge of police officers on tourists and establish a clean police system. This would secure public safety in the local community and prevent crimes against tourists.

## **SECTOR H**

# **INDUSTRIAL DEVELOPMENT PLAN**

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## **H. INDUSTRIAL DEVELOPMENT PLAN**

### **H.1 Present Status of Kyrgyzstan Industrial Sector**

#### **H.1.1 Overview and Status quo of the Industrial Sector**

##### *(1) Secondary Sector*

In Soviet times, the present Kyrgyz Republic specialized in heavy industry- machine engineering and metal works, light industry- textile related industries, and agricultural production, including meat for processing in other Soviet republics. The agricultural processing industry produced wool, leather, cotton, silk cocoons, tobacco, meat and sugar. The highly specialized industrial sector manufactured electro-technical equipment, machine engineering, small computers, and electric lamps. However, items of the light industry made of local raw material were located almost completely outside Kyrgyz Republic. Thus, the Kyrgyzstan industrial sector is presently characterized by a large number of small and micro industries/enterprises, practically no medium-sized enterprises and large private enterprises. The latter excluded the Joint-Stock-Companies (JSCs) that were privatized from the former State Companies.

##### **(Large-scale Industry)**

State-owned manufacturing companies, mostly large-scale industries, lost money, markets, and access to resources, because these industries did not have any historical and location advantages or local raw materials within the territory of Kyrgyz Republic. Thus, the large-scale industrial sector in the Kyrgyz Republic lost not only a large outside market, but also its place as a leading industry in this country.

##### **(Light Industry)**

A large number of light industries/companies processed cotton and wool, and manufactured textiles, clothing and shoes. Light industry made up about 3.5% of Kyrgyzstan's GDP in 2001. Local light industries have to compete with imports from China, India, Turkey and South-East Asia.

##### **(Competitiveness)**

It is pointed out that the high taxes including income tax, social fund payments and road tax, and high import duties on equipment, would increase the costs of production among the Kyrgyzstan enterprises. Price hike in imported energy resources and new materials also impacted negatively on the Kyrgyzstan industrial environment. This environment will be discouraged from investing. Manufacturing (Industry+Construction) is the second largest sector of the economy, contributing roughly 24% to Kyrgyzstan's GDP in 2002. The agricultural sector was the largest contributor (about 36 %) of GDP in 2002.

##### **(Agriculture and Agriculture –Processing Industry)**

The agricultural sector is still a leading industry in the Kyrgyzstan economy and occupied a 35.6% share of GDP in 2002. Also, the agriculture industry provides the important raw materials for the light industry sub-sector.

**Table H.1 Changes of Industrial Structure between 1998 and 2002**

By Sector	1998	1999	2000	2001	2002
GDP (Million Som)	34,181.4	48,744.0	65,357.9	73,883.3	75,240.4
Index (1998=100)	100.0	142.6	191.2	216.2	220.1
Of which:	100.0	100.0	100.0	100.0	100.0
Agriculture	35.9	34.8	34.2	34.5	35.6
Industry +Construction	20.8	24.8	27.1	26.3	24.1
Services (Trade and Public Catering + other Sectors)	34.5	33.0	31.7	32.0	32.5
Net Taxes on Products	8.8	7.4	7.0	7.2	7.8

Source: National Statistical Committee (NSC) and Ministry of Finance (MOF)

## (2) Tertiary Sector

### (Distribution System)

Previously, the distribution network was actually managed and monopolized from a single central Moscow. Some enterprises were registered as manufacturing companies, nevertheless, in the course of functioning some enterprises mainly rendered wholesale trade, logistics or transportation services. Collapse of the distribution system in FSU, which was reliable and had a relatively cheap cost, was another reason for losing the outside large market in the Kyrgyzstan industry sector. The greatest specific weight in goods transportation was the motor transport (94.7%), followed by railway transport (3.1%), pipeline transport (2.1%), internal water (0.1%) and air transport (0.015%).

### (Wholesale Trade)

The total volume of trade and services in 2001 was 43,727.9 million Som, or 7.1% higher, than in 2000. The wholesale circulation in total volume of trade turnover was 27.2% in 2001, reaching 11,898.6 million Som or 10.3% more than in 2000. Very low levels of wholesale trade are observed in the Issyk-Kul oblast, where its share in the total volume of trade turnover was 0.1%, in the Naryn oblast 0.2%, and Batken oblast 4.9%. In the Issyk-Kul oblast its volume dropped by 53.1% compared to 2000, in Naryn oblast by 34.2%, in Djalal-Abad oblast by 41.9%, in Batken oblast by 46.5%, and in Chui oblast by 17.8%. There is practically no wholesale market for goods of technological purpose, spare parts for agricultural facilities, mineral fertilizers, equipment and tools to be used in agriculture, timber, etc.

### (3) Comparisons within the CIS Countries

The GDP of CIS countries increased by 7% on average in 2003. GDP growth was highest in Armenia at 13.2%, followed by Azerbaijan with 11.2%. Kyrgyzstan was 7th highest with 6.7%. On Feb.11, the CIS statistical committee announced there were two million economically active people in Kyrgyz Republic on Jan. 1, 2004 and the total population of the CIS countries was 270 million. Comparison of CIS countries is shown below:

**Table H.2 Comparison between 2002 and 2003 Figures in the CIS Countries**

	GDP growth	Inflation Rate	Industry Output Growth	Investment in basic capita
CIS Average	7.0%	N.A.	8.0%	N.A.
Armenia	13.2%	8.6%	14.9%	41%
Azerbaijan	11.2%	3.6%	6.1%	71%
Belarus	6.8%	25.4%	6.8%	18%
Georgia	8.6%	7.0%	10.6%	68%
Kazakhstan	(Jan-Sep) 9.2%	6.8%	8.8%	11%
Kyrgyzstan	6.7%	5.6%	17.0%	9%
Moldova	6.3%	15.7%	13.6%	16%
Russia	7.1%	8.6%	7.0%	12.5%
Tajikistan	10.2%	12.0%	10.2%	N.A.
Turkmenistan	N.A.	N.A.	N.A.	N.A.
Ukraine	8.5%	8.2%	15.8%	(Jan-Sep) 33.0%
Uzbekistan	N.A.	N.A.	N.A.	N.A.

Source: The CIS Interstate Statistics Committee

## H.1.2 Export and Import Products of Kyrgyzstan

### (1) Main Export Products

At present, the 30 commodity items account for almost 80% of total exports. Within the first five years of independence, the volume of the Kyrgyzstan export as a whole has grown by 1.9 times, whereas supplies to markets of distant foreign countries have increased by 3.7 times. Within the period 1992-94, the light and food processing industries had the most promising export potential.

By the middle of the 1990s, export of light industry items decreased as much as twice, export of wool by 4 times, and export of meat by 57 times, followed by a sharp drop in export of hides during 1995-2001.

Export surplus was slightly positive, amounting to 8.9 million US dollars (Ex.476.1-Im.467.2) in 2001, while in 2000 it was negative, amounting to 50.1 million US dollars (Ex.504.5-Im.554.6). Major export items in 2001 were precious metals (US\$ 226.7 million), electric power (US\$ 46.8 million), cotton (US\$ 22.2 million) and tobacco (US\$ 25.6 million). No commodities of domestic producers have unfortunately penetrated into the world markets due to the taste, processing level, packaging and attractiveness of the goods. Major export items as well as time consignment delivery are shown in Tables below.

**Table H.3 Major Export Products in 2000 and 2001**

Items	Units	2000		2001	
		Q-ties	mil USD	Q-ties	mil USD
Total			504.5		476.1
Milk and milk products	th. tons	4.3	1.4	5.0	3.0
Vegetables and fruits	th. tons	82.1	7.8	56.4	9.4
Tobacco	th. tons	26.7	30.2	29.8	25.6
Electric power	kWt	3,153.0	79.8	2,164.7	46.8
Hide			6.7		8.3
Cotton			33.9		22.2
Slate	th. tons	65.9	3.0	98.4	4.3
Precious metals			196.9		226.7
Waste & scrap of non-ferrous metals	th. tons	50.6	24.6	4.9	2.8
Mechanical engineering items			15.5		12.3
Electric machines and equipment			17.8		16.2
Incandescent lamps	mil pcs	190.6	11.6	207.7	12.2

Source: NSC

Time of delivery of consignments depends on the place of destination. Delivery time of consignments by plane to Moscow is 2 days (daily flights to Moscow), and 4 days to Hanover and Frankfurt. Time of delivery of consignments to Peking, Tokyo or New York is 7 to 10 days due to lack of direct flights.

**Table H.4 Time of Consignment Delivery to Some Cities by Car**

Destination	Lugovaya	Astana	Russia's border	Moscow	Nakhodka	Brest	Dostyk
Number of days	2	11	14	22	45	24	11

Source: METI

**Table H.5 Lead Time**

Type of transportation	By air	By railroad	By motor transport
Number of days	2-3	3-5	1-2

Source: METI

*(2) Main Import Products*

Total imports in 2001 were 467.2 million US dollars, which decreased 87.4 million US dollars from 554.6 million US dollars in 2000. Major import items in 2001 were oil products (US\$ 66.7 million), mechanical engineering items (US\$ 42.5 million), natural gas (US\$ 33.2 million), and pharmaceutical products (US\$ 23.1 million). Major import items and average export price as well as time of consignment delivery are shown in the Table below.

**Table H.6 Major Import Products in 2000 and 2001**

Items	Units	2000		2001	
		Q-ties	mil USD	Q-ties	mil USD
Total			554.6		467.2
Confectionery	th. tons	4.0	3.0	4.1	3.3
Tea	th. tons	3.6	5.2	3.5	5.2
Wheat	th. tons	223.2	33.3	74.3	6.7
Beer	th. liters	4,196.1	28	7,618.5	4.0
Tobacco items	mil pcs	1,660.6	11.0	1,580.7	9.8
Coal	th. tons	749.2	11.1	345.6	6.4
Oil products			728		66.7
including, petrol	th. tons	97.0	24.0	101.9	22.0
Kerosene	th. tons	40.4	11.5	38.7	12.0
Diesel oil	th. tons	83.9	17.2	85.0	19.9
Natural gas	mil. c. m	651.9	33.2	665.7	33.2
Pharmaceutical products			22.3		23.1
Plastic and plastic items			13.2		13.9
Soap and washing items			46		6.1
Paper and cardboard			12.4		11.3
Printed matter			33		1.5
Clothing (knitted fabric, textiles)			10.6		9.6
Footwear			50		4.8
Ferrous metals			76		7.3
Ferrous metal-ware			10.0		8.4
Mechanical engineering items			65.2		42.5

Source: NSC

**H.1.3 Industrial Employment and Outputs by Oblast**

*(1) By Region*

There were 2.12 million people economically active in 2002 in the Kyrgyz Republic. Unemployment reached 12.5% of this total. The lowest unemployment ratio within the region (Oblast) in 2002 was observed in Talas oblast at 5.1 %, followed by Osh oblast (5.8%). The highest unemployment ratio was Batken Oblast (20.4%), followed by Bishkek (20.4%) and Chui Oblast (15.7%).



**Table H.7 Economically Active and Inactive Population Aged 15 and Over (people) in 2002**

	Economically Active Population in Total		of Which:				Economically inactive population	Ratio of Economic Activity	Employment Ratio	Un-employment Ratio
	Number	Ratio	Number of Employed Pop.	Ratio	Number of Unemployed Pop.	Ratio				
Kyrgyz Republic	2,115,597	(100.0%)	1,850,101	(87.5%)	265,496	(12.5%)	1,169,462	64.4%	87.5%	12.5%
Batken oblast	144,548	(6.8%)	114,628	(79.3%)	29,920	(20.7%)	101,904	58.7%	79.3%	20.7%
Jalal-Abad oblast	378,177	(17.9%)	342,340	(90.5%)	35,837	(9.5%)	179,227	67.8%	90.5%	9.5%
Issyk-Kul oblast	150,321	(7.1%)	136,284	(90.7%)	14,037	(9.3%)	127,489	54.1%	90.7%	9.3%
Naryn oblast	96,021	(4.5%)	84,732	(88.2%)	11,879	(11.8%)	63,996	60.0%	88.2%	11.8%
Osh oblast	470,268	(22.2%)	442,977	(94.2%)	27,291	(5.8%)	289,935	61.9%	94.2%	5.8%
Talas oblast	94,908	(4.5%)	90,097	(94.9%)	4,811	(5.1%)	35,109	73.0%	94.9%	5.1%
Chui oblast	369,375	(17.5%)	311,267	(84.3%)	58,108	(15.7%)	177,546	67.5%	84.3%	15.7%
Bishkek city	411,978	(19.5%)	327,776	(79.6%)	84,202	(20.4%)	194,257	68.0%	79.6%	20.4%

Source: NSC

**Table H.8 Employed Population by Employment Status on Main Job in 2002**

	Total	Of which:							
		Hired	Of which:		Non-hired	Of which:			
			at Enterprise, institution, organization	Hired by separate citizens		Employers	Self-employed	Unpaid workers at the enterprise owned by any relatives	Employed on personal subsidiary plot
Kyrgyz Republic	1,850,101	790,467	634,142	156,325	1,059,634	29,506	441,644	195,502	315,637
Batken oblast	114,628	41,086	38,585	2,501	73,542	2,279	21,552	5,442	42,986
Jalal-Abad oblast	342,340	89,203	81,358	7,845	253,137	2,975	96,317	58,895	22,993
Issyk-Kul oblast	136,284	47,976	39,616	8,360	88,309	2,352	34,413	18,820	30,017
Naryn oblast	84,732	23,772	21,839	1,933	60,959	544	27,395	21,937	11,084
Osh oblast	442,977	153,541	127,903	25,637	289,436	3,806	126,104	69,802	89,243
Talas oblast	90,097	20,838	18,475	2,362	69,259	1,351	37,734	19,334	10,840
Chui oblast	311,267	166,775	132,545	34,230	144,492	6,071	34,833	684	102,385
Bishkek city	327,776	247,276	173,820	73,456	80,500	10,127	63,296	588	6,090

Source: NSC

The tertiary sector employment ratio in Bishkek city was 75.9%, which exceeds the national average of 40.5%. The national average of primary, secondary and tertiary sectors was 49.1%, 10.4% and 40.5%, respectively. The highest employment ratio in the primary sector was in Talas oblast at 73.9%. Issyk-Kul oblast shows almost half the total oblast employment (55.2%). In the secondary sector, Bishkek city shows the highest ratio (21.5%), followed by Chui oblast (15.4%), Batken oblast (9.6%), and Issyk-Kul oblast (7.5%).

**Table H.9 Employment Proportion by Types of Industry (2002)**

	Primary Sector	Secondary Sector	Tertiary Sector
Kyrgyz Republic	49.1%	10.4%	40.5%
Batken oblast	53.6%	9.6%	36.8%
Jalal-Abad oblast	69.0%	5.7%	25.4%
Issyk-Kul oblast	55.2%	7.5%	37.3%
Naryn oblast	67.3%	3.0%	29.6%
Osh oblast	56.3%	6.5%	37.2%
Talas oblast	73.9%	2.4%	23.7%
Chui oblast	49.4%	15.4%	35.1%
Bishkek city	2.6%	21.5%	75.9%

Source: NSC

**Table H.10 Employed Population by Economic Activity on Main Job in 2002**

	Kyrgyz Republic	Batken oblast	Jalal-Abad oblast	Issyk-Kul oblast	Naryn oblast	Osh oblast	Talas oblast	Chui oblast	Bishkek city
Total	1,850,101	114,628	342,340	136,284	84,732	442,977	90,097	311,267	327,776
Agriculture, hunting, and forestry	906,412	61,419	236,065	74,298	57,040	249,027	66,611	153,693	8,259
Fishing industry	1,775			964		399		161	251
Mining	7,725	3,073	1,589	397	162	1,566		404	535
Manufacturing	124,745	5,285	12,386	5,861	1,844	17,783	943	34,308	46,334
Production and distribution of power, gas, and water resources	29,231	1,450	5,951	2,043	1,213	1,727	1,232	8,483	7,132
Construction	60,229	2,647	5,497	3,910	569	9,393	1,193	13,327	23,691
Trade, repair of vehicles, domestic goods, durables	219,623	7,250	19,279	14,423	4,580	55,734	3,211	26,748	88,400
Hotels and restaurants	25,385	1,878	1,804	1,486	180	3,252	407	6,043	10,336
Transport and communications	90,538	5,722	7,530	6,549	2,975	16,200	2,743	16,243	32,575
Financial activity	7,868	280	554	303	197	1,122	296	349	4,766
Transactions with real estate, rent and other services	29,847	1,753	899	1,406	483	2,527	174	963	21,641
Governance	82,141	4,054	10,409	5,628	4,755	16,856	3,035	13,740	23,665
Education	144,348	13,966	24,535	9,304	7,735	36,936	6,723	18,073	27,075
Healthcare and social services	78,038	5,293	13,037	7,305	2,455	21,604	2,846	11,707	13,791
Utilities, social and personal services	36,777	486	2,253	1,877	545	7,509	467	6,442	17,198
Housing services	5,281	71	410	529		1,344	216	583	2,127
Activity of extraterritorial organizations	140		140						

Source: NSC

## H.1.4 Industrial Development Potential

### (1) Circumstances for Industrial Development

Political stability, stable international donors' support, relatively high education levels, educated engineers and a new introduced banking system could be favorable elements for building a new phase of industrialization in the Kyrgyz Republic. A key factor in the development of a high value added processing industry is the presence of medium-sized enterprises, which can play an important role as market intermediaries and process specialization among smaller enterprises. Other elements could be rich water resources, coal reservoirs, non-ferrous metals and livestock farming.

### (2) Natural Resources

The agriculture industry is not yet fully developed in the Kyrgyz Republic. Particularly, orchard and livestock farming should be further developed as a supply of raw materials in collaboration with the food processing and textile industries. Water resources are also not fully utilized for increasing the hydroelectric power generation, which presently has been developed to less than 5% to 10% of its potential. Electric power development should be a first priority for increasing the electric power export and using domestic industry development, such as silicon chip development and electric purification industry.

### (3) Human Resources

In the past, between 1989 and 1995, an outflow abroad of the economically active population occurred due to the collapse of the Kyrgyzstan economy. In 2002, 32,700 people left the country and 4,900 people arrived in the country. Migration outflow of the population reached 27,800 people in 2002. This trend has continued since 2000.

Kyrgyzstan has good potential for computer programming. Despite the outflow, there remains a critical mass of programmers in the country, and Kyrgyz universities continue to produce

well-trained ICT specialists. This implies the country has a critical mass of qualified programmers that could be employed by foreign software companies.

#### *(4) Industrial Facilities*

Export-oriented large machinery plants, such as chemical plants, steel plants or paper manufacturers, are not suitable in Kyrgyzstan due to the disadvantage of location (far from large markets) as an inland country and limited local raw materials. Favorable industries in this category would be coal, chemistry industries, ceramic industries (cement factory, sheet glass, etc.), carbonate-related industries, and silicon industries that consume electric power resources. Textile industries using wool raw materials are one of the most favorable industries in Kyrgyzstan due to the availability of existing machines and domestic raw materials.

#### *(5) Trade and Service Industry*

The trade and service industry sector bears a geographical disadvantage as an inland country. Previously, many enterprises have been registered as manufacturing companies rendering wholesale trade, logistics or transportation services. The distribution network was actually managed from a single Center-Moscow. Collapse of the distribution system in FSU, which was reliable and relatively cheap, led to the collapse of the distribution system in the Kyrgyzstan industry sector. The development of trade and service sectors was discouraged by the small domestic market, far distance from the major markets (FSU, EU, USA, Far East) and poor international distribution network (long lead time and high cost). In addition there was an unsatisfied condition for IT network systems in the business environment (unreliable trade environment).

No commodities of domestic producers have spread to the world markets due to the taste, processing level, packaging and attractiveness of the goods. There is also practically no wholesale trade market at local level.

#### *(6) ICT Industry*

In April 2000, a project to set up a trunk line from Shanghai to Frankfurt using transcontinental Asian-European fiber optics was implemented via a US\$12 million loan from the Government of South Korea.

Together with the above IT trunk line project in 2000, the number of computer imports was increased to 50,740 units from 13,200 units due to a non-government organization's importation of a large number of used computers from abroad. These computers were distributed to high and secondary schools in the nation.

**Table H.11 Imports to the Kyrgyz Republic**

Items	1998	1999	2000
Computers, USD1000	3,834	4,825	3,311
Components and other hardware, US000	2,137	2,064	1,295
Total	7,696	8,888	6,606
Computer, units	13,257	13,200	50,740*

Source: The National Statistics Committee. \*In 2000 the number of imported computers was inflated by a large number of imported second-Hand PCs.

According to official statistics, local companies produced 756 computers in 2000 (see Table below).

**Table H.12 Joint Ventures Trade and Production, 1998-2000**

Items	1998	1999	2000
Import of computers and components, units	N.A.	3,248	5,102
Import of computers and components, USD 000	N.A.	2,271	1,633
Production of Computers, unit	341	300	756

Source: NSC

**Table H.13 Computer and Hardware Manufacturing (USD 000) January-November 2001**

	2000	2001
Continent	806.5	774.8
Other Companies	311.7	393.8
Total	1,118.2	1,168.6

Source: NSC

Internet Service Providers (ISP): There are 10 ISPs in the Kyrgyz Republic. Elcat and Asia-Info control the major share of the market.

**Table H.14 Internet Usage in the Kyrgyz Republic, 2000**

Category	%	People
Adult population of large cities	10.6	105,400
In Bishkek	19.0	85,800
In other cities	6.4	19,600
Users spending at least 3 hours/week	5.2	52,000
Breakdown of Internet users:		
Employees	42.0	
Students	33.3	
Others	24.7	
Internet audience growth for the last 6 months	51.5	
Estimated number of PCs in personal use, units		25,600

Source: M-Vector Research & Marketing Consultants

The ICT sector is presently major in the Kyrgyzstan economy. In 2002, the gross revenue of the ICT sector reached US\$ 50 million, which is approximately 3% of GDP. The current growth rate of the sector is 20% per year.

The largest segments of the ICT market in the current period in the Kyrgyz Republic are sales of computer hardware and software. Available ICT services include Internet access, web design systems integration and software development. Local IT companies have become more service-oriented as customers look for value in IT solutions.

Programming is an area of future growth. A number of companies and individuals are active in this emerging sub-sector. Such companies have a strategic partner abroad or are direct subsidiaries of foreign firms.

In 2001, the Kyrgyzstan Government, in consultation with representatives of the ICT sector, developed the “National Strategy for Development of Information and Communication Technologies in the Kyrgyz Republic” to facilitate the industry development. The strategy contains a comprehensive framework for development of the sector.

- 1) E-government (for effective, transparent and accountable public administration using ICT),
- 2) E-economy (development of information business and electronic commerce), and
- 3) E-education (human capacity building and staff training in ICT)

### **H.1.5 Present Industrial Development Policies and Strategies**

#### *(1) Missing Sectors for Industrial Development Framework*

To create the Kyrgyzstan industries more effectively, the linkage between small and medium size industries should be specially integrated vertically and horizontally in order to establish various types of industrial clusters in this country. These industrial clusters could play a key role in the industrial development framework and stimulate new products in the global market.

Other important factors for stimulating the industrial development in Kyrgyzstan are to develop supporting service industries, which are absence at this moment. These are: (1) Financing and Banking, (2) Nation-wide Commercial and Physical Distribution and Logistics, (3) Business Support Services, such as advertising, consulting, etc., (4) Information and Communication, (5) Human Resources qualified for international business.

#### *(2) Comprehensive Development Framework (CDF)*

In the reports: “Comprehensive Development Framework of the Kyrgyz Republic to 2010-Expanding the Country’s Capacities” and “National Poverty Reduction Strategy, 2003-2005”, several development targets are indicated for Issyk-Kul Oblast from the view point of poverty reduction. The following related to Issyk-Kul Oblast are extracted from the CDF report:

The CDF report indicates that the most important and specific factors for the Issyk-Kul oblast are:

- (1) A relatively high level of poverty,
- (2) Limited access to the services of healthcare, education, clean potable water,
- (3) Insufficient volume of investments for attaining sustainable economic growth,
- (4) Poor development and condition of communications, including transportation and telecommunications,
- (5) Ineffective use of recreational capacities of the Issyk-Kul Lake and a low quality of tourism services,
- (6) Poor condition of irrigation networks, and
- (7) A low degree of processing of agricultural products,

Special attention will be focused on:

- (8) Development of the mining complex and processing industry,
- (9) Development of small and medium business, especially in the areas of processing of agricultural products and tourism,
- (10) Privatization of sanatoria and spas located in Issyk-Kul, which will serve as a basis for appearance of proprietors, increase in the volume of investments for infrastructure

development, improvement of tourism services, increase in budget revenues.

- (11) Preservation and development of the landscape and biodiversity of the unique Issyk-Kul basin, as an asset of not only Kyrgyzstan, but an object of global importance.
- (12) Contribution of the agrarian and land reform given the specifics of the region and mentality of its inhabitants.
- (13) Rehabilitation of the irrigation network,
- (14) Rehabilitation and construction of surface roads; and
- (15) Increase of access to telecommunication services for the population,

Given the potential of the Kyrgyzstan on proving transit services in international trade, the Issyk-Kul region has a realistic perspective of gaining the largest benefit. Implementation of the Doctrine of the Great Silk Road will have the most positive effect on development of the Issyk-Kul oblast, as historically the Great Silk Road connected West and East, passing through the Issyk-Kul basin.

A signification step in this direction will be rehabilitation and construction of the Barskoon-bedel and Karakol- Enilchek highways, with an exit to the Chinese People's Republic, as well as Tyup-Kegen highway with an exit to Kazakhstan and Russia, and modernization and construction of new airports of international standard. Coordination with the Aga-Khan Foundation on establishment of a zone for elite tourism at Lake Issyk-Kul can be a rather promising direction of development.

### *(3) Incentive Programs for Industrial Development*

#### 1) FEZ

In December 16, 1992, the Law of "On free economic zones" was passed. The first FEZ was created in the Naryn oblast. A year later, in 1993, the Alai, Chon-Alai, Kara-Kuldja and Karakol FEZs was established. In 1996, a FEZ was open in Bishket, and in 1997, FEZ "Maimak" was opened in the Talas oblast.

The Alai, Hon-Alai and Kara-Kuldja FEZs were liquidated in accordance with the appropriate Jogorku Kenesh Decree in 1998. Thus, now in Kyrgyzstan there are now only four FEZs functioning:

- 1) Bishkek
- 2) Naryn
- 3) Karakol, and
- 4) Maimak

Within only 6 years of the FEZ "Bishkek" existence, more than 200 enterprises have been liquidated due to different reasons. In 2002, in order to increase export possibilities in FEZ "Bishkek", a number of enterprises were put into full operation, such as the Chinese limited company "Eric metal" for ferrous metal scrap processing, the Arabian limited company "National Paints" to produce paints, and the Iranian factory to manufacture soap and washing liquids.

Construction of a Chinese limited company "Issyk-Kul FEZ" for production of cashmere articles will begin soon. According to concluded contracts all these enterprises will export 95% of manufactured products outside Kyrgyzstan.

## 2) FDI

FDI in 2002 was 116 million US dollars, of which food process industries occupied 27% of total investment (27 million US dollars).

In January 2003, JICA (under the direction of Katsumoto Takehara) prepared “The Kyrgyz Republic Distribution Network Research” for METI. This indicated the following conditions for improving the FDI activities in the Kyrgyzstan.

- (1) Development of exportable products and services
  - 1) Light Industry
  - 2) Processed Foods,
  - 3) Tourism and Leisure Industry,
  - 4) IT software;
  - 5) Hydraulic Energy,
  - 6) Metal Goods,
  - 7) Business Support Services.
- (2) Development of Distribution and Logistics Industry
  - 1) Information Capacity
  - 2) Financial Capacity
  - 3) Human Resources
- (3) Establishment of Export Development Fund.
- (4) Establishment of KEPO (or KETPO) (Kyrgyz Export Promotion Organization).
- (5) Making Free Trade Agreements with neighboring countries.

### **H.1.6 Issues and Constraints for Industrial Sector Development of Kyrgyzstan**

#### *(1) The Nation and Sector*

Global Development Solutions, LLC, “Barriers to Competitiveness: An Analysis of Principal Factors Inhibiting the Competitiveness of Kyrgyzstan Industry, prepared for the World Bank”, July 2000 summarized the three principal constraints and a number of other bottlenecks inhibiting the development of competitive enterprises. Three principal constraints are:

- (1) Lack of market opportunity: need for working capital
- (2) Excess production capacity among privatized SOEs, and
- (3) Lack of capital equipment among SMEs.

Also, it indicates at least 7 factors that inhibit competitiveness and business linkages among Kyrgyzstan enterprises. These factors include:

- (1) Mismatch of production capacity reflected in the excess capacity among privatized SOEs, and the lack of access to capital equipment among SMEs;
- (2) Absence of product distribution chain and warehousing;
- (3) Embryonic processing and packaging industry as reflected in the high level of imported products,
- (4) Limited purchasing power of the local economy to stimulate and accelerate the rapid growth of a value-added processing industry,

- (5) Lack of branding and merchandizing particularly for export oriented products as a result of small lot production, lack of marketing capability, and the absence of a wholesale-retail chain,
- (6) Absence of a structured market and supply chain, inhibiting the development of product and process specialization and value added production,
- (7) Fragmentation of agricultural activities and decline in quantity and quality of outputs; and
- (8) Lack of information on domestic and foreign market opportunities.

In our JICA study, an additional six major issues and problems in the industrial sector are identified as follows:

- (1) High costs of commodity transportation to large outside market (disadvantage of accessibility as an inland country) and weak competitiveness in global market
- (2) Lack of supporting management for enterprises, such as management, accounting, sales promotion, quality control guidance, product development, etc adjusting for new global market economy
- (3) Lack of marketing information in domestic and global markets
- (4) Weak and underdeveloped industrial linkages & cluster formation in Kyrgyzstan industrial sphere
- (5) Inactive retail market, and no wholesale market for industrial products. No mutual cooperation among industrial and commercial enterprises
- (6) Continued outflow of qualified human resources in industrial sector (including software engineers)

The following nine issues and problems are also identified:

- (1) Difficulty and inefficient maintenance of used gadgets and limited installation of new gadgets for new products due to the unattractiveness of products in the market
- (2) Over-capacity and low quality of productions in ex-leading industries
- (3) Loss of market share in domestic and global market partially due to the WTO free trade policy (increase of competitive market in the domestic and outside market)
- (4) Insufficient public loan system and disturbance by high tax regulations for operation (increase of shadow economy)
- (5) Increase of barter business due to the lack of operating budget and financial security of the enterprises
- (6) Underutilization of natural resources due to a shortage of investment capability (small financial capacity)
- (7) Lack of motivation for private investors due to the small Kyrgyzstan domestic market and export capability
- (8) Lack of incentives for generating entrepreneurship (high interest rate, high taxes, uncertain business incentives, weak support for business incubator system)
- (9) Lack of quality control in the domestic industrial products against imported products.



## H.2 Industry in Issyk-Kul Oblast

### H.2.1 Overview of Issyk-Kul Oblast

#### (1) Employment

There were 2.12 million economically active people in 2002 in the Kyrgyz Republic of which 150,321 were in Issyk-Kul oblast (7.1% of national population). Over 90% of economically active people are employed in this oblast. National unemployment reached 12.5% of the 2.12 million people. The lowest unemployment ratio within the region (Oblast) in 2002 was observed in Talas oblast at 5.1 %, followed by Osh oblast (5.8%) and Issyk-Kul oblast (9.3%). The highest unemployment ratio was Batken Oblast (20.4%), followed by Bishkek (20.4%) and Chui Oblast (15.7%). The unemployment ratio in Issyk-Kul oblast is less than the national average (12.5%).

Among the employed population in Issyk-Kul oblast (136,284 pop. in 2002), the hired and non-hired employed were 47,976 and 88,309 population, respectively. Employment in enterprises, institutions and organizations in the hired category (39,616 of 47,976) and self-employees and personal subsidiary plots in the non-hired category (64,430 of 88,309) represent the major job opportunities in this region.

The national averages of employment in primary, secondary and tertiary sectors in 2002 were 49.1%, 10.4% and 40.5%, respectively. In case of Issyk-Kul Oblast, the primary sector employment ratio was 55.2 % - almost half that of total oblast employment, which exceeds the national average of 49.1%. In the secondary sector, Bishkek city shows the highest ratio (21.5%), followed by Chui oblast (15.4%), Batken oblast (9.6%), and Issyk-Kul oblast (7.5%), which lessens the national average of 10.4%. The tertiary sector employment ratio in Issyk-Kul oblast was 37.3%, which also lessens the national average of 40.5%. However, it is the second highest ratio below Bishkek city (75.9%), which exceeds the national average.

**Table H.15 Employment Proportion by Types of Industry (2002)**

	Primary Sector	Secondary Sector	Tertiary Sector
Kyrgyz Republic	49.1%	10.4%	40.5%
Issyk-Kul oblast	55.2%	7.5%	37.3%

Source: NSC

Total employment in Issyk-Kul oblast decreased by 2,399, from 138,683 in 1999 to 136,284 in 2002. This decrease occurred in the primary sector. The numbers employed in secondary and tertiary sectors both increased. The oblast averages of primary, secondary and tertiary sectors in 1999 were 62.1%, 5.2% and 32.8%, respectively, compared with 55.2%, 7.5% and 37.3% in 2002.

Major economic activities in Issyk-Kul oblast are 1) agriculture, hunting and forestry (74,298 employed), 2) trade, repair of vehicles, domestic goods and durables (14,423), 3) education (9,304), 4) healthcare and social services (7,305), 5) transport and communications (6,540) and 6) manufacturing (5,861). Employment in the fishing industry in Issyk-Kul oblast is 964 of a total of 1,775 in Kyrgyzstan.

The employed jobs in the secondary sector - “mining”, “manufacturing” and “construction” in 2002 were 397 (1,270 in 1999), 5,861 (4,415) and 3,910 (1,496), respectively. The number of mining jobs decreased to 874 in 2002 from 1,270 in 1999. Jobs in the processing and construction fields increased by 1,446 and 2,414, respectively, from 1999 to 2002.

*(2) Wholesale and Trade*

Very low levels of wholesale trade are observed in the Issyk-Kul oblast, where its share in the total volume of trade turnover (43,727.9 million Som) for 2001 was 0.1%, in the Naryn oblast 0.2%, and in Batken oblast 4.9%. In the Issyk-Kul oblast, its volume dropped by 53.1% compared to 2000, in Naryn oblast by 34.2%, in Djalal-Abad oblast by 41.9%, in Batken oblast by 46.5%, and in Chui oblast by 17.8%. There is no wholesale and trade center or track terminal facility for distribution and collection of various regional agricultural and manufacturing products.

*(3) Output Products by Industry Sector*

The share of the value added in the industry sector, excluding Kumtor gold mining, is only 6.2%, while agriculture has a share of more than 60%.

**Table H.16 Gross Value Added of the Issyk-Kul Oblast excluding Kumtor in 2002**

	Agriculture	Industry	Construction	Service	Total (million Som)
2002	3,750.2	366.7	151.4	1,636.8	5,905.1
Share	63.5%	6.2%	2.6%	27.7%	100%

Major industrial manufacturing activities in Issyk-Kul Oblast are agro-processing, mining, machinery manufacturing, and construction materials. Total industrial outputs in Issyk-Kul Oblast in 2002 were 8,877.4 million som (18.97% of national total output). However, excluding the "Kumtor" gold-mining enterprises, this dropped to 1,466.1 million som or only 4.95% of national total output.

**Table H.17 Industrial Output by Issyk-Kul Oblast and Nation in 2002 and 2003**

	Unit of Measurement	Issyk-Kul Oblast	Nation	% to National Industrial Output
Industrial Output including "Kumtor" gold-mining	million soms	8,877.4 (12,306.6)	46,809.0 (53,703.4)	18.97 % (22.92%)
Industrial Output excluding "Kumutor" gold-mining	million soms	1,466.1 (1,587.6)	29,624.2 (32,295.6)	4.95 % (4.92%)

Note: Number in a parenthesis indicates the data of 2003.

Industrial output by "Kumtor" gold-mining enterprises is 17,184.8 million soms in 2002 and 21,407.8 million soms in 2003.

Source: NSC, "Economy of Kyrgyzstan in 2003", Bishkek, 2004.

The major output products by these industries in 2003 were "cheeses of all types" (52.9% of national output), "flour including potato" (15.2%), "butter of all types" (16.4%) and "flour including potato" (15.2%). Percent ratio of "footwear, excluding sport and protective footwear" (77.4%), "electric stoves" (78.0%), and "electric heaters" (23.2%) were quite high in 2002. However, it must be borne in mind that the production amount in each item is quite small.

**Table H.18 Output of Main Industrial Products by Issyk-Kul Oblast and the Nation in 2002 and 2003 (excluding “Kumtor” gold-mining Company)**

Industrial Products	Unit	Issyk-Kul Oblast		Nation		% to National	
		2002	2003	2002	2003	2002	2003
Coal and lignite	thsd. tons	30.2	23.8	459.0	411.3	6.57 %	5.79 %
Meat and offal	tons	155.6	90.4	2573.1	4,559.0	6.04 %	1.96 %
Butter of all types	tons	261.5	290.6	1,461.8	1,776.2	17.89 %	16.36 %
Sausages	tons	26.0	26.2	628.4	473.8	4.13 %	5.53 %
Milk (fluid) and creams	tons	174.1	75.3	4,505.2	5,955.7	3.86 %	1.26 %
Cheeses of all types	tons	975.1	1,116.4	1,817.1	2,110.0	53.66 %	52.90 %
Flour including potato	thsd. tons	56.9	39.5	438.7	260.2	12.97 %	15.18 %
Fruits, vegetables and canned mushrooms	tons	35.2	24.1	2,178.7	5,752.0	1.62 %	0.42 %
Vodka and liqueur beverages	thsd. liters	1,068.2	663.1	24,289.4	23,919.8	4.3 9%	2.77 %
Natural grape wine excluding sparkling wines	thsd. liters	64.6	44.9	1,798.7	1,233.5	3.59 %	3.64 %
Machine and handmade knitted stockings and socks	thsd. pairs	0.8	0.5	2,028.4	696.8	0.04 %	0.07 %
Footwear, excluding sport and protective footwear	thsd pairs	64.5	n.a.	83.3	n.a.	77.4 %	77.4 %
Cement	Thsd. tons	---	3.5	532.8	757.5	---	0.46 %
Prefabricated building structure made of concrete	thsd. tons	3.6	2.5	83.2	98.8	4.32 %	2.53 %
Furniture	million soms	1.1	1.2	208.2	201.2	0.53 %	0.5 %
Electric stoves	pieces	353	n.a.	452	n.a.	78.0 %	n.a.
Electric heaters	pieces	200	n.a.	861	n.a.	23.2 %	n.a.

Source: NSC-Economy of Kyrgyzstan in the 1st half of 2003 (Preliminary Data)

In the Issyk-Kul region, 63 industrial enterprises (mainly JSC: Joint-Stock Company-former State Company) were registered in 2004, and one-third have assured the growth rate of production of goods in comparison with the same period of the previous year. From the beginning of 2004, output of products as a whole in the region amounted to 4.5 million som and growth rate compared to the corresponding period of the previous year amounted to 120.7%.

However, 20 enterprises out of 63 had been standing idle in 2004. Except the JV “Kumtor” gold-mining company” (Jety-Oguz), which produced nearly 90% of the total production in the Issyk-Kul Oblast, the Issyk-Kul industry is represented by a small number of JSC enterprises. Machine-building is represented by the following main enterprises: JSC “Electrotekhnicheskiy zavod” (Karakol), JSC “Kadjysaiskiy Corporation” (Tong Rayon)(enterprises is standing idle) , JSC “Ulan” (Karakol), JV “Ozero”ltd. (Jety-Oguz Rayon) From the beginning of 2004, they have produced goods valued at 9.1 million soms (growth rate: -39.1%). Enterprises of these industries have operated below full capacity in comparison with the previous year.

The food-processing industry is represented by enterprises which produce dairy products (milk, cheese), bread, bakery, macaroni, flour, spirits: JSC “Issyk-Kul Dan Azyk” (Balykchy), JSC “Altyn-Dan” (Balykchy), Corporation “Issyk-Kol-Sut” (Karakol), Corporation “Ak-Bulak” (Tup Rayon), “Karakol-Buudai” (Karakol) and Public enterprise Karakol

Distillery Plant “Karakol”. Production of canned meat and meat concentrates, sausage and cooked meats are produced at JSC “Balykch et combinary ”(Balykchy). However, these enterprises have also operated below full capacity in comparison with the previous year as well as after the collapse of the USSR market (see table below). Many of the former large-scale state-run enterprises are no longer of an appropriate size except “Balykchy Grain Mill”(Balykchy) and “JSC “Issyk-Kul Dan Azyk”(Balykchy), which have relatively modern equipment.

**Table H.19 Canned Fruit and Vegetable Goods Output and Actual Capacities in 2002**

Oblast	Fruit and Vegetable Goods Output (1,000 soms)	Actual Full Capacity (1,000 soms)	Utilization of Available Capacities (%)
Bishkek	49,898.0	63,415.3	79 %
Jalal-Abad Oblast	1,200.0	1,664.0	72 %
Osh Oblast	36,062.8	145,770.0	25 %
Batken Oblast	93,886.0	300,847.4	31 %
Chui Oblas	30,988.5	67,677.7	46 %
Issyk-Kul Oblast	27,641.0	126,570.8	22 %
Naryn Oblast	1,627.5	28,750.0	6 %
Total	241,349.6	734,695.2	40 %

Source: SENTI Financial Company, “Fruit & Vegetable Processing Industry Analysis- The Kyrgyz Republic November 2002-2003”, P.20

Light industry is presented by enterprises involved clothing manufacture: “Siluet” company and “Ata-Kench” Close Corporation (Karakol). JSC “Kurmentyement” (Balykchy), JSC “Kauhartash” (former concrete plant: (Balykchy) and LLC (Limited Liability Company), and “Eldan” (Karakol) are still functioning to produce cement, lime and gypsum.

According to official figures from the year 2001, there were 215,514 legal SME<sup>1</sup> enterprises registered in Kyrgyzstan. Out of 215,514 enterprises, 22,858 SMEs are industrial enterprises. Of these SMEs, 20,672 were registered as small enterprises and 2,186 as medium sized enterprises. Only 8,500 were operational. Many of the officially registered companies do not exist anymore, or have never existed. (“Small and Medium-sized Business in Kyrgyzstan: Current Situation, Problems and Perspectives”, Soros Fund. Bishkek. 2001).

In the Issyk-Kul Oblast, more than 400 small and medium-sized business enterprises are registered and produce over 40% of total oblast industrial products, which excludes the “Kumtor Gold Company output. Processing of agricultural products is being carried out by SMEs, such as local flour-mills and bakeries.

<sup>1</sup> Definitions of SMEs:

Small enterprises: less than 50 employees, in construction, transport, agriculture and trade less than 20 employees.

Medium sized enterprises: less than 100 employees in industrial companies, 50 in construction, 30 in agriculture and wholesale trade and 20 in retail trade.

## H.2.2 Industry by Rayon

### (1) Employment

The tertiary sector employment ratio in Balykchy city in 1999 was 79.9%, which greatly exceeds the oblast average of 32.8%, followed by Karakol city (73.6%) and Issyk-Kul rayon (35.1%). The highest employment ratio in the primary sector was in Jeti-Oguz rayon at 81.3%, followed by Tup rayon (80.4%) and Ak-ssuu rayon (79.1%). Issyk-Kul rayon was 62.5%. In the secondary sector, Karakol city shows the highest ratio (17.4%), followed by Balykchy city (15.3%), and Issyk-Kul rayon at 2.4% is the smallest among the rayon. The Issyk-Kul oblast is thus, dominated by primary sector employment, the majority being farmers. The detailed figures by rayon are shown in Tables below.

**Table H.20 Number of Employed Population aged 15 and over by Industrial Sector in 1999 and in 2002**  
(Unit: person)

Issyk-Kul Oblast		Total Employment	Primary Sector*	Secondary Sector*	Tertiary Sector*
Oblast Total in 2002		136,284	75,262	10,168	50,854
Ratio		100.0%	55.2%	7.5%	37.3%
Oblast Total in 1999		138,683	86,060	7,181	45,442
Ratio		100.0%	62.1%	5.2%	32.8%
By Rayon (1999)					
31	Ak-Suu Rayon	21,466(100.0%)	16,966(79.1%)	517(2.4%)	3,983(18.6%)
32	Jeti-Oguz Rayon	32,922(100.0%)	26,756(81.3%)	609(1.8%)	5,557(16.9%)
33	Issyk-Kul Rayon	21,897 (100.0%)	13,680 (62.5%)	534(2.4%)	7,683(35.1%)
34	Tong Rayon	13,976(100.0%)	10,243(73.3%)	347(2.5%)	3,386(24.2%)
35	Tup Rayon	20,263(100.0%)	16,286(80.4%)	476(2.3%)	3,501(17.3%)
	Kenesh Karakol City*	18,458 (100.0%)	1,660(9.0%)	3,211(17.4%)	13,587(73.6%)
	Kenesh Balykchi City*	9,701(100.0%)	469(4.8%)	1,487 (15.3%)	7,745((79.9%)

\* Primary Sector:

Agriculture, Hunting , Forestry and Fishing

\* Secondary Sector:

Mining and Quarrying, Manufacturing, Construction

\* Tertiary Sector:

Electricity, Gas and Water, Wholesale and Retail Trade, Restaurant Hotel, Transport, Storage and Communication, Finance, Insurance, Real Estate, Business Service, Community, Social and Personal Services, Production of Government Services, Other Producer

Source: NSC

**Table H.21 Employment by type of Industry in Issyk-Kul Oblast by Rayon**

(Unit: person)

Issyk-Kul Oblast Oblast/by Sector	Total Employment in Secondary Industry	Mining Industry	Processing Industry	Construction
Oblast Total in 2002	10,168	397	5,861	3,910
Oblast Total in 1999	7,181	1,270	4,415	1,496
by Rayon (1999)				
31	Ak-Suu Rayon	517	291	172
32	Jeti-Oguz Rayon	609	271	162
33	Issyk-Kul Rayon	534	313	195
34	Tong Rayon	347	206	58
35	Tup Rayon	476	400	56
	Kenesh Karakol City*	3,211	1,796	634
	Kenesh Balykchi City*	1,487	1,138	219

Source: NSC

(2) *Outputs*

The Kumtor Gold Company (KGC) was established in 1992 as a joint venture between Cameco of Canada and State-owned in Kyrgyz Republic. The industrial output is extremely huge at Jeti-Oguz Rayon in Issyk-Kul Oblast. The industrial outputs in Jeti-Oguz rayon accounted for 91.4% of total oblast industrial outputs in 2001 (excluding “Kumutor” output, the Jet—Oguz output reduces to 13.5% of Oblast total).

**Table H.22 Industrial Production in Issyk-Kul Oblast by Rayon between 1999-2002**

(Unit: 1000 Soms)

Issyk-Kul Oblast/City/Year	1999	2001	2002
Oblast Total including shade activity on flour and bread production	----	10,988,021.7	9,033,500.0 (Preliminary)
Oblast Total including 2 cities	7,246,469.3	10,807,631.6	N.A.
31 Ak-Suu Rayon	186,533.0	308,781.5	N.A.
32 Jeti-Oguz Rayon	6,689,093.6	9,873,371.0 (146,502.0* w/o Kumutor)	N.A.
33 Issyk-Kul Rayon	19,284.8	34,526.4	N.A.
34 Tong Rayon	15,154.7	22,070.0	N.A.
35 Tup Rayon	39,451.1	116,610.1	N.A.
Karakol City*	152,233.5	242,631.5	N.A.
Balykchy City*	144,718.6	209,641.1	N.A.

Note: \* City under Oblast Supervision Excluding of “Kumutor” gold-mining output, industrial production in Jety-Oguz Rayon was estimated to 146,502 thousand soms

Source: NSC

(3) *Location*

Major industrial enterprises are concentrated in the two main towns, Karakol and Balykchy. In 2001 they accounted for over 22.4% and 19.3%, respectively, of total Issyk-Kul Oblast output (excluding “Kumtor” output). Products of agro-processing, machinery manufacture and building materials are concentrated in both Karakol and Balykchy towns. Industries of Mining (Mixed SJSCX “Mine Jyrgalan (Jargalan, Ak-Suu Rayon)” and JSC “Kyrgyzaltn)) are located at Ak-Suu, Jety-Oguz and Ton Rayons.

**Table H.23 Major Basic Industrial Products by Rayon (excluding Mining)**

Rayon	Major Industrial Products
Ak-Suu Rayon	Canned Food
Jeti-Oguz Rayon	Flour (potatoes), Dairy Products, Butter, Cheese, Meat
Issyk-Kul Rayon	Dairy Products, Butter, Cheese, Canned Food, Alcoholic spirits/wine, Mineral Water, Soft Drinks, Forestry products/timber
Tong Rayon	Coal, Semiconductor devices (JSC “Kadji-Sai electrotechnical Plant”)
Tup Rayon	Cement, Construction Bricks, Dairy Products, Butter, Canned Food
Karakol City*	Coal, Concrete Slabs, Steel bars, Vodka/wine (JSC “Jemish”), Sewing Products, Shoes, Electric Braziers, Electric Stoves/Heaters/Ovens, Meat, Sausages, Dairy Products, Butter, Cheese, Flour/potato/wheat production, Animal Feed, Soft Drink,
Balykchy City*	Metal recycling (JV “Triod”/German), Pens, Reinforced Concrete Slabs, Electric heaters, Flour, Meat, Sausages, Canned Food, Soft Drinks, Mineral Water, Animal Feed

Source: Selected by the information of Issyk-Kul Oblast Statistical Committee, METI, “Investment Projects: Kyrgyz Republic 2003” and KOMPASS, “Kyrgyzstan 2004- Company Information Products & Services”.

The oblast produces 17% of GDP of the nation (without the JV Kumtor Gold Company it reduces to 7.9%). The share of the JV Kumtor Gold Company in the oblast industrial output is nearly 90%. The remaining industry is mainly represented by enterprises processing agricultural produce, producing foodstuffs and construction materials, and coal mining enterprises.

There are 5,155 peasant farms and farming enterprises registered in the oblast. In the longer-term, due to limited land resources suitable for agricultural activities and a short growing period, development of livestock farming is considered to be the most favorable.

There are more than 400 small and medium business enterprises operating in the territory of the Issyk-Kul oblast. They produce over 40% of industrial products (without the Kumtor Gold Company). Individual entrepreneurship is widely developed in the sphere of trade and services.

**Table H.24 Industrial Production in Issyk-Kul Oblast by Rayon between 1999-2002**

(Unit:1000 Soms)

Issyk-Kul Oblast/City/Year		1999	2000	2001	2002
Oblast Total including shade activity on flour and bread production		----	9,633,068.6	10,988,021.7	9,033,500.0
Oblast Total including 2 cities		7,246,469.3	9,554,602.6	10,807,631.6	N.A.
31	Ak-Suu Rayon	186,533.0	267,183.3	308,781.5	N.A
32	Jeti-Oguz Rayon	6,689,093.6	8,898,786.2	9,873,371.0	N.A
33	Issyk-Kul Rayon	19,284.8	29,424.6	34,526.4	N.A
34	Tong Rayon	15,154.7	18,787.7	22,070.0	N.A
35	Tup Rayon	39,451.1	95,526.1	116,610.1	N.A
	Karakol City*	152,233.5	224,440.9	242,631.5	N.A
	Balykchi City*	144,718.6	20,453.8	209,641.1	N.A

\* City under Oblast Supervision

Source: NSC

#### *(4) Constraints and Development Directions for Issyk-Kul Industrial Development*

##### *1) Constraints for Issyk-Kul Industrial Development*

Indispensable factors for stimulating the industrial development in the Issyk-Kul Zone as well as the Nation are to develop supporting service industries, which are absent at this moment. These are: (1) Nation-wide commercial and physical distribution and logistics, (2) Business support services, (3) Financing and banking, (4) Information and communication, and (5) Human resources qualified for international business.

Main issues and problems that seriously affect not only the Issyk-Kul industrial sector, but also the nation are as follows:

- 1) Lack of branding and merchandizing as a result of small lot production and poor design,
- 2) Lack of marketing capability (lack of information on domestic and foreign market opportunities and the absence of product distribution chain and warehousing),
- 3) Absence of the development of product and process specialization and value-added

production (e.g. no attractive packaging and bottling for domestic and overseas consumers),

- 4) Lack of supporting management for enterprises, such as accounting, sales promotion, quality control guidance, designing and packaging/bottling development adjusting for a new global market economy,
- 5) Continued outflow of qualified human resources in industrial sector
- 6) Weak and underdevelopment of industrial vertical and horizontal linkages and cluster formation. It is necessary to integrate scattered SMEs into the industrial park for an efficient and effective industrial network.

The following contents related to Issyk-Kul Oblast are extracted from the CDF report:

The CDF report indicates that the most important and specific factors for the Issyk-Kul oblast are:

- 1) A relatively high level of poverty,
- 2) Limited access to the services of healthcare, education, clean potable water,
- 3) Insufficient volume of investments for attaining sustainable economic growth,
- 4) Poor development and condition of communications, including transportation and telecommunications,
- 5) Ineffective use of recreational capacities of the Issyk-Kul Lake and a low quality of tourism services,
- 6) Poor condition of irrigation networks, and
- 7) A low degree of processing of agricultural products.

## 2) Development Directions for Issyk-Kul Industrial Development

“Comprehensive Development Framework of the Kyrgyz Republic to 2010- Expanding the Country’s Capacities”, National Poverty Reduction Strategy, 2003-2005 indicates the national development directions for Issyk-Kul zone as follows:

- 1) Development of the mining complex, processing industry,
- 2) Development of small and medium business, especially in the areas of processing of agricultural products and tourism,
- 3) Privatization of sanatoria and spas located at the Issyk-Kul, which will serve as a basis for appearance of proprietors, increase in the volume of investments for infrastructure development, improvement of tourism services, increase in budget revenues, and
- 4) Increase of access to telecommunication services for the population.

The most important issues for the revitalization of the Issyk-Kul industry are to understand the potential resources and their competitiveness in the domestic and international markets, as most industries are closed and have been without markets or competitiveness under the market economy since independence. Some industries have survived but only after locating markets through strenuous efforts. It will be unwise to develop a mass-production type industry in Issyk-Kul as it has a location handicap. It would therefore be more promising to develop niche products for niche markets.

Despite the fact the tourism industry is considered to be quite promising in the Issyk-Kul zone, there has been little regional contribution of products or services for the construction and maintenance of regional tourism complexes. With experience now being gained in the



rehabilitation of community centers under the pilot community development programs, local procurement of equipment and facilities for construction are increasing substantially in Issyk-Kul.

Due to a lack of financial resources and obsolete production facilities, the processing of such niche products will have to be planned step-by-step with a gradual expansion of markets. Development over a short period will be dependent on foreign direct investments (FDIs) requiring proper market channels and funds for investment.

Logistical service industries, such as packaging, labelling, storing and transportation, are to be developed in Issyk-Kul in combination with the manufacturing industry. For instance, glass bottles for agro-processing products are presently available from a factory in Bishkek as a bulk order (say 10,000 bottles per order). Such an order is, however, impractical for small and household industries. An enterprise should be developed to function as a packaging bank, buying glass bottles in bulk and selling them in small quantities to household industries, allowing for a reasonable margin on sales. Transportation enterprises for trades should also be developed for marketing of products in the Issyk-Kul zone.

### **H.3 Development Concepts of Issyk-Kul Industry**

#### **H.3.1 Promising Industries in Issyk-Kul**

The most promising industry in the Issyk-Kul zone will be the agro-based industries. Together with the improvement in the agriculture sector, the processing industries should be developed gradually in order to enhance value added in the region. Processing of fruit products appears to be viable in view of the fact that imported juice and jams are served in hotels and restaurants in Cholpon Ata and other tourist centers in Issyk-Kul, as well as in the largest urban centre of Bishkek. Potatoes and other vegetable processing should also be developed, mainly for domestic markets. New types of liquors might be developed based on cider, honey and other local products.

Production of ethanol from potatoes and other starches is worthy of study given a number of farmers have been cultivating potatoes without a stable market available and exports of Issyk-Kul potatoes to Kazakhstan were suspended after harvest in 2004. Since the Republic imports all fuel for vehicles, the produced ethanol could be converted into gasoline if such a policy was to be adopted by the central government. The distilling technologies have been gained in the Issyk-Kul zone through distilling for vodka production.

Pharmaceutical industries can be developed through the use of herbs and other specific products in the Issyk-Kul zone. The extraction of oil essential for perfumes and other uses could also be promising. In the event cultivation of herbs in the pilot program for village nurseries proves satisfactory, herb cultivation will be disseminated widely in Issyk-Kul. Distilling factories could then be developed at various locations in the region. A by-product of bee cultures offers the opportunity for processing medical products, which could then compete in the international market. Promotion of the pharmaceutical industry also ties in closely with the development of medical tourism and the creation of a health sector in the Issyk-Kul region, which is in line with the objective of the integrated development plan.

Gypsum of good quality is available to the south of the Issyk-Kul Lake. It may be used for production of sanitary wares or toiletry ceramics, as well as for drainage pipes for domestic consumption. Since increased tourist numbers and expansion of hotels and other facilities are envisaged in Issyk-Kul, it will be worth evaluating the viability of manufacturing gypsum for

use in sanitary wares. This may also promote gradual improvement in household sewage facilities and improved environmental protection in the region.

The gold produced by the Kumtor Gold Company is totally exported at present. If some gold is retained in the local market, cottage goldsmith industries could possibly be developed in Issyk-Kul for production of souvenir gold items. These could be marketed to Chinese tourists who are expected in the medium term. This type of cottage industry is desirable from the viewpoint of creating job opportunities for villagers during the winter season.

Packaging, storing and other logistical industries should be developed in the Issyk-Kul zone, in line with the development of agro-based and pharmaceutical industries in the region. Even though the processing industries in Issyk-Kul only participate in the early stages of production and do not yet produce finished goods for consumers, these logistical industries are essential for the more general promotion of industries in the region. An enterprise can be started with the procurement of glass bottles as a bulk order and then selling them with labelling materials to small producers of agro-based industries, as introduced in the foregoing section. This approach may alternatively be called a package-bank.

In this context, it may be feasible for a logistics centre to be developed in the Issyk-Kul zone for promotion of packaging, labelling, storing and other logistics services associated with trades and industries. This type of industry is dependent on the division of labour, which was not developed under the centrally-controlled economy but should be promoted under the market economy to enhance competitiveness of the markets. A truck terminal can also be developed along with the promotion of some logistical service industries. The city of Balykchy is well-located for this type of logistics service industry.

The industry related to ICT (information communication technology) also appears to be promising in the Issyk-Kul zone, where IT software engineers can enjoy the natural beauty and environment. An option is to establish an IT park for the IT software industries at a location along the Issyk-Kul Lake. Since the climatic conditions and environment are better in Issyk-Kul than any other CIS countries, the IT park will provide a good location for IT software engineers in CIS. The IT park will also serve as a center for promotion of e-government in the Issyk-Kul Oblast in the longer term.

Strategically, the development and location of these potentially promising industries in the Issyk-Kul zone should be based on a form of industrial clusters, with linkages among industries being developed and strengthened. At the same time, linkages of these industries with academic institutions in the region should also be promoted. With experience gained through the pilot project for herb cultivation and marketing in the village nurseries, the pharmaceutical industry can initiate collaboration with the College of Pharmacy in Karakol. Likewise, a hotel industry for tourism development will be promoted based on creation of a cluster in the Issyk-Kul zone, as illustrated on the diagram in the following page.

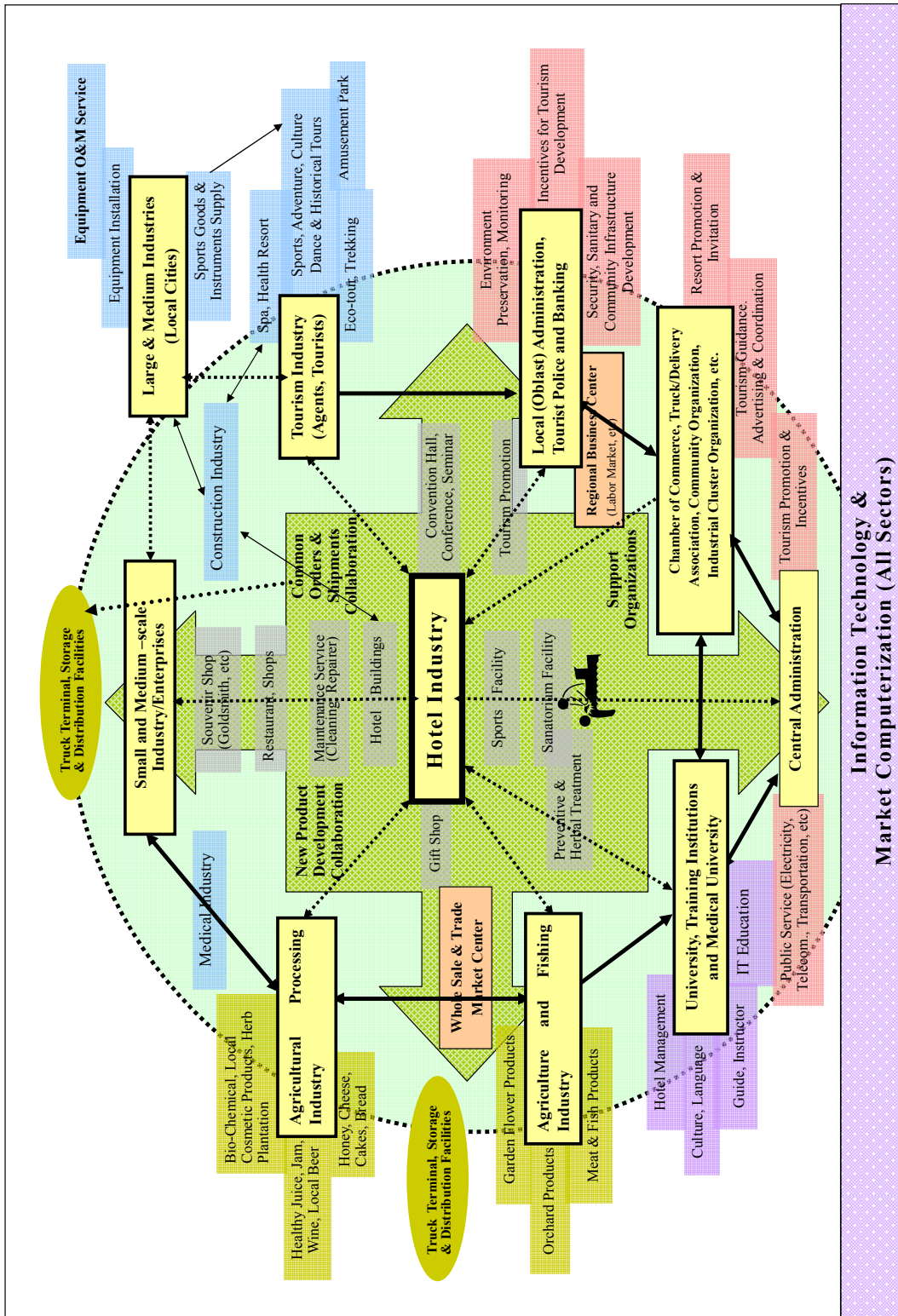


Figure H.1 Image of Issyk-Kul Cluster for Hotel Industry