Introduction
The CBA program is supporting the implementation of between 8 and 20 community-based adaptation projects, designed to enhance the adaptive capacity to climate change of participating communities, in each of ten countries (Bangladesh, Bolivia, Guatemala, Jamaica, Kazakhstan, Morocco, Namibia, Niger, Samoa, and Vietnam). In order to ensure cost-effectiveness, projects are implemented in areas that are particularly vulnerable to climate change including variability, and where there is high potential to secure global environmental benefits in the context of climate change. Projects like this one under review, emerges from each of the focal areas [biodiversity, land degradation, coastal zone management, etc] depending on local context, specific vulnerability and adaptation analysis in each of the selected sites within the countries. To achieve the objective of this project and in line with the overall CBA programme, all activities discussed during evaluation should provide clear inputs to the three overall outcomes at the global levels. These are:

(i) Enhanced adaptive capacity allows communities to reduce their vulnerability to adverse impacts of future climate hazards
(ii) National policies and programmes designed to include community adaptation priorities to promote replication, up-scaling and mainstreaming of best practices
(iii) Cooperation among member countries promoted for innovation in the design and implementation of adaptation to climate change including variability projects and policies.

SECTION A: Project Details

1.0 Name of Project: Adaptation of pastoral cattle farming of Lepsy local community to the climate change

2.0 Project Number: CBA/KAZ/SPA/09/03

3.0 Project Start Date: April 2009

Project End/Termination Date: September 2011

No. of Project Extensions If Any: The project had one extension, from May 1 to September 30. The reason of the extension was to finalize and improve the final project reports by the project executing parties.

4.0 SECTION B: ORIGINAL PROJECT INFORMATION:

5.0 Project Goal, objectives, expected outputs and sustainability plans:

The project goal is to prevent the adverse impacts of the climate change on the Semirechye sandy pastoral ecosystems.

Project objectives:
Restoration of the traditional seasonal use of pastures as an adaptation method to the climate change conditions;
To give due regard to the climate change risks in pastoral management and distant grazing;
To enhance the community's capability of mitigating the climate change (aridization) risks;
The lessons learned from the project have been collected, analyzed and disseminated.

**Expected outcomes:**

1. The agreement was signed with Sarkand District Akimat on the use of remote pastures (those located 25-30km from Lepsy village) by the project.
2. Productivity assessment was performed over the remote and near-village pastoral lands.
3. Three pit wells and watering sites have been rehabilitated at the remote pastures.
4. The areas of grazing lands have been expanded to 5850ha due to water use optimization.
5. The technology of seasonal pastoral use by the community herd managed by the project participants has been implemented and accomplished with the herdsmen.
6. The basic infrastructure was established at the distant pastures: the yurt and solar generator have been installed, cattle yards have been developed, the supplies of drinking water and food products have been organized.
7. Over 1000 heads of small cattle and 300 heads of cattle owned by the LC members are grazed at the remote pastures located 25-30 km from the village.
8. Pastoral rotation (the rotation of seasonal grazing sites) has been established at the remote and previously unused pastures.
9. The cattle load on the near-village pastures was reduced by 30-40% compared to the current loads.
10. The environmentally sound loads on pastures are ensured by making agreements with the cattle owners.
11. The vulnerability of LC members was reduced along with the enhancement of their livelihoods by virtue of the sustainable traditional cattle farming practices within the project site.
12. The optimal methods to reduce the climate change impacts on the sandy pastures have been replicated by the neighboring communities.
13. The technology accomplished by the project is recommended for the other sandy lands of Kazakhstan totally containing 31.2 million ha of the country territory.

Sustainability mechanism. The activities of the project will be expanded by the local community members owing to the outcomes to be attained. The accurate implementation of the project activities will enable to reduce the adverse impacts of the climate change and develop the sustainable project activity upon completion. Public, production, social and scientific capacities will be accumulated by the project is used by the local community both during and after the project.

**SECTION C: METHODOLOGY (Describe the innovative methods/systems estratégias used in the project and a listing of name of participants/organisations in this process):**

The system of seasonal pasture rotation and distant grazing has been developed and implemented within the project. The community herd was established and part of the community cattle
was driven to the remote pastures where cattle was grazed in spring, summer and autumn coming back just for the winter. The development of remote pastures was possible after restoration of the traditional wells and watering sites.

The optimization of water supply to remote undeveloped pastures enabled to distribute the stock on the vast territories, preserve the productivity and mitigate the factors affecting the normal feeding of cattle and livestock products. Given the poor water supply especially in the situation of the growing climate aridity, the step was rather well timed and enabled in a certain manner to adapt to the ongoing changes.

The second innovation of the project was the arrangement whereby the pastures were used depending on the conditions of vegetation i.e. where animals are first of all grazed at the dry sites and then at more wetted pastures (in hollows and depressions).

The project was implemented by Farmer of Kazakhstan Public Foundation in collaboration with Arai PF and the local community of Lepsy village. The project engaged 155 households.
### 6.0 The table

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Findings on Activities and strategies Implemented</th>
<th>Lessons learned and Challenges Encountered</th>
<th>Tools and Products developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M+E performed previously</td>
<td>The project monitoring covering the project duration from 2009 to 2011 has shown that the project outcomes deserve a high evaluation. LC members ensure continuous monitoring of the grazing practices and the cattle conditions at the remote pastures. In the course of the project the executing parties have shown the full agreement of opinions in their willingness, capabilities and capacities to follow up with the project activities at the end of the donor's financing. The monitoring of project activities, interviews with the village inhabitants and the vulnerability reduction assessment exercises have shown that the adaptation method implemented as well as the project outcomes attained have reduced the dependence of Lepsy inhabitants on the growing climate aridity on the project site. It follows from the project outcomes that the seasonal pastoral rotation technology is the best method of cattle farming adaptation to the growing climate aridity risks in the desert zone. The project experiences were followed up by 2 farms of Lepsy village and the local</td>
<td>With CBA Program financial donor aid and the grant provided by the Swiss Government the LC of Lepsy village managed to overcome the main barrier – the lack of starting capital to perform the climate change adaptation activities, notably: to restore water supply to remote and more productive pastures; to develop the basic infrastructure at the distant grazing lands and arrange the pastoral rotation. The rotation of grazing sites enables to mitigate the growing climate aridity. The project activities enabled to address a number of management issues such as allocation of grazing lands to the local community members; arrangement of the community herd; hire and training of herdsmen. It follows from questionnaire survey of the local community members that the project has contributed to a number of issues. At the same time, there are some external barriers that need to be</td>
<td>The project-related information was actively disseminated within the project through: - Field Days; - Workshops and training; - Publication of the information materials such as brochures, leaflets, newspaper articles and the video film created. Four workshops and 2 training courses have been performed by the project to train the local community members and inhabitants of the neighboring villages in the methods of sustainable pastoral management implemented by the project. The Field Days were organized for the village inhabitants and farmers within the entire grazing period. The training was organized dedicated to the climate change at the project site and the opportunities of vulnerability reduction of the local community by way of pasture watering and development of the rotational seasonal use of remote pastures. The brochures have been published dedicated to the seasonal grazing</td>
</tr>
</tbody>
</table>
community of Kokzhide village that have organized with no outside help the seasonal pasture rotation using the watering sites restored by the project.

addressed: removal of the entire stock from the near-village pastures; the lack of experienced herdmens, training of LC members.

The project approach, simple and understandable to the village inhabitants, has demonstrated the ways of LC adaptation to the climate change risks, and generated interest in various regions of the country. For the time being there are some cases of its replication.

technology, climate risk mitigation within grazing cattle-farming sector, Lepsy project implemented under CBA Program.

The Project Manager presented the project at the meetings of district, oblast and national levels, UNDP workshops on the climate change adaptation, by radio and on TV.

The project information was regularly published in the newspapers, magazines and the other mass media.

| Training and Capacity building of grantees and communities | The grantees were actively involved in the training activities for the LC members of Lepsy village and the neighboring villages dedicated to the rules and methods of sustainable pastoral management in the desert zone. The main goal was to ensure maximal coverage of the district inhabitants to make them aware of the potential climate change risks, adaptation methods of the rural population and demonstration of specific methods implemented by the project and enhancing the adaptation capacities of the local community members of Lepsy village. | The training participants (not only the inhabitants of the nearby villages but also people from the neighboring districts) proposed a number of ideas and are willing to develop the projects focused on the new approaches to the adaptation of local communities to the climate change risks.

The Arai Youth Center Rural NGO has develop a new project and obtained SGP GEF grant for the forage base development by seeding wheat grass, a forage draught-resistant crop. | Capacity building of the local communities and enhancement of their involvement in the adaptation activities are encouraged by the Field Days organized on the project site, demonstration of economic efficiency of the methods implemented, publication and dissemination of the information leaflets, brochures, video film exhibition and presentations of the project executing parties in mass media. |

<p>| Community mobilization | The proposed project approach was discussed in 2008 at the general LC meeting. | The main lesson learned from the project was the continuous | The community mobilization tools were the meetings, discussions, Field Days, |</p>
<table>
<thead>
<tr>
<th>How project promoted or impacted policy</th>
<th>The project strategy is the flooding of distant pastures and expansion of grazing lands under the growing climate aridity conditions. The project activities were focused on implementing the technology of pastoral resources sustainable management i.e. revival of the traditional method of seasonal pasture utilization. Such approach has improved the LC adaptation and the livelihoods of the local inhabitants. The project was enlisted in the list of the best practices of the Kazakhstan National Concept of Climate Change Adaptation. The project in question as well as a number of</th>
<th>The project was a good demonstrational ground for the technology and advantages of the seasonal rotational use of pastures. The Project Managers, FKF experts presented the project activities and outcomes at the oblast and republican international workshops, meetings and round tables held in Astana, Almaty, Taldykorgan, Korgalzhyn etc. The problem is that the Ministry of Agriculture has no any unit or department on pastoral</th>
<th>An important component of LC capacity building has been accomplished that included training in the field of pastoral resources management. The grantees actively worked on the improvement of local awareness in field climate change and the risks faced by grazing cattle farming as well as the methods of adaptation to such risks in order to reduce the LC vulnerability under the growing climate aridity conditions. Owing to the broad demonstration of the pasture rotation arrangements, the local community of Kokzhde village (15km from Lepsy village) and 2 farms of Lepsy</th>
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<tr>
<td>The project goals, objectives and activities were supported by the local community members. In the beginning the project involved 25 households. Owing to the awareness activities, regular Field Days and project monitoring by the village inhabitants, in 2010 155 people of Lepsy village have been involved in the project.</td>
<td>awareness of the local community members of the project outcomes; demonstration of the project benefits; involvement of the local inhabitants in the project monitoring. The challenge encountered at the project inception stage was the distrust of inhabitants in the opportunity to restore the wells and arrange the distant grazing. Some problems exist with hiring herdsmen and stock-keepers. But the issue is not just of local significance, it has the national scale.</td>
<td>dissemination of information on the project outcomes, specifically the economic figures reflecting the growth of well being of the project participants.</td>
<td></td>
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</table>
Other SGP GEF projects in the field of pastoral resources sustainable management were the basis of the National Program of Kazakhstan's Pastures Revival currently developed by the Ministry of Agriculture. Management. The Law on Land has no adequate provisions on pastures. Pastoral management is under the competence of the local executive authorities that have neither professional staff, nor finance to perform the monitoring of pasture conditions, control their use and organize the infrastructure of seasonal pastures. Village have arranged seasonal grazing using the project pattern on the territory flooded under Lepsy project. To remove the barriers to implementing the adaptation methods used by the project, the advocacy of the project experiences needs to be continued in mass media along with the work with the district akimats and the other related agencies.

| Other important activities of Project | The participatory video method was used to make the video film that is exhibited in the villages. The project experience to reduce the climate change impacts on the grazing cattle farming is widely promulgated and disseminated in the areas of Kazakhstan with the similar ecosystems. | Seasonal grazing of cattle is a traditional method to conserve the pastoral fertility and enhance the resistance of LC members to the growing climate aridization. The proposed approach is simple and understandable by the rural inhabitants that guarantees the project sustainability and is further replication. | The regular meetings of the village inhabitants to explain the benefits of seasonal grazing. Weight monitoring of cattle and performance of stock productivity analysis for both distant and near-village grazing. Publishing and dissemination of the information concerning cattle farming productivity enhancement resulting from the distant grazing among the village inhabitants and throughout the district. |
SECTION D: Environmental Benefits

7.0 Summary of the VRA/IAS, Volunteerism Activities and interpretation of the data/information in the M+E table

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Supportive Narrative Information and or Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results of the Vulnerability Reduction Assessment</strong></td>
<td><strong>First/Initial</strong></td>
</tr>
<tr>
<td>Sustainability of the project outcomes is well demonstrated by the results of the workshops dedicated to vulnerability reduction assessment (VRA) of LC members to the climate change risks. There were 3 vulnerability reduction assessment workshops conducted in Lepsy village. The participants were asked 4 indicator questions as follows:</td>
<td>VRA workshop was held on November 25, 2008</td>
</tr>
<tr>
<td>• How serious is the climate change impact on your livelihood?</td>
<td>Question 1: score 4,7</td>
</tr>
<tr>
<td>• How serious will be the impact of increased raught on your livelihood with the existing agricultural practices?</td>
<td>Question 2: score 3,7</td>
</tr>
<tr>
<td>• Give an assessment of the obstructions constraining to your implementation of the climate change risk mitigation activities?</td>
<td>Question 3: score 3,9</td>
</tr>
<tr>
<td>• Give an assessment of your capabilities and willingness to support the project activities?</td>
<td>Question 4: score 1,2</td>
</tr>
</tbody>
</table>

To ensure the experimental integrity all the three workshops involved the same LC members who were asked the same 4 questions (indicators). The scores were assigned by the participants based on a five-grade scale, where 5 means heavy impact and 0 denotes low impact. The analysis of scores assigned by the workshop participants has shown the trends as described below:

**Question 1:** The assessment given at workshop 1 has shown a heavy impact of the climate change on the livelihoods of LC members. The scores of workshop 2 were lower compared to those at the outset of the project, although the workshop participants have mentioned the further aggravation of climate. According to the judgments provided by the LC members the reduction of the climate change impact was under the influence of the project activities. At the distant pastures the cattle owned by the LC members has shown good weight gains thus contributing to the growth of LC’s income from the sale of livestock products. The third assessment has shown even less
dependence of the LC members on the climate change.

**Question 2:** The assessments have shown the LC members’ concerns in respect of the further climate aggravation and the impacts on their livelihoods. At the third workshop the participants have noted the increased livestock productivity in connection with the use of seasonal pastures. They have also expressed their confidence that the proposed method will help to adapt cattle farming to the climate change risks. They have mentioned the need to continue with and expand the project activities i.e. to develop the remote and more productive pastures and extend the grazing period in order to reduce the hay consumption.

**Question 3:** In 2011 the score has dropped by the end of the project. It follows from the assessment that the project helped to overcome a number of obstacles: the akimat’s support has been gained; the material and financial aid has been provided; the required equipment has been procured to develop the distant pastures. Some constraints still exist that need to be resolved on the governmental level (the lack of clear-cut legal rules of pasture use; the lack of qualified herdsmen and the governmental support for rangelands watering).

**Question 4:** This is the most indicative question to assess the project impact. The assessment of 2008 has shown quite a low confidence of the LC members in their capabilities to implement the project activities. The scores of 2010 have demonstrated the growth of confidence and willingness of the LC members to follow up the project at the end of financial assistance. Such confidence was the most convincing in the third assessment of 2011. The local community have seen the positive result of the seasonal grazing at the distant pastures proposed by the project. Having believed in the opportunity to improve their livelihoods the LC members have expressed readiness to make their own contribution to the further implementation of the project activities.

The method to conduct the vulnerability reduction assessment workshops is rather convincing to show the project sustainability.

| Description of the voluntary contribution (capacities, Arai PA was a key project executing party whose... |  |  |
knowledge, know-how, manual labor, materials, tools, etc.). Gender segregated data on communities engaged, opportunities and barriers to volunteerism, existing volunteerism activities before and after implementation of project.

For the purposes of project implementation, an initiative volunteer group composed of farmers and cattle owners was established in Lepsy. Its members were involved in the project, starting from the concept discussion through the project completion, its monitoring and promotion. The volunteers from among the local inhabitants cleaned and repaired the wells and established watering sites.

Arai PA has representatives in the neighboring villages who were involved in the project activities on a volunteer basis. The project encouraged the volunteer movement in Kokzhide and Kokterek villages.

The project has contributed to the development of the rural volunteer initiative, volunteer movement and encouraged the community unification.

### The results of the Impact Assessment System Indicators (Global Environmental Benefit focal areas + Livelihood and Empowerment)

<table>
<thead>
<tr>
<th>The project verification against the indicators as set up in the project has shown a high efficiency of the project activities.</th>
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<tbody>
<tr>
<td>1. <strong>Reduction of load limits:</strong> The project activities have ensured a 29.1% reduction of the load on the near-village pastures.</td>
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<tr>
<td>2. <strong>5850ha of pastoral lands are under sustainable management:</strong> The sustainable grassland cattle farming was established in the area of 5850ha of remote pastures.</td>
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<tr>
<td>3. <strong>10-12% increase in live weight of cattle:</strong> By the end of grazing period, the live weight of livestock grazed according to the project arrangements exceeded the same parameter of the animals grazed at the near-village pastures, notably: 27-32kg/head of cattle and 5,0-6,5kg/head of small cattle. Due to the weight gains of cattle the income made by the LC members involved in the project increased by 33-35%.</td>
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<tr>
<td>4. <strong>The number of technologies implemented:</strong> The technology of seasonal use of distant pastures was implemented through the project.</td>
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<tr>
<td>5. <strong>10% of inhabitants have access to the sustainable grassland cattle farming.</strong> 20% of village inhabitants are involved in the...</td>
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</table>
sustainable pastoral resources management under the project.
6. The number of NGO’s/LC’s involved in the project: **2 NGO’s and 2 local communities** of the neighboring villages have been involved in the project activities. The number of households involved in the project increased from **25 to 155**.
7. The improvement of the near-village pastoral foliage cover: In 2010 the foliage cover of the near-village pastures was increased by **7-10%** and the productivity – by **0.5hw/ha**.
8. The number of wells and watering sites restored: The project has restored **3 wells** and its watering sites.
9. The number of stock taken to the distant grazing: 2009 - 520 heads of small cattle and 152 heads of cattle; 2010 - 1250 heads of small cattle and 300 heads of cattle.
10. Design of the grazing arrangements: The project designed a seasonal use of distant pastured maintained by the rural district.
11. Evaluation of pastoral soil-feeding capacity: The project used the distant rangelands which productivity was **15% higher** compared to the near-village pastures.
12. The number of yurts purchased: **4 yurts** have been purchased; **one** of them was financed by the Swiss grant.
13. The number of leaflets: The information leaflet dedicated to the climate change has been published in the Kazakh and Russian languages and disseminated.
14. Booklet publication: **2 brochures** have been published: «Reduction of Climate Change Risks in the Grassland Cattle Farming », 20 pages, A4 format, with color photos; and «Key Elements of the Rational Grazing Preventing Degradation of Pastures», 32 pages, A5 format, with color photos.
15. Dissemination of strategy on all the levels: In addition to the project activities the project experience was applied by the **2 farms** of Lepsy village and the **local community of Kokzhide village**. In addition, the new project in the field of sustainable
Pastoral management was initiated in the South Pre-Balkhash Area.

16. Demonstrational workshop: The regional **Round Table** and three **workshops** on vulnerability reduction assessment have been organized. The **demonstrational workshop** was held on 25 March 2011 in Taldykorgan attended by the officials of the oblast and district akimats, LC members of Lepsy village and M. Tolebayev.

| Describe the results of the Adaptation indicators measured during the project | The project results were verified against the adaptation indicators as described below:
1. **Percent change of the population dependent on the natural resources that have access to the alternative or additional livelihood sources.**

In 2010 155 households were involved in the project making 20% of the village inhabitants. That was a high percentage since Lepsy is a railroad center and the majority of inhabitants work at the railway station.

2. **The efficiency of intervention of the sustainable use of natural resources in ensuring the livelihood sources and protection of natural resources.**

The restoration of three water wells at the remote pastures that have been out of use due to the lack of water enabled to expand the grazing area up to 5850ha (one well supplies the grazing territory in about 8km radius). |

| Provide a Summary Paragraph on the above monitoring and evaluation activities | The project serves a successful example of proper selection of the sustainable pastoral management technology in the desert zone of Kazakhstan under the growing climate aridity conditions. The method proposed by the project is built on the revival of the elements of the traditional Kazakh nomadic cattle breeding. The approaches proposed are demanded by the rural communities living in the desert zone, do not require high capital investment, are easily implemented and enable to become less dependent on the climate change. |

**8.0 Project outcomes with respect to the following variables:**

**Objective 1: Restoration of the traditional seasonal use of pastures as an adaptation method to the climate change conditions**

On the territory of Lepsy LC the disturbance of traditional grazing practices along with the climate change have resulted in the reduction of yields of the pastoral vegetation, pastoral degradation...
and the loss of livestock productivity. The relations climate – vegetation – animals – livestock products – living conditions of cattle owners - are clearly visible. The growing droughts of the recent years had an adverse impact on the above relations and affected the living standard of the village inhabitants. The problem was addressed by the activities under Objective 1.

Objective 1 has been accomplished with the following outcomes attained:
- Water supply has been restored at the allotted grazing territory by repairing three pit wells;
- As a result of pastoral water supply optimization the areas of grazing lands have been expanded up to 6 thousand ha;
- The local community members started developing the new pastoral lands, thus the cattle load on the near-village pastures has been reduced by 29,1%.

The main effect of Objective 1: the outcomes attained enabled to reduce the LC vulnerability by way adding the new more productive territories to the pasture rotation system. The approaches built on the traditional knowledge have been demonstrated that can be used in any LC with similar natural and climate conditions (in Kazakhstan the total desert pastoral area similar to the project site contains 31,2 million ha) to adapt the grazing stock farming to the climate change risks.

Objective 2: The climate change risks are incorporated in the pastoral management and cattle farming issues

Before the project 2000 ha of total 6307 ha of pastoral lands have been used. The pastoral yielding capacity did not exceed 150 kg/ha vs the potential productivity of up to 500 kg/ha. Due to the low awareness of the local authorities of the climate change and the related risks and due to the lack of budget funding and knowledge the akimat of Lepsy village was not able to establish the rational and sustainable pastoral resources management.

The goal of Objective 2 was to establish a cooperation model between the akimat and the LC members, to develop the agreement on allotment of the distant rangelands to the LC members for the purposes of seasonal cattle grazing.

The following outcomes have been attained as a result of the activities implemented under Objective 2:
- Improved awareness of the Lepsy akimat officials of the climate change risks existing on the project site and of the methods to reduce the LC vulnerability;
- The consensus reached and the agreement on the use of remote rangelands concluded with the akimat;
- Three grassland sites selected for the remote cattle grazing: Kasavatka – 1350ha, Butlyu – 980ha, Kum – 2000ha;
- The yielding capacity determined for the pastoral biomass at each seasonal site selected;
- The livestock number calculated per each seasonal site taking into account the pastoral yielding capacity, load limits and climate change;
- In 2009 the remote pastures located 25-30km from the village accepted 1280 conventional heads of cattle owned by the LC members;
- In 2010 the remote pastures accepted 3275 conventional heads of cattle owned by the LC members including 1250 heads of small cattle and 285 heads of cattle;
- The grazing load on the near-village pastures has been reduced by 29,1%.

Positive effect of Objective 2: the model of collaboration established between the cattle owners and the akimat to allot the grassland areas for the community cattle in view of the climate change risks.
Objective 3: Capacity building of the local community to combat the climate change risks (aridization)

The following outcomes have been attained from the activities under Objective 3:

- The project has developed and has been for the first time ever implementing since 2009 the technology of seasonal use of pastures associated with the rural district to graze the cattle owned by the community members involved in the project. The above technology minimizes the adverse impact of grazing on the soil and vegetation. Such arrangements represent the following order of pasture rotation: spring pastures (Kasavatkaa) containing 1350ha are used from 1 April to 15 June; summer pastures (Burlyu) covering 980ha located 27km from the village are used from 15 June to 20 September; autumn pastures (Kum) covering 2000ha are used from 20 September to 1 December; and in winter i.e. from 1 December to 31 March the cattle is maintained in stalls at the household plots.

- The rational seasonal use of pastures was constrained by the lack of infrastructure on the selected sites. The following activities have been implement by the project to address the problems:
  - Three pit wells and the watering sites (water-filling points, watering pans, concrete beds) have been repaired on the grazing site Kum;
  - Three electric generators purchased to supply electric power to the remote pastures;
  - Three water pumps purchased with the flow rate of 2m²/hour;
  - Four yurts purchased for the herdsmen;
  - Four saddles purchased for the herdsmen;
  - One water dispenser (drinking water tank) purchased for the herdsmen;
  - Wire grid purchased for 4 yards of small cattle.

- Four workshops and 2 training courses have been conducted within the project dedicated to the new pastoral utilization focused on the climate change risk mitigation and sustainable grazing cattle farming. The workshops have been attended by the LC members involved in the project, the rural district authorities, the authorities and specialists of Sarkand District and Almaty Oblast interested in the project outcomes.

The local community have benefited from the more sustainable agricultural practices applied such as the rational use of pastures and conservation of the yielding capacity of the pastoral ecosystems dependent on the climate change. The proposed activities enabled to reduce the vulnerability and ensure the sustainability of the traditional cattle farming on the project site.

Objective 4: The lessons learned from the project implementation have been collected and disseminated

The following outcomes have been attained as a result of the activities under Objective 4:

- The project implementation was accompanied by experts consultations and training of the village inhabitants, herdsmen, representatives of the local authorities, entrepreneurs, owners of the pastoral lands, government authorities (district and oblast akimats), potential donors (international organizations, entrepreneurs) in the methods to respond to the climate change and the demonstrate the project outcomes attained;

- Five articles published in the district newspaper in Kazakh, three articles published in the republican magazines and newspapers and 2 articles published in the Internet;

- Based on the project results the recommendations have been prepared in the Kazakh and Russian languages tailored to the small and medium-size farms (150 copies) dedicated to the adaptation of Kazakhstan, office 103 block40, Orbita 1 muerodistrict, Almaty 050043 Kazakhstan
of grazing cattle farming to the climate change under the desert zone conditions of the South-Eastern Kazakhstan;

- The brochure has been prepared and published on key elements of the rational grazing that prevent the degradation of pastures under the growing climate aridization conditions.

The project is the first project of its kind which priority was to seek and implement the climate risk mitigation methods in the grazing cattle farming. One of the main goals of the project activities was to demonstrate to the cattle owners that there are feasible and cost-efficient methods of seasonal use of the natural grasslands that can generate the economic and environmental effect under the conditions of climate change towards aridization.

The questionnaire survey has been conducted in March 2011 among the inhabitants of Lepsy village. The survey has shown high efficiency of the adaptation methods applied by the project and the willingness of the LC members to follow up the project activities at the end of donor financing.

8.1. Organizational: Has this project impacted the organization?

Yes, it has. Farmer of Kazakhstan Public Foundation has become a leading non-governmental organization in Kazakhstan in the area of the rational use of natural resources, specifically pastoral resources. The authority of the organization is very high. UNDP Kazakhstan has made an agreement with FoKPF on the involvement of the FoKPF experts in the development of a number of projects dedicated to the climate change adaptation in Almaty Oblast.

8.2. Capacity Building: How were local capacities enhanced and how did it contribute to project success?

One of the conditions of project activities was the existence of NGO on the project site. Lepsy village has such organization, Youth Center Arai. Bolatbek Shalov, the head of the Center was one of the active project organizers who has put the project activities into practice. At the general LC meeting an initiative group was established headed by Bolatbek Shalov who was unanimously elected by the community members. The initiative group discussed and adopted the methodology of the project activities and the ways to address the problem of mitigation of the climate change adverse impacts on the grazing cattle farming. It is important to note that the initiative group has been working fruitfully and has become the mainstay of the project activities in all the work stages.

The capacities of The Youth Center Arai PA, key project executing party, have considerably improved through the project. Its members were involved in the project development and implementation of the project activities. The members of Arai not only from Lepsy village, but also from Kokzhide and Kokterek have been involved in the community herd development and the arrangement of seasonal grazing. The experienced gained and the work skills of preparing and implementing the project have contributed to the institutional development of the public association. The fixed assets such as yurts, pumps, generators etc. purchased under the project financing are on the balance of Arai Youth Center. Owing to the experience gained through the project in question, Arai PA prepared their own proposal and obtained the grant from SGP GEF. For the time being the project «Restoration of the Desert Degraded Pastures of the Eastern Pre-Balkhash Area» is successfully implemented.

8.3. Poverty Reduction: How the project impacted poverty

The two years of project activities is a short period to state poverty alleviation; but it follows from the project results that given the annual rotational seasonal grazing the pastures will
conserv[...](please refer to the table below).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Cattle</th>
<th>Years</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2008</td>
</tr>
<tr>
<td>Live weight gains per 1 head per a grazing period at the near-village pasture, kg</td>
<td>Cattle</td>
<td>37,0</td>
</tr>
<tr>
<td></td>
<td>Small cattle</td>
<td>6,0</td>
</tr>
<tr>
<td>Live weight gains per 1 head per a grazing period at the pastures used by the project, kg</td>
<td>Cattle</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Small cattle</td>
<td>-</td>
</tr>
</tbody>
</table>

The incomes of the project participants are increased accordingly. Even within the short period of time the LC members have gained an economic benefit from the sale of one head of cattle was US$100 and small cattle – US$30 respectively. Due to the weight gain of cattle the income of the local community members involved in the project has increased by 33-35%.

8.4. Community Participation

The local community of Lepsy village comprises 3100 inhabitants. The adults make 2070 people of which women represent 54%. The average age of the target population is 46 years. Kazakhs make about 90% of all the village inhabitants. The livestock animals (cattle and small cattle) are the main source of livelihood of Lepsy inhabitants. The livestock products are either sold at the market or used by the cattle owners for their own needs. Since Lepsy is a big railway center, the majority of inhabitants work at the railway station. The cattle stock has doubled compared to 2005. Due to the fact that the inhabitants spend most of their business time at the railway station performing their regular jobs and due to the lack of necessary skills, people use the near-village territories to graze the animals. For said reason and due to the growing aridity, pastures around the village are heavily depleted and do not cover the feeding needs of cattle owned by the local community.

Farmer of Kazakhstan Public Foundation and the local NGO Youth Center Arai have performed an extensive pre-project advocacy and awareness work among the local inhabitants (discussions, general meetings, workshops) dedicated to the climate change risks within the project site and the potential cattle farming adaptation methods to such risks. Said activities have actively been performed at the stage of the project idea selection, development of the project activities and discussion of involvement and input of each LC member in the project activity. The clearly formulated project activities, expected outcomes and benefits to be gained by each project stakeholder have contributed to the development of project ownership of each LC member. The overall project goal and objectives understandable to the village inhabitants as well as the activities that were within the powers of the project executing parties have consolidated the local inhabitants and contributed to the project success.

Therefore the project idea has been positively perceived by the village inhabitants and has gained the full approval and support at the general LC meeting. Because at the initial stage some people were doubtful about the project success, others were afraid to bring their cattle to the community herd, only 25 households were involved in the project at the first year of project activities. The volunteer movement has emerged in the village: the local inhabitants took an active part in the project.
monitoring, Field Days etc. The continuous monitoring on the part of the community members was one of the project success factors. In the second year 155 households of Lepsy LC were involved in the project.

8.5. Sustainable Livelihoods/Benefits

The material benefits gained by the project participants are mainly represented by the value increment of the livestock products made. The rotation of pastoral sites improves the forage base and thus the productivity and quality of the livestock products. At the end of the project, the cattle owned by the local community members, well grazed under the seasonal grazing arrangements, was sold at a market price of no less than US$900 per a head of cattle, while in the pre-project period 1 head of cattle was sold at no more than US$400.

The interview given by the village inhabitants at the workshop, in the video film and during the VRA seminars demonstrate the improved livelihood of the LC members. In addition to the environmental benefits (improvement of village environment), the transfer of cattle to the community herd has freed considerable time, especially for the women. Many people were engaged in the alternative activities and making profit from processing the livestock products, sale, gardening at the household plots etc.

8.6. Project policy impact

The project outcomes and their presentations on various levels have resulted in the changes of the governmental policies: a Pastoral Specialist was appointed in the Cattle Department of the Ministry of Agriculture. The Ministry of Environmental Protection jointly with the UNDP have prepared the National Climate Change Adaptation Concept where agriculture was identified as the most vulnerable sector. The Concept Paper encloses the list of the best adaptation practices implemented in Kazakhstan and recommended for replication. The project in question was also included in said list.

The project along with the number of other projects implemented by GEF SGP in the field of sustainable pastoral resources management have drawn the attention of the RK Ministry of Agriculture and laid the basis for the Kazakhstan’s national pasture restoration program being currently under development.

It is necessary to mention a number of challenges encountered by the project that require the steps to be taken on the governmental level.

The gaps in the land legislation and the absence of law on pastures give rise to the conflicts when allotting and using the pastoral lands. No any agency deals with the monitoring of pastoral conditions and control over the rational use of pastures. The governmental support of stock-water development at the distant pastures, infrastructure development of the distant pastures and development of cattle routes has fully been stopped.

The lack of governmental support for the pastoral cattle farming results in the shrinkage of the flooded pastures and overgrazing of the flooded and near-village rangelands. The lack of infrastructure at the remote rangelands makes the herdsmen’s work unattractive for young people. The above reasons as well as the lack of training courses result in the deficit of experienced herdsmen and cattle farmers.

8.7. Sustainability Plan

The project includes the sustainability activities that have been accomplished. The equipment purchased through the project was transferred to the balance of the Youth Center Arai PA that
guarantees its safety and the intended use from year to year. The establishment of partnership relations and support of the project on the part of the local executive authorities (rural and district akimats) are of great significance to the project sustainability.

8.8. Financing and Co-financing

The project has gained a grant support under Community-based Adaptation Program amounting to US$50,000 and the additional amount of US$10,000 from the Swiss government for strengthening the project activities. The grant has contributed to strengthening the basic infrastructure at the distant pastures (purchase of yurt, repair of pit wells, purchase of water dispensing tank for drinking water, saddles and snaffles). The input of project participants and the local community was US$55,938.

8.9. Replication: Is this project suitable for replication in other communities or regions. Plans or what has taken place in this regard

The main pastoral territories of Kazakhstan located in the semi-desert and desert zones and covering the area of 31 million ha are rather vulnerable not only to the man-induced pressure but also to the climate change risks: elevation of temperature, intensified draughts, impacts of the dry hot winds and changes in the precipitation pattern. The loss of traditional knowledge, the lack of methodologies and arrangements of the rational pastoral utilization in the light of the ongoing climate changes have resulted in the degradation of pastures and reduction of wellbeing of rural inhabitants. To date the project approach i.e. restoration of the traditional seasonal use of pastures is rather demanded in many areas of the country.

The project outcomes have become attractive to the neighboring villages which inhabitants are also engaged in the grazing cattle farming. In particular, the project experience was used by the cattle owners of Kokzhide LC located 15km to the south of Lepsy. The project lead was followed by the two farms of Lepsy village. i.e. the training process for cattle breeders in the measures to respond to the adverse climate change processes is under way on the basis of the project.

The project implemented has gained the next step forward: the technology of seasonal grazing at the distant pastures is applied in the project «Restoration of the Desert Degraded Pastures of the West Pre-Balkhash Area» implemented by the Youth Center Arai PA. The elements of the project activities are used in a number of projects implemented in Almaty, Akmola, and Zhambyl oblasts. The project approach is used by the middle-sized project of UNDP/GEF, the Government of Kazakhstan, the United Nations Development Program and GTZ acting as an additional stakeholder: PIMS 3819 CACILM «Sustainable Pastoral Management to Improve the Wellbeing of Rural Inhabitants and Conserve the Environmental Integrity».

8.10. Gender Mainstreaming:

To date the cattle farming sector engages many women. The reduced soil fertility threatens the agricultural production and thus the food supply of the households. In these conditions the role of rural women is increasing more than ever in addressing a set of problems of the local level: development of farms; selection of the methods of rational land farming; selection of more productive crops and demanded agricultural products; sustainable cattle farming development; restoration of the traditional agricultural practices. This important role of women should not be underestimated. In Kazakhstan the nomadic life has determined a great deal of freedom and independence of women compared to the other countries in Central Asia. Women took part in discussions; their opinion was considered. Distant
grazing is a hard work: the lack of normal living facilities, staying far from home and children for months. So, the herder's job is the business more suitable for men. Women stay in the village, deal with their families, domestic work and household plots. Therefore, it is quite difficult to identify the direct involvement of women in the projects on grazing cattle farming. In this case there is no gender violation of gender equality; women can be involved if they wish to (there are some cases of women's involvement) graze the herds at the distant pastures. Women are mainly involved in the training workshops and monitoring of the project activities.

8.11 Were all the objectives achieved? If not, what were the challenges related to the objectives not achieved?
All the project objectives have been fully accomplished and all the project outcomes have been achieved.

8.12 How did the project contribute to the outcomes and impact identified in the Country Program Strategy?
The project was one of the most successful demonstrational practices under CBA Program in the field of grazing cattle farming under the growing climate aridity conditions. As long as Kazakhstan is the fifth country in the world in terms of the pastoral areas, the replication prospects of the project in question are great, especially in the light of intensified climate aridity.

9.0 Other Lessons learned not captured in section/part 6 above:
It is necessary to note that a great deal of work has been performed by the project with the local community members making the basis for the successful project implementation and expansion of its activities.

10.0 Annexes and other relevant documentation (could be sent if required)

11.0 Final comments by the Evaluator/Grantee/Individual filling the evaluation template
The project implemented under CBA Program is one of the most successful projects in the field of sustainable pastoral management in the desert zone of Kazakhstan. The project strategy has embodied the whole experience gained by Farmer of Kazakhstan PF through similar projects implemented. The main project achievement is the development of the local community's initiative that, having received the startup capital for arranging the seasonal pasture rotation, is expanding the seasonal grazing technology from year to year, the most acceptable methods under the growing climate aridity conditions.

12.0 Digital photographs taken during the evaluation/appraisal with title to be attached here:

Name of Person Compiling Report: Gulnar Bekturova
Signature:

Evaluation/Appraisal Date or Period: April 2011
Date Evaluation/Appraisal Report was submitted: October 2011

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