Co-operation of Local Communities in Kyrgyzstan for Betterment of Rural Development: Case Study in Issyk-Kul Oblast

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Abstract

Rural development is a concern all over the world, but is of more importance for developing countries as most of the developing countries' population is rural; hence development of rural areas is significant in achieving their national development. It is true for all post-soviet countries in transition including Kyrgyzstan. Sixty five percent of Kyrgyzstan's population lives in rural areas.

Rural development issue had got its importance right after gaining sovereignty. Unlike socialist system of government when rural areas fully depended on the decisions made by the center, under the decentralization after gaining sovereignty from the Soviet Union strategy of Rural Development was changed, firstly, because of the change in government system; and secondly, due to the lack of resources to subsidize all rural development activities. Thus, rural communities' self-initiative attitude was welcomed since then.

This research note presents the case study of current rural development situation in two remote villages of Issyk-Kul oblast in Kyrgyzstan; and states that further participatory rural development with systematic government support and development of farmer-oriented strategies is needed.

Key words: Rural community development, livelihood, participation, local self-government Kyrgyzstan

1. Introduction

Kyrgyzstan is one of the post-soviet countries in transition, which has experienced series of big reforms of political and economic character since the last decade of the 20th century. Independence from soviet Russia, gained in 1991, had put a good start for building own legal base, adjustment to new economic system and development of strategies.

Kyrgyzstan has got own Constitution in May 1993 with main principles of governance and code of laws – written by deputies of the 1st Parliament and approved in national Referendum. The collapse of centrally planned and coordinated economic system and the shift to a market-oriented system in the early 1990s caused significant institutional changes.

Decentralization was introduced in early 1990s and formed local self-government bodies (hereinafter LSGB) to coordinate and implement bottom-up community development initiatives. The process of transferring settlements (villages, rayons and cities) to local self-government principles has been completed in 2001 and was accompanied with intensive social mobilization of human resources at grassroots levels and building new financial and legal regulatory systems. Basic structure and activities of local executive bodies have been established in the first Constitution of Kyrgyzstan of 1993.

1.1 Local Self-Government System in Kyrgyzstan

Local self-government system was formed to solve daily political issues locally; based on this fundamental principle local Aiyl Kenesh (deputy councils) – representative body has been formed and elected by population of respective territories since 2001. Number of deputies in Aiyl Keneshes varies from 9 to 21 depending on territory and population of respective AÖs. Deputy corps is responsible to control allocation of resources and administrative work of executive body officers – Aiyl Ökmötü; Aiyl Kenesh ratifies and monitors local budget formation process and its implementation, determines village development strategies on behalf of population. Aiyl Kenesh deputies should hold regular meetings with population to report about own work and listening to villagers' opinion on common priorities, problems.

Head of executive administrative body at village level is elected by population. Main duties of Aiyl Ökmötü include:

- Developing draft budget, programs of development;
- Administering financial resources;
- Maintaining and renovating important facilities and resources;
- Control over agricultural land usage;
- Ensuring availability of adequate schooling and medical treatment.

The second phase of decentralization has begun in 2002 with adoption of National Strategy "Decentralization of the state administration and local self-governance development in the Kyrgyz Republic till 2010" approved by the Presidential Decree No 381 of December 17, 2002.

The most important laws and normative acts introduced during the second phase of decentralisation were:

- Law on Local Self-Government (LSG) and Local State Administration (2008 new version),
- Law on municipal property,
- Law on Financial and Economic basis of LSG (2003),
- Law on Municipal Service (2004),
- Law on Jamaats and Associations (2005)

Currently there are three levels of sub-national government:

- ① 7 oblasts (region), and two cities of republican significance (Bishkek and Osh)
- 2 40 rayons (district) and 12 cities of oblast sifnificance and 11 towns of rayon significance
- 3 459 Aiyl Ökmötüs (local communities uniting groups of villages: 440 aiyl districts and 19 township councils).

There can be identified two types of sub-national governance bodies: a) bodies of local state administration, exist at oblast and rayon level; and b) bodies of local self-government consist of two types of organs

- representative councils: Local Keneshes at rayon, cities of Republican significance, towns of rayon sifnificance and Aiyl Okrug levels.
- executive organs of LSG: Mayor's offices in the cities of national and oblast significance, city councils in cities of rayon sifnificance, aiyl ökmötü in aiyl districts.

Head of AÖ appoints Aiyl Bashy (Village Head) with the consent of villagers. Aiyl Bashy fulfils the responsibilities delegated by the AÖ at individual village level.

According to Law No 101 on Local Self-Government bodies local administrations work under control of and accountable to representative body – Aiyl Kenesh for administering works of local importance; in the national level of government AÖs are accountable to state bodies for implementation of state-delegated duties either directly to national ministries or to their rayon offices.

Steimann (2010) pointed out the problem related to rural livelihood system organization - uncertainty occurred after reorganization of political and economic systems, which resulted with shortage of natural resource management, social responsibility, loss of stable source of income and shortage of competent professionals at village level for changing the situation for better. Capacity building of local authorities in local budget formation, administration and management was necessary for stabilization of post-Soviet Kyrgyz economy and start participatory rural development with active citizens. First decade of sovereignty in Kyrgyzstan is well-known for its reforms, which introduced perceptible changes in livelihood.

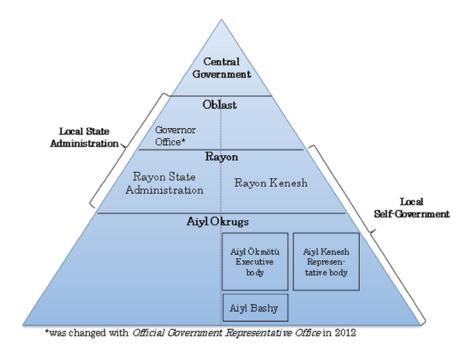


Figure 1. Levels of Government in Kyrgyzstan **Source:** Adopted from INTRAC report on Decentralization in Kyrgyzstan

1.2 Reforms in Agrarian System

Kyrgyzstan has more representation of rural population¹ since Soviet Union time², it is true till nowadays, more than 65% of population inhabits rural areas (National Census report, 2009). Therefore agriculture and rural development are priority sectors to promote economic development and poverty alleviation.

Agriculture experienced great loss in subsidies for agricultural inputs during the first phase (1991-1995) of rural reform. Prior to the end of the Soviet era 98% of arable land was controlled by collective state farms, the rest 2% of arable land was controlled by so called 'quasi-private sector'. Twenty years later, in 2008, the share of agricultural enterprises (about 1,200 privatized successors of collective state farms) in arable land had gone down to 25%, while the share of the individual sector (the traditional household plots and some 300,000 peasant farms that have emerged since 1992) had increased to 75% (Lerman &Sedik, 2009).

The second phase of the Land-Agrarian reform, which started in the mid-1990s, focused on land distribution. Land agrarian reform had directly changed the situation and position of the country's rural population. Land ownership right was transferred from the state to a farmer under the very reform, which introduced important changes in agricultural system.

Free market economy introduced many important changes in livelihood of the total population of the country. There was significant decline observed in industry in 1991-1995 years, so that GDP dropped for 50% in comparison to 1991 year (ILO, 2008). The situation with employment of urban population got serious as well as rural one. Previous collective farms collapsed, so that rural employees lost their work places and stable salary income; further maintenance of their livelihood was wholly dependent on their own initiative. Rural farmers could choose to stay in village to cultivate own land and breed livestock or leave for closest urban areas as well as abroad countries to get non-farm related job. Hence the rural communities are expected to take a key role and self-responsibility in managing own land plots and livestock breeding as one of the main additional source of income; whereas national government developed National Poverty Reduction strategy and Country Development action plan documents with assistance of international experts; donor agencies actively participated together with local self-government and non-government organizations in implementation of strategies.

1.3 Community Mobilization

Community involvement into rural development process was started in late 1990's and early 2000's via projects implemented by International Donor Agencies and Non-Governmental Organizations. Financial and technical assistance provided as official development assistance (ODA) by the international agencies was used for institutional development and capacity building of local authorities as integral part of development (Abdusalyamova & Warren, 2007) and realization of goals stated in National Decentralization strategy. International Donor Agencies support comes in grants and credits. UNDP, WB, USAID, EU, and DfID have substantial impact on decentralization process.

UNDP was one of the pioneers introducing the concept of Self-Help Groups and Jamaats in rural areas of Kyrgyzstan as an effective form of community-based organization (hereinafter CBO), able to tackle poverty through encouragement and promotion of income generation activities in 1998. It was then when local communities were encouraged to organize themselves to create locally based self-help groups or so called 'Jamaats'. The then president of Kyrgyz Republic announced 2004 year – Year of Social Mobilization; and Law about CBO was signed in 2005.

All locally created Jamaats get registered in local Aiyl Kenesh and AÖ administrations. Newly organized SHGs participate in capacity building activities on how to set up village SHGs. AÖ administrations should render all-round support to Jamaats and SHGs by disseminating information in village meetings about their achievements and joint implementation of projects to improve life of the village mobilizing local resources and utilizing grants/credits.

Another capacity building program implemented by UNDP has been the strengthening of micro-finance institutions in rural areas in Kyrgyzstan. This has involved training members of the micro-credit groups in law, accountancy, and financial management, management of micro-credit and formulation of project proposals.

International agencies established local NGOs and Public Foundations in Kyrgyzstan, who implemented projects and were actively involved in community mobilization activities in rural areas of country. There were more than 8,000 NGOs registered as of 2007 (Abdusalyamova & Warren, 2007), but only few hundreds worked actually in close relation with local administrations and international funding agencies providing technical assistance to strengthen capacity of local authorities and community groups. One of the leading local agencies, cooperating closely with international funding agencies since 2003, is *Community Development and Investment Agency of Kyrgyz Republic* (ARIS). ARIS was established under Edict of the President of Kyrgyz Republic as of October 15, 2003 as an autonomous organization with the status of a legal entity. The Administration of the President of Kyrgyz Republic (1), Association of Local Self-Governments of Villages and Settlements³ (2), The Public Association "Counterpart – Sheriktesh" (3) are establishers of the ARIS.

All the above mentioned rural development agencies have worked in Issyk-Kul oblast and some implemented project activities in study area.

Study on rural development was initiated with overall research objective:

To study about current tendencies, challenges and opportunities for reaching sustainability in rural livelihood based on 2 case studies in Issyk-Kul oblast, Kyrgyzstan

Specific objectives:

- Study main sources of income and expenses in rural areas;
- Examine the rural community development initiatives in local communities and role of community members themselves in deciding, implementing and evaluating the initiatives;
- Analyze livelihood strategies being practiced in study villages;
- Discuss the implications of findings for future rural development.

Summarized results and findings of the study are presented in the next sections of the given research note.

2. Research Methodology

This study is qualitative; participatory rural appraisal tools were used during the field survey.

2.1 Study Area

The research was held in two villages located in the easternmost Issyk-Kul oblast (province) in Kyrgyzstan: Tasma village in Karasaev Aiyl Okrugu (hereinafter AO) and Chong Kyzyl Suu village in Svetlaya Polyana AO.

Issyk-Kul oblast is situated in the eastern part of Kyrgyz Republic and borders on China in the southeastern part, on Chui oblast in the west, on Kazakhstan in the north and on Naryn oblast in the south. One of the highest peaks of the world Pobeda Peak is located in the oblast (7,439m.) and Khan Tengri (6,995m.). Oblast is located on temperate latitudes nearby with deserts. Climate of the oblast is influenced much by mountainous relief and Lake Issyk-Kul. Being one of the biggest lakes in Tian-Shan Issyk-Kul Lake makes winter in the oblast mild.

Issyk-Kul oblast has 3 towns, 58 AÖs, 5 rayons (districts) and 175 villages with total population equal to 425,500 people. The oblast is rural in majority as well as other oblasts of the country.

2.2 Research Design

The field survey was held twice to collect data on main sources of income; expenses related to staple crops' cultivation and non-food expenses; semi-structured interviews were held with relevant local self-government officers, project staff, and community

based organization members to find out role and relation of community people with and among one another in rural area. Additionally to semi-structured interviews and focus group discussions, household survey was held among 122 households which were selected by cluster sampling based on area of residence.

VillageTotal village populationVillagers covered by survey
(% of total village population)Tasma1777
(921 male; 856 female)322 (35)Chong Kyzyl Suu556
(286 male; 270 female)288 (52)

Table 1. Population covered by study

There were held 3 focus groups in each of the 2 villages: men, women and youth; semi-structured interviews were held with Heads of AÖ, chairperson of Aiyl Kenesh (local deputy council) and social worker of social department of respective AÖ. Besides focus groups and semi-structured interviews, there were held meetings with Jamaats available in the villages. Team of student surveyors was trained to fill in questionnaires in study villages.

2.3 Study Villages' Socio-Economic Background

Issyk-Kul oblast is known as a tourist area in Kyrgyzstan, but both of study villages are not involved in any tourist service due to lack of infrastructure and distant location from main road. Therefore these two villages were selected as research sites to study how rural community development going on in distant villages of Issyk-Kul oblast; to observe current rural livelihood system in Issyk-Kul oblast based on two villages located relatively far from main road, rayon and oblast centers. In line with development theories almost all households are engaged not only in agriculture, but also in variety of activities to have several sources of income.

Average family size of sample households is 5, which is slightly higher than the national average of 4.2 in Issyk-Kul oblast

Table 2. Demographic and socio-economic characteristics of the sample households

Parameters	Tasma (n=62)	CKS (n=60)
Average family size in number	5.2	4.8
Dependency ratio by age group	0.4	0.4
Education of the HHH		
Illiterate	1 (1.6)	0 (0)
Secondary	37 (59.7)	32 (53.3)
Vocational	11 (18.1)	16 (26.7)
Higher	13 (20.6)	12 (20)
Sex of the HHH		
Male	54 (87.1)	52 (86.7)
Female	8 (12.9)	8(13.3)
Primary occupation of the HHH		
Farming	40 (64.5)	32 (53.4)
Wage labor in the village	18 (29.1)	26 (43.3)
Entrepreneur	4(6.4)	2 (3.3)
Primary occupation of the population ⁵		
Farming	95 (61.3)	87 (60.8)
Wage labor in the village	29 (18.7)	19 (13.3)
Wage labor in country	13 (8.4)	14 (9.8)
Wage labor abroad	3 (1.9)	2 (1.4)
Student	15 (9.7)	21 (14.7)

Source: Field Survey, 2011

Note: Figures in () indicate percentage

(National Statistic Committee Census Report, 2010). More than 60% of total economically active sample households members' primary occupation is farming. Salaried jobs here refer to teachers of secondary school, medical assistants of local medical centers, librarian of village libraries. There are some villagers less than 3% who work abroad and about 10% who work in other regions of Kyrgyzstan. Both villages have small shops where products of daily necessity are sold. There are 3 of shops in Tasma village, where 6.4% of economically active population covered by survey work; Chong Kysyl Suu has one shop run by one family (3.3%) occupied in entrepreneurship.

3. Main Findings and Discussion on Current Village Development Initiatives in Study Area

3.1 Networks of LSGBs and Local Communities

Local communities and LSGBs have own networks which are utilized in implementation of policies for development purposes. Mainly local organizations at village level cooperate among one another and with LSGBs due to character of the problems. Both study villages have experience of getting some technical assistance with NGOs and Donors. Usually outside agents (NGOs & Donors) agree own projects and ideas for cooperation with LSGBs at oblast and/or Rayon, and Village level administrations in order to get their support as well as build up their capacity in implementation of local development programs and promote cooperation with local communities.

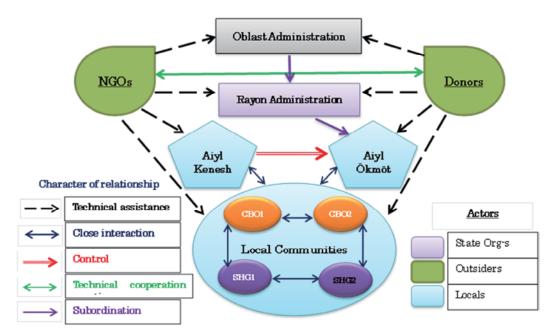


Figure 2. Relationship among State and Local self-government bodies, Local community, NGOs and Donors. **Source:** Field Survey, 2011 Figure was developed based on interviews with LSGB officers

Both study villages were active participants of those social mobilization activities. Availability and current level of Jamaats' operation and LSGBs in study villages can serve as a positive results and impact of massive social mobilization campaign in early 2000's.

LSGBs try to look for networks to achieve the whole village development related purposes. With that perspective in mind Karasaev AO as well as Svetlaya Polyana AO cooperated with ARIS Village Investment Project and developed *Village Profile*⁶ and implemented several social and income generating projects. There are several more agencies which worked in Tasma village for community development such as JICA, Counterpart International, UNDP. Local community-based organizations - Jamaats' networks are built mainly based on product promotion and self-capacity building interests.

There are several cases of donor-driven and community-supported projects being implemented in study villages as shown in tables given below.

Table 3. Development agencies operated in Tasma village

Agency	Year	Activity	
Counterpart International	2005	Support of community based initiatives: wool carding machine was purchased for Ak Shoola Jamaat	
ARIS	2006 2011	Social mobilization for development of social projects (a) Development of Farmers' Union (b) Joint Pasture Management	
JICA	2008	Producing value added products using local resources	
Village Consulting Service	Since 2011	Breeding of milk oriented cows and basics of veterinary for betterment of livestock breeding conditions	
Mercy Co	Since 2007	Distribution of humanitarian aid among poor households in 3 villages of AO	
UNDP	Since 2009	Social mobilization of villagers in improving infrastructure of the villages in AO; Capacity development of AÖ officers in improving conditions of livelihood of women, youth and children; Electronic management system development in Karasaev AO	

Source: Field Survey, 2011

Chong Kyzyl Suu village has some more partnership with organizations working for mountainous community development. Most of the villagers in Chong Kyzyl Suu built up own capacity by participation in many skill development trainings organized by donors and organizations from outside.

Table 4. Development agencies operated in Chong Kyzyl Suu village

Agency	Year	Activity	
Association of Mountainous Communities in Central Asia	2002	Growing poplar trees in village area as a strategy against desertification	
Central Asian Mountain	2004	Multifunctional use and management of resources	
Program Ala-Too	2006	Construction of warm house using heat isolation materials	
German Technical Center	2005	Biogas installation	
Kyrgyz association of Community Based Tourism	2006	Hospitality training for accepting guests in Yurt camps	
Public Foundation 'Eraiym'	2007	Self-help group working principles and household economy	
NGO 'Shoola'	2009 2010	Disaster management Field visits for better potato growing	
ARIS	2006	Basics of social mobilization for joint reconstruction of sport hall	
JICA	2008 2010	Producing value added products using local resource; Biogas installation in village bath house	

Source: Field Survey, 2011

Although each village had cooperated with different development agencies there are some common effects for village development such as positive change of attitude among villagers for more self-reliant and responsible development via Jamaats' activities, village meetings, infrastructure improvement events with participation of villagers.

3.1.1 Community-Driven Changes in Rural Livelihood

Community members are encouraged and their right for participation in local self-governance is secured legally. According to the Law No 101 on Local Self-Government citizens can realize their right for self-governance in two ways through:

- 1) representative and legislative bodies of Aiyl Okrug (local village area) and town, as well as by direct participation; and
- 2) representative bodies of Rayon (region).

Local community members have right to elect and to be elected; to monitor and participate directly in making decisions on the issues of local importance. However, practically it has not been practiced well by villagers/urban citizens. That was confirmed

during field survey in both villages. Almost half of the respondents in Chong Kyzyl Suu (47.8%) and one third of respondents in Tasma (31.5%) responded that they do not wish to participate in public meetings organized by Rayon or AO representatives because their problems are not resolvable due to lack of financial and technical support. At the same time respondents give more preference to AÖ representatives, rather to Rayon or Oblast officers. Work of deputies in Local Keneshes needs to be improved by means of more frequent interaction with community members and assistance for solution of local problems.

A bad road condition⁷ was named by 100% of respondents in Tasma village as acute problem. Representatives of Rayon and Oblast administrations had been informed in the meetings for several times, problem has not been solved yet.

<u>Lack of agricultural machinery</u> (*mentioned by 37.6% of respondents*) is a big problem for Chong Kyzyl Suu villagers, because few tractor drivers or combiners come to mountainous village. Villagers under leadership of Aiyl Bashy have started collecting money for purchasing a tractor for leasing. Some villagers agree to contribute own livestock in order to raise necessary amount of 1st payment. The collected amount of money has been lent to villagers with 10% interest rate monthly.

Both problems are capital intensive and local administrations are not able to solve by themselves, governmental support is required.

Most of other problems of local importance have been being solved by local administrations together with community members

There is no public transportation running between villages and rayon/oblast center organized by local administration or local self- government in both villages. Tasma villagers use own cars or taxi service to travel out of the village. Taxi drivers are local residents of the village, who own a car and have no other occupation; they work in their free time.

Unlike Tasma village, Chong Kyzyl Suu villagers succeeded to organize a public transportation in 2010 with the help of former resident of the village - Mr. Sydykov, who donated an old mini-bus to the village in 2010. The mini bus runs between Rayon center – Kyzyl Suu village and Chong Kyzyl Suu village once a day only; it leaves for Kyzyl Suu at 8:30 AM and starts back to Chong Kyzyl Suu at 13:00 from Kyzyl Suu village bus station. Mini-bus is registered as Chong Kyzyl Suu village property at AO office, but maintenance cost is covered by the village driver from transportation fee paid by bus-riders. Before Chong Kyzyl Suu villagers had to use personal cars (if available), otherwise hitch-hiking or even sometimes had to walk to reach AÖ or rayon center.

Most of Chong Kyzyl Suu villagers named the case with mini-bus as one of the success stories of their village. Transportation fee is decided by taxi drivers themselves in Tasma village; in case of Chong Kyzyl Suu public mini-bus fee was agreed with villagers.

Village	Rayon center	Oblast center	Notes
Tasma	50 KGS (\$1.1)	90 KGS (\$2.1)	Villagers have to make a change to go to oblast center in case of hitch-
CKS	30 KGS (\$0.7)	110 KGS (\$2.4)	hiking in both villages; Tasma villagers need an extra change to go to rayon center, as a result need to spend more time and money.

Table 5. Travel cost between village and Rayon/Oblast Centers

Source: Field Survey, 2011 Note: \$1=45.89 KGS as of 2010 year

3.1.2 Social Mobilization at Grassroots Level

Both villages' communities are united on cluster base; villagers interact with one another during traditional celebrations in the village. Each village division has own leader called – onduk (direct translation from Kyrgyz language 'head of ten households'). Onduks are elected by villagers themselves, work on volunteer non-paid base and have no limited time period for serving. Onduks serve as a bridge between community and LSGBs. However, they are not involved much in project implementation or some other official activities not related to traditional celebrations. There are some formally organized community-based groups called Jamaats.

In case of Tasma village there was established public foundation Tyntai in 2003, which united almost all village residents representatives of 8 small tribal groups. Initiative of organizing village based public foundation was suggested and promoted by the AÖ Head; following year there were organized 2 Jamaats: (1) Group of seamstress and (2) Felt boots' making group 'Ak Shoola'. Role of public foundation was to coordinate initiatives of other small CBOs or initiative organizations. Currently Public Foundation has stopped working. Head of Karasaev AÖ explained it as a consequence of shortage in regular financing and lack of leaders to lead young members to work and find own niche in the market.

Nowadays 'Ak Shoola' Jamaat has expanded production assortment, producing not only felt boots, but also felt bags, felt accessories for daily use. That is achievement of self-initiative search of finance and cooperation possibilities with donors and NGOs to get financial and technical assistance, with other felt product masters to exchange and enhance of experience; and with

private shops and guest houses to sell hand-made felt products in Karakol town and Bishkek city. Active cooperation of 'Ak Shoola' Jamaat with JICA had a spillover impact on formation of new group for traditional soap production 'Bugu Ene'. 'Ak Shoola' Jamaat members have own internal fund saved for charitable purposes, such as: production of warm felt boots for elderly people and handicapped children of the village: products of 4,500 KGS was presented to 2 old men and 3 handicapped children in 2010. Total number of beneficiaries has reached 8 in elderly group, and 5 among handicapped children since 2007. This is another positive impact on social development of Tasma village.

In case of Chong Kyzyl Suu mobilization activities were actively organized and supported by leadership of Aiyl Bashy.

All projects served very well in improving infrastructure of the village and human resource development. However, the system of sustainability varies from project to project. Relationship between project implementation team and local community is vital.

Interview with Aiyl Bashy of Chong Kyzyl Suu

There were 5 self-help groups organized. Each SHG had own mission: micro-crediting, community based tourism service, wild berry jam producing. Only one self-help group, out of five established, continues group activities. According to group leader's opinion their SHG might have also collapsed if not additional input and capacity development in marketing of locally made products within J-CEP project.

Chong Kyzyl Suu village has a good system of informal network with former residents of the village. They celebrate Spring Equinox day regularly, where former residents of the village living outside, business partners (NGOs, PIU staff and other partners are invited) come together and get to know about achievements and challenges of the villagers.

Compare to Chong Kyzyl Suu, Tasma village has less village level networks and connections. AO officers and villagers themselves explained this fact by diversity in community: each of 8 tribal groups have own celebrations and another factor is distant location of the village from main road with poor quality of road surfacing.

Although 100% of respondents from both villages are engaged in agriculture activities cultivating own plots, there is no any farmers' group working together for improvement of agricultural activities. That is explained by lack of technical base and shortage of investments to purchase agricultural machinery or invest in better seeds of crops.

3.2 Household Economy

Sample households' (hereinafter HHs') well-being depends on agriculture and role of owned land in study area is significant for their livelihood. But there are quite many shortages inherited from land-agrarian reform of late 1990s.

In the aftermath of the significant declines in agricultural production, the Kyrgyz government began to implement historic institutional changes in the form of land distribution (i.e., de-collectivization of agriculture and creation of individual peasant farms). Starting in late 1994 and through most of 1995, the government passed several legal and policy directives.

After four years of reform, only 12 percent of Kyrgyzstan's arable land was under cultivation by individual farms, while the rest of the arable land was still controlled by large agricultural enterprises. As cited in Akramov & Omuraliev (2009), 'there was little difference in the organizational structure and management of the agricultural cooperatives and peasant farm associations compared to the old state and collective farms'.

Prior to the reform process, there were no private ownership rights to land. In the early reform stage individuals residing in rural areas were given land use right certificates up to 99 years for agricultural land. These land use certificates granted five legal rights to individual farmers, namely the rights to *transfer*, *exchange*, *sell*, *lease*, and *use* the land as collateral for credit. Later in 1998 there was a country-wide referendum to adopt a constitutional amendment that allowed private land ownership. According to this constitutional amendment, all land-use certificates were converted into private land ownership documents.

3.2.1 Land Distribution in Study Sites

Residents of both villages had got own plots by the end of 1998 during the Land reform. Additionally to the plots each household got small area of parcel near their houses. Land parcels are broken down into two categories: <u>land with access to irrigation canal</u> for watering and rain-fed land.

According to field survey data analysis average landholding of sample households is equal to 3.8ha in Tasma village, and 2.2ha in Chong Kyzyl Suu village. The size of plot allocated to each individual depended upon the number of eligible people living the vicinity of the AO or collective farm. Therefore land holdings vary from household to household.

Tasma village has more operational land area, where each resident had got 0.78ha (0.48ha irrigated and 0.30ha rain-fed) land per person who was born before June 1st, 1996; In case of Chong Kyzyl Suu each resident who was born by June 1st, 1996 had got 0.44ha, and no rain-fed land. According to decision of Local Kenesh each resident of Chong Kyzyl Suu had right for 0.23ha of rain-fed land, but all villagers refused to get those parcels because of: (1) distant location from the village; (2) villagers did not

understand the value of land at that time. Nowadays all returned rain-fed land is transformed into pasture land by Decree of Local Council and is under Aiyl Ökmötü's balance.

- > Within 20 years of independence villagers had realized significance of land ownership. Most of farmers had been self-employed by land cultivation activities, and supplied own families with food and some income. So the opinion of a farmer in the box above is getting more common among villagers' in both study areas.
- Field survey showed that it is a common practice to rent in/out land by households. Land is rented among villagers in both study areas. In Tasma village land is rented on yearly base; the area is more prone to hailstorm and residents lose their harvest due to the damage caused by unexpected hailstorms. The last case of hailstorm happened in 2003 (Field Survey, 2011); whereas in Chong Kyzyl Suu village land is rented out for 5 years at least.

3.2.2 Main Cash Crops Grown by Farmers

All sample HHs (122) are involved in land cultivation activities. It was found that households in both villages produce crops mainly for self-consumption, and if harvest is good they sell extra amount to local markets, what does not make them farmer-producers, but consumer and does not bring enough income to cover all expenses.

Main cash crops grown by sample households include: potato (Solánum tuberósum), wheat (Tríticum), barley (Hordeum vulgare), lucerne (Medicágo sátiva) and apple (Malus domestica).

Cash crop	Village	HHs cultivating (%)	Average plot size/trees per HH (ha/unit)	Average yield per ha/quintal (per tree/kg)
Potato	Tasma	57 (91.9)	0.5	86
Potato	CKS	56 (96.6)	0.3	72
Wheat	Tasma	54 (87.1)	2.2	16
	CKS	13 (21.7)	0.97	16
Dowless	Tasma	34 (54.8)	1.7	15
Barley	CKS	10 (16.7)	0.79	21
Lucarna	Tasma	9 (14.5)	1.56	29
Lucerne	CKS	35 (58.3)	1.7	41
Ample	Tasma	52 (83.9)	16.9	33.1
Apple	CKS	44 (73.3)	26	37.4

Table 6. Land use of sample HHs in 2 villages under study

Source: Field Survey, 2011

As it is shown in the Table 6 Tasma village has better yield of potato and more households grow wheat, which is because of soil quality, better seeds of potato and favorable climatic conditions especially for wheat. Even though Chong Kyzyl Suu has better yield in barley, which is explained by favorable conditions for barley – dry land less HHs grow barley, because living in mountainous area villagers are specialized more in livestock breeding; and that's why more HHs grow Lucerne as a nutritious fodder good for livestock and nitrogen (N) enricher for soil. However, in both villages crop yield is much lower than the national average indicators provided by Ministry of Agriculture of Kyrgyz Republic for 2010 year.

Collected yield by sample households vary from house to house because of different volume, frequency and quality of used fertilizers and limited financial resources of households to purchase better seeds of crops. Only 15.4% of households in Tasma village and 21.6% of households in Chong Kyzyl Suu village change seeds of potato and wheat in 3 to 5 year period. Average plot size is less than 3 ha in Chong Kyzyl Suu village, whereas in Tasma village it does not reach 4 ha. It explains why another practice good for yield improvement - *crop rotation* is not feasible in study area, as well as in all over Kyrgyzstan.

Villagers are not interested in giving rest to their land with purpose of rehabilitation. Thus, they are practicing extensive land cultivation growing the same crop on the same plot, which decreases the land fertility; Individual farmers seem to recognize this disadvantage of cultivating small land area, however, not yet ready to come together and start cooperatives.

Table 7. Average productivity of crops in Kyrgyzstan for 2010

#	Crop	Average harvest per ha/quintals		
Industrial crop				
1	Potato	158.1		
Cere	als			
2	Wheat	21.7		
3	Barley	18.9		
Fodder crops				
4	Lucerne	60.5		

Source: Adopted from Plant growing development program in Kyrgyz Republic in 2010-2015developed by Ministry of Agriculture

3.2.3 Cash Income of Sample HHs from Crop Selling

Rural households in Issyk-Kul oblast sell extra crop or fruit grown in orchard or plot in the fields. Potato, apple, pear are common crops purchased in Issyk-Kul oblast. Villages along the southern shore of the Issyk-Kul Lake are good for selling apricot, apple and pear, which is caused by climatic conditions good for growing these cultures, and convenient location of the villages along the main road eases buyers' collection. Both study villages are lacking these advantages of mild climate and convenient location.

There are 3 main types of potato-buyers in Kyrgyzstan, which is common study area too: (1) <u>local middle persons</u> who have own connections in countries of export or Kazakhstan and Uzbekistan, where they re-sell crop with value-added price; (2) <u>village resident</u> who had negotiated with buyers out of village to collect potato in order outside buyer to save time; and (3) <u>outsiders</u> who come to the villages only to collect crop in the season (in Issyk-Kul oblast mainly from Kazakhstan due to closer location). Due to availability of this system of purchase villagers in both study areas do not go out of the village to sell extra amount of grown potato after keeping some amount for self-consumption.

Table 8. Average yield and annual income of HHs growing and selling crops

Cash crop	Village	HHs cultivating	HHs selling	Average sold (ton)	Average price per/ton (\$)
Potato	Tasma*	57 (91.9)	39 (68.4)	4.6	210.9
Potato	CKS*	58 (96.7)	36 (62.1)	1.9	220
Wheat	Tasma	54 (87.1)	38 (70.4)	2.8	200.5
wneat	CKS	13 (21.7)	3 (23.1)	0.76	236.8
Amplo	Tasma	52 (83.8)	21 (40.4)	0.7	294.5
Apple	CKS	42 (70)	26 (61.9)	1.1	316.2
Dorlar	Tasma	34 (54.8)	12 (35.3)	3.04	182.6
Barley	CKS	10 (16.7)	1 (1)	1	152.5
Lucarna	Tasma	9 (14.5)	3 (33.3)	3.7	69.7
Lucerne	CKS	35 (58.3)	13 (37.1)	4.1	69.7

Source: Field Survey, 2011

Note: * Tasma (n=62) CKS (n=60) (true for the whole table) Figures in parenthesis indicate percentage of HHs

Price for potato and other cash crops is not set up by producers in Kyrgyzstan. The price is set up exclusively by buyers. Local farmers have no capacity to bargain because, a) lacking knowledge in marketing; b) almost no record is kept on net revenue and total expenses for land cultivation; c) amount of crop for selling is not big, so that farmer agrees any price buyer gives if that is higher than previous year's price.

Villagers sell some amount of potato and wheat harvest in autumn during harvesting time and the rest amount in early spring. Usually price given in spring is higher than the one given in autumn, but there is no any guarantee about that. Study had found that farmers in study villages growing potato for selling never do any preliminary marketing survey to check potato harvest in neighboring countries, what they rely on is the price of previous year (if it was good) and hope for higher price. This system is of

no sustainable character. Relevant government officials are to lobby the interests of rural farmers, in order them to be self-assured for own yield and farming.

Main cash income comes from selling potato in both villages.

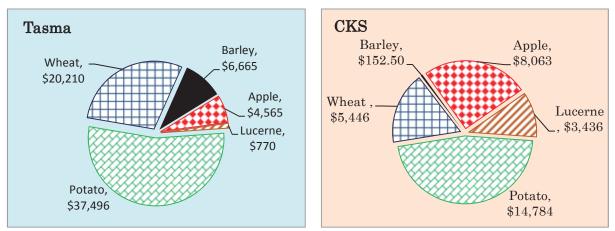


Figure 3. Average annual income of HHs from cash crop selling

Source: Field Survey, 2011

3.2.4 Livestock Holding

Issyk-Kul oblast is one of the providers of livestock in kind as well as processed form in the country. Study had found that livestock is another main source of income for both villages.

Sample households keep livestock mainly for providing themselves with by-products such as meat, milk, egg, wool, leather for daily needs and selling when cash is needed (usually it is in spring and autumn). Figure 4 provides data on general livestock holding in sample HHs of both villages.

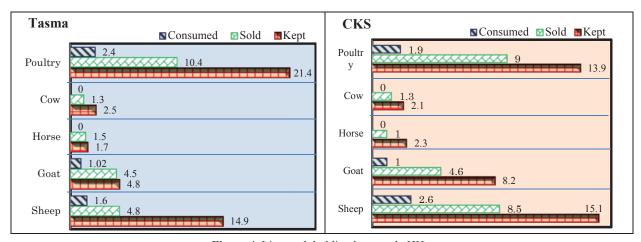


Figure 4. Livestock holding by sample HHs.

Source: Field Survey, 2011

As shown in the Figure above there is no much difference in ownership of livestock between study villages. No cow and horse is consumed, because cows are one of the strategic livestock for villagers; they give milk, which can be consumed daily base and provide HHs with additional cash income. Horses are used as pulling power in agricultural activities and means of transportation mostly for young men. Less than 40% of total sample HHs earns some money from livestock selling. Average income from selling livestock is not much as can be seen from data given in Table 9; it also shows the difference in amount of average income between 2 villages. That is explained by kinds of livestock and season of selling. Price for livestock is much higher in autumn, than in and after winter.

 HHs selling livestock

 Total number
 1 kind
 2 kinds
 More than 3 kinds

 Tasma (n=62)
 22 (35.5)
 \$311.4 (22.6)
 \$638.1 (11.3)
 \$2,302 (1.6)

 CKS (n=60)
 22 (37.5)
 \$407.5 (18.3)
 \$1,524.7 (10)
 \$1,771 (1.3)

Table 9. Average annual income of sample HHs from selling livestock

Source: Field Survey, 2011 Note: Figures in () indicate percentage of HHs

The mostly sold livestock is sheep. Villagers prefer going to Karakol because there are more opportunities to sell, unlike markets in rayon centers in Kyzyl Suu or Tup. Villagers bring livestock for selling by a hired truck in group of 2-3 people usually.

3.2.5 Non-Farm Income Sources of Sample Households

Since more than half of sample HHs' economically active population is involved in agricultural activities and gets income from selling agricultural products as shown in previous paragraphs. Share of wage labor and small entrepreneurship/remuneration is small, but quite perceptible during land cultivation season to purchase necessary supplies. The average amount of annual income from enumeration is not much because labor migrants from study villages work as blue collar workers, and most of the time has general education without any specialization. The most amount of income among non-farm related sources comes from 'salary' paid for teachers of secondary school, medical staff of local medical centers or local administration officers.

Table 10. Average annual income of sample HHs from non-farm source (in USD)

Village	Source of income	Non-cas	h income	Cash income	
Village	Source of income	No. of HH	Income/HH	No. of HH	Income/HH
	Pension	-	-	26 (41.9)	653.8
Tasma	Salary	-	-	25 (40.3)	2,486
(n=62)	Allowance	-	-	3 (4.8)	303.6
	Enumeration	-	-	2 (3.2)	750.0
	Pension	-	-	18 (30)	952.1
CKS	Salary	-	-	33 (55)	5,908
(n=60)	Allowance	-	-	2 (3.3)	300.7
	Enumeration	-	-	3 (5)	466.3

Source: Field Survey, 2011

Note: Figures in parenthesis indicate percentage

3.2.6 Expenses

Main source of expenses is land cultivation in both villages. Individual farmers in Kyrgyz villages have to become Jack of all trades in order to run family managed farm to supply family with food. Farmers cannot afford purchasing machinery and have to depend on farmers who own machinery; thus, land cultivation expenses get high.

Land cultivation expenses cannot be covered fully by HHs own financial resources. That's why households in both villages have to borrow money from Micro Credit Agencies. The most difficult time period when family feels shortage in finance is early spring and beginning of summer time. That is so because of land cultivation activities and end of preserved food supplies, so families need to buy almost all products from the market and need cash. That is time when many households (up to 26% of sample) have to apply micro-finance organizations for credits with quite high annual interest rates: varying from 18% to 24%.

Credit program oriented for poor villagers with lower interest rate from 7% to 9% is not able to cover all in need. Respective AOs under study were given about \$21,000 and could give this sum only for 4 HHs at most. Since this program was started in late spring villagers could use it only for purchase of livestock, not for land cultivation related needs such as change of seeds to improve yield and be able to pay the credit back.

Table 11 shows that money borrowing sources farmers can't afford getting credit from MCAs much. The one who borrow money from MCAs are those who have stable source of income such as teachers, small entrepreneurs.

	Relatives	Friend	Neighbor	MCA
Tasma (n=62)	21 (33.8)	16 (25.8)	1(1.6)	21 (33.8)
CKS (n=60)	18 (30)	19 (63.3)	5 (8.3)	26 (43.3)

Table 11. Number of HHs borrowing money

19 (63.3) Source: Field Survey, 2011 Figures in () indicate percentage

Land cultivation is cost-intensive and requires cash to finish cultivation activities on time. Thus, villagers have to get credit. However, there were several cases mentioned during field survey, when villagers apply for credit as if to cover costs related to land cultivation, but actually using that money to cover daily expenses. This is quite serious problem, which puts some villagers in vicious circle and needs to be discussed, solved by respective government and private financial groups.

3.2.7 Food Consumption Of Sample Households

Meat, dairy products and bread are the main staple food in Kyrgyzstan. Meat is the most important product in winter season that was confirmed by answers of sample HHs. Most of households try to consume meat mostly in winter season, when weather is too cold and energy is needed to keep them warm enough. However, it was found that most of HHs cannot afford required amount of meat consumption throughout a year. Average meat consumption per person in Tasma is 1.9kg per month; and in Chong Kyzyl Suu is 2.7kg per month. According to National Statistic Committee's monthly ration indicator⁸ for 2010 year the average meat consumption per person/month must be 3.16kg.

All households consume milk and other dairy products in some amount daily base. Those HHs which do not have a cow (6.4% in Tasma & 25% in CKS) buy milk from neighbors or exchange with other products such as egg. Amount of milk produced vary from season to season. The most amount of milk is produced in summer season. Milk production is higher in Chong Kyzyl Suu because of close location to vast near village pastures.

Volume of produced milk (litre) 10 8 2 0 Produced Consumed Sold Tasma 5.8 8.6 2.8 CKS 2.1

Daily milk production by sample HHs in summer

Figure 5. Share of daily milk consumption and selling in summer season by sample HHs Source: Field Survey, 2011

There is well-maintained system of milk collection in both study areas by regional dairy product producing companies. 'Süt Bulak' Kyrgyz-Swiss private Joint-Stock company has been purchasing milk from 6 villages of 2 AOs in Tup rayon, including Tasma since 1996. Joint-Stock Company 'Ak Zhalga' purchases milk in many villages of Jeti-Ögüz rayon, including Chong Kyzyl Suu. These two companies have been a monopolist in purchasing milk from villagers for a long time; there are now at least 5 points of milk collection in both of villages opened additionally to these 2 big companies in last 5 years. In the opinion of villagers it served them well, because price for 1 liter of milk was raised from 7 KGS per liter up to 10.5KGS and 15KGS in summer time. Süt Bulak and Ak Zhalga are still paying the highest price. The other Companies 'Ümüt' and 'Tumar' come from Karakol town. 'Ümüt' Co works for dairy company in Bystrovka village in Chui oblast.

Süt Bulak's strategy is creation of sustainable milk providers system. Therefore within a pilot project 5 farmers from Tasma village and 6 farmers from neighboring village are being trained on improvement of cow breeding conditions; on how to get better yield of milk by improving quality of fodder and regular control of health condition. After the end of training course 'Süt Bulak' Kyrgyz-Swiss private JSC will provide the farmers with credit to purchase dairy cow. As a condition of the program, farmers will have to submit milk only to 'Süt Bulak' Kyrgyz-Swiss JSC. In this way outside Co is building a network with village farmers.

- > The availability of opportunities to sell milk in the village provide villagers with good additional source of income, what gives them opportunity to save more money for land cultivation activities or livestock purchasing.
- > Example of networking with some organizations and companies from outside as exogenous way of rural development with utilizing local resources in a good combination with opportunities of outside agents.

3.3 Veterinary Service

Veterinary service is one of the significant aspects of sustainable livelihood in rural Kyrgyzstan. Because of rapid growth of livestock since 1995, there are many HHs which get their main source of income from livestock, not from land cultivation. The surplus of livestock grown is sold in local market alive or as meat. In order to get maximum income livestock owner must take a good care of livestock which includes fodder and health care issues.

There are veterinarians in the villages who work on self-support base. They have vocational education and experience. However, there is no enough material-technical base necessary for providing a good service. That is a problem of country scale. Health condition of livestock in study villages is satisfactory due to regular check of analysis and vaccination. Most of the villagers are satisfied with veterinary service in the village, though some improvements would be good for them as well.

Although there is no one who has higher or technical education in our family, our experience of sheep grazing and cattle breeding in the mountains during Soviet period helped us a lot in breeding our livestock. Until now we rely on that experience in treating some basic disease of animals at household level.

[Resident of Chong Kyzyl Suu village, shepherd]

Since many of the villager used to work in kolkhoz during soviet period, they have some practical skills and experience in livestock and land cultivation activities. It serves currently farmers in 2 ways. On the one hand they know basics what to do, but there are many changes in system itself: during soviet time all inputs and necessary supplementary materials used to be provided; farmers had no necessity to think of how to get and manage. Now the situation is the other way round. Farmers have to manage everything on their own and pay for veterinarian service such as analysis, vaccination and special treatment needed.

4. Conclusion

The study found that the livelihood strategy of rural population in remote villages of Issyk-Kul oblast is still of defensive character rather than entrepreneurial. Results and findings obtained from sample households analysis show that households are much dependent on agriculture. This study focused on household economy in general; land cultivation and livestock were seen as a component, not a focus of study.

It is recommended that twenty year experience of peasant farmers in sovereign Kyrgyzstan be analyzed from perspective of efficiency and sustainability. Results could be utilized by Kyrgyz government to think of better agrarian management policy, what is a necessity now, since the current agrarian policy is more for food security (Jumabaev, 2012).

Most of sample households are self-employed being involved in agrarian activities and have to face series of obstacles such as: few number of machinery available in the villages; lack of guaranteed buyer system for profitable price; and absence of systematic support for farmers from government. These are one of the main obstacles observed in study areas, but not full list. However, these obstacles mentioned by key informants are enough to cause serious problems in society throughout the cultivation period and demotivate farmers to make better efforts in growing better kinds of crops with economic benefit in mind, not only for self-consumption. It affects all aspects of livelihood of the villagers and their children, pushing younger generation to look for better opportunities in urban areas rather than thinking of developing own village.

LSGBs have no power to change the situation with selling system by advocating interests of farmers in Aiyl Kenesh (Village Deputy Council), who could initiate advocacy campaign in national parliament. That is a feature of the whole system in all over the country, not only for the villages under research.

Cases of successful cooperation with outside agencies showed that exogenous and endogenous community development can be successfully practiced only when interests of both sides are well-understood and community members see their participation makes difference in their livelihood. It would be beneficial for village development if those networks, collected experience and capable Jamaat members used in systematic way to promote pro-active village development *by* community, not only *for* community.

- ➤ Role of leadership skills of Aiyl Bashy (in case of Chong Kyzyl Suu) is well recognized and play positive role in introducing new projects, however, not enough to sustain projects' results. Creation of local community network with involvement of active youth and other residents is recommended.
- > Role of Jamaats in rural development is positive, because Jamaat members get access to new knowledge and new information as a result they get into contact with more people from other communities and organizations which have skills and technologies which could be introduced at first in Jamaat and then spread in the community. In order to make this system work, regular and purposeful partnership between LSGBs and local Jamaats is required.
- ➤ It was observed that *onduks* have good connection with community people and are respected. Their network and knowledge of internal characteristics of community could be well-utilized by project teams and/or LSGBs, to make project activities participatory. It would also stimulate informal leaders onduks to develop capacity and improve their knowledge.
- > Capacity building activities are significant to be continued for local authorities as well as local community members by NGOs and/or donors; however, it would be more efficient if participants of training had some follow-up tasks in order them to practice theoretical knowledge in practice and for providers to monitor how efficient is the module for future improvement. It would also be good if local administrations were more pro-active and create own system of experience exchange among officers; giving a participant of a training or study tour opportunity to re-think what was seen/ learnt while preparing for short master class or seminar in the administration.

There is a necessity for studying needs of farmers in order to build national pro-farmers agrarian extension service, which would help farmers to become more efficient; and to see obstacles and opportunities for co-operation of villagers in rural development. Therefore as it was proven by many developed countries practice of social development with utilization of locally available resources must be prioritized by national government of Kyrgyzstan and local administration.

Role of LSGBs in advocating interests of villagers is crucial, because local administration officers are not only the closest officials to villagers, but also members of the same territory and know the problems not by ear.

If rural areas of Kyrgyzstan stay un-developed and lacking rational and efficient support from central government by means of policies and programs like now, and local administrations do not promote co-operation among community people it will be difficult to imagine successful development of the country. Therefore Kyrgyz by-word 'Road to the universe starts in the village' still has meaning and good to be considered in formation of rural development policies.

Endnotes

- ¹ According to National Statistic Committee's Census Report (2010) sixty five (65) per cent of the total country's population resided in rural areas as of 2009, which is more vulnerable to poverty.
- ² See Patnaik, A. 'Agriculture and Rural out-migration in Central Asia 1960-1991', p. 147.
- ³ Local self-government bodies are represented by Association of Local Self-Governments of Villages and Settlements of KR. Since November 12, 2010 association is renamed as Union of Municipalities, which includes all urban municipalities (25); village municipalities (459); and rayon keneshes (deputy council (40)). See http://citykr.kg/start/en/about-msu for more details.
- ⁴ Counterpart-Sheriktesh is registered NGO, established by civil society activists with aim to build capacity of civil society organizations in Kyrgyzstan. From the outset, Counterpart-Sheriktesh was involved in capacity building support, providing consultations in organizational development, and facilitation of information exchange between NGOs and community organizations. Counterpart-Sheriktesh actively participated in development of National Poverty Reduction Strategy; two chapters concerning wide participation procedures and NGO role in the implementation of the given strategy were developed by Counterpart-Sheriktesh staff (For more details see the URL http://sheriktesh.org.kg/html/mission en.html).
- ⁵ Population within 18-64 age group is considered
- 6 Village profile is a document which contains information on socio-economic infrastructure of AO villages; renewed annually. However data are not accurate and not used by AO for planning of village development.
- According to the Law No 71 on Road Fund ratified in 1998 LSGBs used to collect road transport tax and transfer the total sum to republican budget; although maintenance of road was of LSGBs' responsibility. That was one the biggest drawbacks of that law (Tyulyundieva, n.d.), worsening village roads' quality. Road transport tax has been collected and used 100% by LSGBs since 2001 due to amendments made in the Law and Tax code. However, problem of road reconstruction is too capital intensive and still can't be managed by such AOs like Karasaev and Svetlaya Polyana with relatively small population and small amount of tax collected.
- ⁸ See the Annex 1 for other products' indicator
- Open Joint Stock Co "Ak Zhalga" was established in 1994 on the base of former Pokrovka cheese making factory. JSC makes dairy product: cheese, cream cheese, butter, sour cream, yoghurt, curd cheese. Production capacity in 24 hours: processing 50 tons of milk. There are 112 employees in the ISC.

References

Abdusalyamova, L. and Warren, H. (2007), Organizational capacity building in Central Asia http://www.intrac.org/data/files/resources/412/Praxis-Paper-15-Organisational-Capacity-Building-in-Central-Asia.pdf on April 23, 2012

Akramov, K. T. & Omuraliev, N. (2009), Institutional Change, Rural Services, and Agricultural Performance in Kyrgyzstan,

International food research institute, 1-5. Retrieved from http://www.ifpri.org/sites/default/files/publications/ifpridp00904.pdf on May 16, 2012

International labor organization, (2008), Kyrgyzstan: economic growth, employment and poverty reduction, Geneva, 5-71. Retrieved from http://www.ilo.org/public/english/region/eurpro/moscow/info/publ/kyrg_econom_grow_en.pdf Retrieved on July 9, 2011

Jumabaev, J., (2012), Development of farms in modern conditions and in prospects [Развитие крестьянских (фермерских) хозяйств], *Kyrgyz-Russian Slavic university newsletter*, 12 (4), 38-40.

Lerman, Z., and Sedik, D. (2009), Agrarian Reform in Kyrgyzstan: Achievements and the Unfinished Agenda. FAO, Rome. National Statistic Committee Census Report, (2010), Bishkek, 11-18.

Ronsijn, W., (2006), Coping during transition in rural areas, *The case of post-soviet southern Kyrgyzstan*, Ghent University, 1-15. Retrieved from http://www.psw.ugent.be/crg/Publications/working%20papers/workingpaper ronsyn.pdf on February 23, 2011

Steimann, B., (2010), Making a Living in Uncertainty, Agro-Pastoral Livelihoods and Institutional Transformations in Post-Socialist Rural Kyrgyzstan (Doctoral dissertation, Zürich University), Retrieved from http://www.dsgz.geo.uzh.ch/Steimann. html on November 13, 2011

Tyulyundieva N. M. (n.d), Legal basis of finance-economic base of local self-government in Kyrgyz Republic (Правовая основа финансово-экономической базы местного самоуправления в Кыргызской Республике). Retrieved from http://municipalkg.narod.ru/tiva.htm on March 12, 2012

Annex 1. Monthly Ration of The Average Citizen in Kyrgyzstan as of 2010 Year

#	Item	Amount per person/month (kg/pc)
1	Bakery products (bread, macaroni etc.)	7.88
2	Potato	4.69
3	Vegetables	6.83
4	Fruit	7.76
5	Milk	5.86
6	Yoghurt	5.74
7	Curd cheese	0.23
8	Butter	0.31
9	Meat (beef, mutton, chicken)	3.16
10	Fish	0.35
11	Egg	16
12	Sugar	1.6
13	Vegetable oil	0.79
14	Tea	0.2
15	Salt	0.2

Note: As of the end of 2010 the total cost of the food basket was 3,850KGS (\$83.9)

Source: National Statistic Committee www.stat.kg