Pasture Management – in an electronic format

Best practice replication of the “Demonstrating Sustainable Mountain Pasture Management in the Suusamyr Valley, Kyrgyzstan” Project implemented by UNDP funded by GEF (2008 - 2013) in frames of the UNDP - UNEP Poverty and Environment Initiative
Main activities’ success of the “Demonstrating Sustainable Mountain Pasture Management in the Suusamyr Valley, Kyrgyzstan” project implemented by UNDP and funded by GEF is Computer-based system “Electronic Pastures Committee” that was developed and implemented in the Suusamyr Valley. After two years of its testing, this mechanism has allowed the solution of the most important problems relating to the Pasture Management and today it supports population of Suusamyr Valley to manage their pastures resources and to deliver a regular based monitoring of pastures in Suusamyr Valley, as well as monitor land degradation processes. The system is very simple and accessible: data are entering in the computer on rangeland’ square, number of livestock, grazing periods. After that the program automatically identifies underexploitation or overexploitation of various rangelands. Land was divided into separate parts after the inventory of 304 thousand hectares of land, its capacity and yield is identified. The system includes functions on counting of livestock number, vaccination control, it allows to make a search of pasture tickets, routes of livestock migration, number of grazing livestock, grazing area, calculations and accrual amount of payment, recordkeeping of payments as well. This information system significantly simplified the work of the Joint pasture users’ Association “Suusamyr”. This system led to the big interest not only in our country, but also in the neighboring Central – Asian countries like Kazakhstan and Tajikistan. In frames of this project, the system has been introduced in 11 districts / rayons of Chuy, Talas and Jalal - Abad oblasts that graze their livestock within the Suusamyr Valley. As a response on the big interest coming from other parts of the country, there are ongoing activities since 2013 in order to replicate this system in 5 Aiyl - Okmotu of two rayons in Naryn oblast in frames of the ongoing UNDP – UNEP project “Poverty and the Environment”.

**Informational system “Jaiyt Committee”. New Modules**

**Subsystem of the livestock keeprecording:**
- Livestock keeprecording by types and owners.
- Keeprecording of the livestock vaccination.
- Plan and execution of vaccinations.
- Keeprecording of livestock owners.
- Issuance of Certificates on livestock ownership.
- Information search.
- Reporting.

**Rangeland’s card**

**Rangeland’s card contains followings:**
- Inventory data on the status of the rangeland.
- A list of rangeland’ frames including inventory data.
- List of issued pasture tickets.

**Issuance of the pasture tickets includes followings:**
- Data on pasture user.
- Route of livestock migration.
- Number of grazing livestock.
- Data on vaccination.
- Grazing areas.
- Charge the amount of the payment.
- Accrued amount of payments.

**The reports should include:**
- Issued pasture tickets
- Debt of pasture users
- Exploitation / workload of grazing areas / rangelands
- Inventory of grazing areas / rangelands
- Inventory of rangelands’ frames.
Esengul Isakov,
Deputy of the Jogorku Kenesh (Parliament) of the Kyrgyz Republic:

“The Law “On pastures” has been adopted in 2009 that provides with mechanisms for the cost-effective use of rangelands. Unfortunately, the methodology of our ancestors, who at all times grazed their livestock seasonally, was forgotten. Village pastures began to be used intensively, and pastures that are located in remote areas, are not used at all. Pasture infrastructure has been partially or completely destroyed. Almost 80% of the pastures were covered by the degradation. The adopted Law has provided with a push to a new use of pastures. On the basis of the Law Jaiyt Committees were established that take the responsibility and obligations on Pastures’ Management. All innovations have been applied in practice in the Suusamyr Valley due to UNDP-GEF project. Experience has demonstrated that all problems have been eliminated in Suusamyr Valley that they have before. Pastures started to be used on the basis of timelines, depending on the time of the year. Pasture improvement is visible and evident. And most important issue - Jaiyt Committees jointly with pasture users began to rehabilitate the destroyed infrastructure. This experience we would like to introduce in other regions of the country, for example, in the Naryn oblast, where there are many pastures”. (From the speech of E. Isakov in the meeting with members of the Association “Suusamyr Jaiyttary” 2012.)

Nurdasan Kulmatov, Chairman of the “Suusamyr” Public Association of Pastures users:

“Electronic system strongly simplifies activities of Jaiyt Committee: we are entering all data into the computer, we could print out our pasture tickets. Everything is clear and simple in terms of what pasture is used now, what pasture will be used in spring, autumn, summer. If suddenly somebody will come in order to check our work, they also could sit at the computer and have a look on how much money we spent per item. It’s not necessary to open documents; you can see everything in the electronics module. Before it we recorded everything by hand, somewhere we had mistaken, right now everything is delivering automatically, the computerized system calculates everything itself. It’s a very convenient and easy way to work efficiently.” (From the speech in the project deliverables’ presentation for the Ministry of Agriculture).

Lyudmila Penkina, “Demonstrating Sustainable Mountain Pasture Management in the Suusamyr Valley, Kyrgyzstan” project expert:

“They would like to introduce this practice in other oblasts and to get the same result. Many representatives of Ayl districts, Jaiyt Committees are ordering materials on identification of rangelands’ boundaries and development of map as well. I see here that this as a great output for the promotion of the results that has been achieved by the “Demonstrating Sustainable Mountain Pasture Management in the Suusamyr Valley, Kyrgyzstan” project.
Replication of the best practices in Suusamyr Valley in other regions of the country has become one of the directions of this initiative. And in frames of this initiative there were activities delivered already in 2012 - 2013 in the Naryn in five pilot Ayil Okmotu (Village Administration) of At-Bashi rayon / district of Kara-Suu and Kara-Koyun and Naryn rayon – Dobolu, Ortok, Sary-Oi.

The total area covered by the pilot works was equal to 360, 046 thousand hectares including 106, 747 ha of pastures. For example, in Dobolu ayil aymak (rural area) the total area that is covered by the pilot works was equal to 3, 1954 hectares and out of it there were 17,430 ha of pasture, hay - 45 hectares, and the cost of pasture was equal to 2, 140 thousand USD. There are opportunities to graze livestock in livestock unit -7505, sheeps - 8067 and horses - 1584 in this site. There were main activities implemented here on the inventory, geo - botanical surveys, economic assessment and development of Livestock Grazing Plans, that allowed to get an opportunity to define the using boundaries of pilot areas, its dimensions, to determine the composition of plant communities, types and seasons of pastures, its productivity, yield, gross forage supply, presence of non - eaten, ruderal and toxical vegetation. During of the working process there was keeprecording execution of the existing livestock capita, its grazing sites, routes of livestock migration and terms of use. Under economic assessment the livestock production was taken into account, its final cost and opportunities to generate incomes by villagers from the used area. As a result of the work it was found that the explored area under the proper management can generate incomes equal to 13 million US Dollars.

In this regard, the computer based informational system “Electronic Jaiyt Committee” has been installed and introduced in five pilot aiyl aimaks of At-Bashy and Naryn rayons of Naryn oblast. This system provided with the opportunity for sustainable pasture management as well that. It will be focused on the improvement of the pasture status monitoring, and allow to monitor the process of pasture degradation in the region. The following activities have been carried out in order to launch this system in Naryn: inventory, geo - botanical survey and Economic Assessment of Pastures, Grazing Plan including specific timetable and routes of livestock migration have been developed, the identification of yield and capacity of pastures. All pilot pasture committees were provided with computer equipment and nowadays they use the electronic system for the cost – effective and sustainable Pasture Management.

The training module “Video lesson – Electronic Jaiyt Committee” has been developed aiming capacity building of pilot Pasture Committees’ members, on the basis of this module there were 12 trainings delivered on training skills of pasture users on sustainable Pasture Management, and use of the information- al system “Electronic Jaiyt Committee». This work was delivered due to the support of teachers of both Naryn State University and University of Central Asia.