Volga Farming
Grain Production Project in Penza region
(Russian Federation)

Social and Environmental Assessment Report
V.1 – Social and Environmental Assessment (risks and possibilities)

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EXECUTIVE SUMMARY

The prime objective of the project is to acquire first-class agricultural land, which has been abandoned since Soviet times, and to assemble a land platform from which to build a lean modern grain producer. Volga Farming (VF) has operated in the Russian Federation (RF) since 2007 and at present grows crops on and controls more than 65,000 ha of consolidated agricultural land located within a radius of 60 km in Penza region, 600 km Southeast of Moscow. The integrated economic, social and environmental approach to the land use and land management promotes the success of the company and VF is committed to grow to about 150,000 ha with expansion on adjacent regions and become a publicly traded company.

Penza region’s advantages includes high-quality agricultural land with rich black soils (chernozems), a good education system and qualitative agricultural labor, good transportation infrastructure and political and economical stability. VF plans to invest into expanding the grain production on black soils in Penza and Tambov regions. The money will be invested during a three year period for expansion of agricultural land, new equipment, increase of grain storage and machinery capacity, application of modern no-till technologies, training for personnel and recruitment of additional personnel.

The project has been classified as a Category B project under MIGA’s Policy on Social and Environmental Sustainability. This is based on the nature of the project’s predicted adverse impacts, which are/can be readily addressed via well-understood mitigation measures.

The main possible risks of the agricultural activity are connected with grain production. The basic operations in the project are: tillage – sowing of crops – crops surgery – harvesting – transportation – preliminary sorting – storage – sale and shipment. The main environmental and social impacts are on soil erosion, pesticides and fertilizer pollution of water courses and soils, farm machinery pollution, crop storage pollution, depletion of water resources, dust creation, land acquisition and worker health and safety.

As abandoned laylands are included in the project and will be gradually incorporated into crop rotation, special attention is given to the use and management of soil resources as a main natural resource for grain production. This will be made in terms of assessment of soil quality, management efficiency, present state, protection and replicability, maintenance of fertility, including paying attention to such activities as fallow, plant protection means, tillage of laylands, minimal soil treatment etc.

The objective of the ESIA is to identify, assess and mitigate the impacts associated with the existing 65,000 ha of land and provide a framework for environmental and social management for new farming operations. The proposed MIGA guarantee will cover the 90,000 ha that has yet to be acquired in the Penza and Tambov regions. As the physical and socio-economic characteristics of the existing farming operations are similar to the identified locations in Penza and Tambov regions, this ESIA also presents the principles and procedures for managing the environmental and social impacts of all VF activities. As significant numbers of plots of land are acquired, site specific ESIA’s will be prepared and reviewed by MIGA and local authorities in accordance with national laws and MIGA’s Performance Standards.

The following IFC Performance Standards are applicable to the project:
- PS1: Social and Environmental Assessment and Management System
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety and Security
- PS5: Land Acquisition and Involuntary Resettlement

PS6 (Biodiversity Conservation and Sustainable Natural Resource Management) is not applicable because the project does not impact on the local natural biodiversity as the land platform of the project only
consists of arable land that has been transferred anthropogenically from natural forest steppe several centuries ago. PS7 (Indigenous Peoples) does not apply as there are no indigenous communities potentially affected by this project and there are no specific groups of indigenous people neither in the project personnel nor in communities in local settlements. PS8 (Cultural heritage) is not applicable as the project does not cover the area of cultural heritage land. At the same time, Chance Find Procedures of the PS8 will be applied and provided in the Planning matrix, especially on the areas adjacent to national historical parks. In line with VF’s strategy for land acquisition, it is expected that all of the land that will be acquired will be used strictly for agricultural purposes free of settlements and ecologically sensitive areas.
PROJECT DESCRIPTION

Project focus
Volga Farming Phase 2 is an agricultural project focusing on developing 90,000 Ha agricultural land, using modern technologies for farming and storage operations. The project aims to strengthen Russian agriculture and regional development. The project is divided into five focus areas:

1. Land development – Impact: Acquire agricultural land at market prices (stabilize the market), digitally register the land objects and land rights in the Russian Federal Cadastre and Rights Registration System (continued process of land privatization)

2. Develop agricultural production (Ha-size and Mt-volume) – Impact: Convert derelict agricultural land into production, raise soil fertility, achieve economies of scale and raise regional employment level both internally and externally

3. Invest in machinery, equipment, technology and infrastructure – Impact: Implement world-class standards for international competition

4. Organizational development – Impact: Implement international standards for accounting, legal, HR and production processes

5. Competence development – Impact: Conduct world-class training, coaching, job rotation, feedback and experience exchange programs

Cost and duration of the project
Volga Farming plans to invest 90 million US dollars into expanding the grain production in Penza and other regions in the Black Earth belt. The money will be invested during a three year period for expansion of agricultural land, new equipment, machinery and storage, training of personnel and recruitment of additional personnel.

The table below shows the approximate costs for the most important assets of the planned expansion from the current 65,000 ha to a potential 150,000 ha platform.

<table>
<thead>
<tr>
<th>Investment items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>90,000 ha land and M&amp;A</td>
<td>38 m USD</td>
</tr>
<tr>
<td>Machinery 90,000 ha (3.5 m USD/10,000 ha)</td>
<td>23.6 m USD</td>
</tr>
<tr>
<td>Storage (250,000 tonnes) aim 50% of production</td>
<td>25 m USD</td>
</tr>
<tr>
<td>Working Capital and Reserve</td>
<td>3.4 m USD</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90 m USD</strong></td>
</tr>
</tbody>
</table>
For this study, the following approaches and materials have been used:
- Study of the requirements, regulations and concepts on the environment protection issue in Russia
- Study of materials about the company published on the Internet and in mass media
- Field study and consultations with company specialists, employers and local people
- Research of maps and space images
- General environmental expertise of the area
- Consultations with the representatives of local authorities

Environmental Permitting Process and Community Engagement

Russian land and environmental legislation clearly defines the approval process of land acquisition. Each step of the project was assessed in accordance with the governmental procedure and was approved by representatives of communities (representatives of land shareholders), of the local rural administration, of the Regional State Governmental Committee for protection of natural resources and environment, of the forestry department, of the land committee, of the rights registration authority and other related bodies. Ongoing and future measures for project development and for further land acquisition are in the different stages of permitting and follow the same procedure and will require similar agreements.
PROJECT CONTEXT

Brief history
Volga Farming (VF) was founded in 2007. The initial idea was to acquire prime agricultural land, which had been neglected since the Soviet times, and to assemble a land platform from which to build a lean modern grain producer. Several factors, including the condition of the neglected land, complex land registration procedures and the reluctance of investors to invest in the Russian market, had conspired to ensure that this prime agricultural land was trading at deep discounts compared to other parts of the world. Despite challenging financial markets, Volga Farming managed to raise additional financing both through institutional money and private equity to continue the expansion.

In 2008, Volga Farming started buying agricultural land in the Penza region of Russia by acquiring public long-term leases and ownership rights from private individuals. In May 2009, Volga Farming merged through acquisition with Heartland Farms in Penza. Heartland Farms was a UK-owned business and managed farm active since 2000. The acquisition of Heartland has brought Volga Farming to an excess of 60 000 ha land under control of which most is productive land in crop rotation.

In August 2008, Volga Farming founded the management company called “Grain Company Ltd.” in Penza region in Russia to start grain production on the lands of Volga Farming.¹

Volga Farming has benefited from lessons learned by the first movers into Russian farming in numerous ways. The main focus is to acquire productive farms adjacent to each other and to consolidate them. This strategy together with in-depth knowledge of the sector and in-house expertise in mergers, acquisitions and land registration has resulted in a fast and cost-efficient progress in assembling large high-quality land platforms. The land is efficiently farmed utilizing both local and Western technologies and know-how.

Volga Farming aims at becoming the lowest-cost grain producer. In order to achieve this goal, cost consciousness, efficiency, simplicity, competence development and productivity are merged into a strong company ethos. Volga Farming recognizes that it requires much more than good soil and modern equipment to make a large-scale farming operation work efficiently and profitably.

At present, despite the youth of the company and short period of investment activity in the Penza region, Volga Farming has already established itself in the region and become one of the twenty largest agricultural companies in the Russian south - and also has had success in its basic activities. For example, in the past the average crop of winter wheat in Nizhelnolomovsky district was 1,8 mt/ha. In 2009, the company harvested 2,6 mt/ha on the same land and, despite a catastrophic drought (declared in 14 regions of Russia including the Penza region) in 2010, Volga Farming managed to get 1,4 mt/ha, which is on average 0,54 mt/Ha more than many other companies achieved in Penza region.

Mission of Volga Farming and project overview
Volga Farming positions itself as “a large-scale farming company with a mission to become an industry leader respected for our high profitability, competence and ethics. We are committed to make Volga Farming a modern and highly-efficient organization employing modern farming technologies as well as management skills to become the lowest-cost producer in the industry. Volga Farming believes its greatest asset is its people and we are committed to an organizational environment which will attract and retain team members at all levels which are committed to achieving our mission and we will offer them stable

¹ Grain Company, Ltd. (Zernovaya kompaniya, OOO as spelled in Russian) is a more known name of Volga Farming, Ltd. in Russia, because it represents the production branch part of the Volga Farming. Below, when saying “Volga Farming” we consider the Grain Company (GC) as well and vice versa.
employment with competitive salaries based on performance. Volga Farming’s management strongly believes in teamwork and training and is committed to cooperate and continuously improve and to embody the highest management competences and ethics. In the long-term, Volga Farming is committed to grow to about 150 000 ha and become a publicly traded company”.

The Organizational Development Plan of the company includes the following approaches and goals: cost and time efficiency, efficient communication, proactive – not reactive, clear roles and responsibilities, robust built-in feedback mechanisms, competent employees and a safe work environment.

**Cost and duration of the project**

Volga Farming plans to invest 90 million US dollars into expanding grain production in Penza and other Black Earth belt regions. The money will be invested during a three year period for expansion of agricultural land, new equipment, machinery, training for personnel and recruitment of additional personnel.

The table below shows the approximate costs for the most important assets of the planned expansion from 65 000 ha to a 150 000 ha platform.

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<tr>
<td><strong>Total</strong></td>
<td><strong>90 m USD</strong></td>
</tr>
</tbody>
</table>

**Location of the project**

The Penza region is located in the central part of European Russia, 600 kilometers Southeast of Moscow. Penza region’s advantages include top-quality agricultural land, a good education system and qualitative agricultural labor, good transportation connections and political and economical stability – the region has one of the lowest crime rates in Russia.

Volga Farming’s existing operating area of 65 000 ha is located in three adjacent districts of Penza region and constitute two large blocks of agriculture land neighboring each other (43 000 ha in Nizhny Lomov and Pachelma district and 22 000 ha in Belinsk district). The additional 90 000 ha is planned to be located in current and neighboring districts (40 000 ha) up to a total platform of 100 000 ha (including the existing land under control) and in Tambov region (50 000 ha) which is bordering Penza oblast in Southwest.
The general characteristics of the land currently controlled by Volga Farming in three districts (Nizhny Lomov, Pachelma and Belinsky district) of Penza region are illustrated in the above table. The total area is more than 65 000 ha which corresponds to about 16,5% of the total area of agricultural land in the project-affected districts or about 12,6% of the total area of these districts. The highest share of Volga Farming’s land is in Nizhny Lomov district – 29,2% of agricultural land and 20,8% of the total district area. More than 1/3 of the land is in the ownership (or in the process of ownership rights registration) of VF. The other land is leased (or in process of being leased) for 49 years (except 4579 ha which are short-term leases) and with an option to buy after three years.

**Volga Farming land under control in Penza region (ha)**

<table>
<thead>
<tr>
<th></th>
<th>Nizhny Lomov district</th>
<th>Belinsk district</th>
<th>Pachelma district</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Volga Farming land</td>
<td>36209</td>
<td>22332</td>
<td>6893</td>
<td>65434</td>
</tr>
<tr>
<td>Land in ownership (or in process of ownership registration) Property of Volga Farming</td>
<td>16092</td>
<td>875</td>
<td>6893</td>
<td>23860</td>
</tr>
<tr>
<td>Leased land (or land in process of lease registration)</td>
<td>20117</td>
<td>21457</td>
<td>0</td>
<td>41574</td>
</tr>
<tr>
<td>Arable land and fallows</td>
<td>~22500</td>
<td>~18000</td>
<td>~1500</td>
<td>~42000</td>
</tr>
<tr>
<td>Lay lands</td>
<td>~14000</td>
<td>~4000</td>
<td>~5500</td>
<td>~23500</td>
</tr>
<tr>
<td>Total Volga Farming’s Lands</td>
<td>36209</td>
<td>22332</td>
<td>6893</td>
<td>65434</td>
</tr>
<tr>
<td>Total land in the district</td>
<td>~ 174000</td>
<td>~212400</td>
<td>132200</td>
<td>518600</td>
</tr>
<tr>
<td>Total agriculture land in the district</td>
<td>123900</td>
<td>173800</td>
<td>99763</td>
<td>397463</td>
</tr>
</tbody>
</table>
Location of Nizhny Lomov, Pachelma and Belinsk districts

There are three grain growing branches (farms) of VF – Kuvak-Nikolskoe, Belinsk and Atmis - and one separate granary branch in Belinsk district called Volchkovo.

As all farms are close to one another, Volga Farming benefits from strong economies of scale when it comes to machinery, service, personnel, storage and transport. In addition to the above the land includes several lakes and pounds, which makes irrigation possible for high margin crops like potatoes, which Volga Farming grows.
VF land in Nizhny Lomov and Pachelma district
VF land in Belinsk district
Natural environment in the region

The project area is located in the forest-steppe zone with rich black soil (chernozem). The plots with pine and broad-leave forests remained basically on water ridges along basic rivers, and wet forests – in the depressions of local topography. Forests do not belong to the Volga Farming’s lands. The relief is strongly crossed by a network of ravines and gullies, most of which are fixed. Natural steppe has not remained as the land has been used for agriculture over a very long period of time. The aggressive methods of land use and agriculture intensification during the Soviet period have led to the exhaustion of soils and land degradation, first of all, as a result of soil erosion. The content of soil humus decreased and the soil structure degraded. After the collapse of the USSR, a considerable part of the land was abandoned and now become layland. Therefore in some areas, one can notice an insignificant restoration of soil fertility but much of the land has been overgrown with bushes and trees and to reclaim it to arable land is quite problematic and costly. At the same time, in the Soviet period the net of wood strips and cascades of ponds were successfully designed for the purpose of soil moisture and water conservation. Many of them have remained and even at the present time have high economic value.

The climate of the area is favorable for agriculture and grain production.

Climate is moderate-continental, with warm summer and moderately cold winter. Seasons are well expressed. The winter comes in the third week of November and lasts more than four months. The monthly average temperature of January is around 12°C, but sudden Arctic winds can occasionally lead to abrupt temperature decreases to -40°C. Snow cover is stable from the end of November, and melts in the first week of April. The frost-free period is 128-130 days. The duration of summer is on average about 95-100 days. Monthly average temperature of July is nearly +19-20°C, though in some years (for example, in the drought of 2010), the temperatures can reach 40°C. Annual precipitation in general ranges from 330 to 650 mm, including 250-300 mm during vegetation period. Hydrothermal factor is 0.9 – 1.1.

Thus in spring and early summer heat and moisture balance is optimal for successful growth of grain crops.
**Volga Farming grain production statistics, July 2010**

<table>
<thead>
<tr>
<th></th>
<th>2008/09</th>
<th>2009/10*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winter Wheat</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area, ha</td>
<td>9156</td>
<td>14 739</td>
</tr>
<tr>
<td>Yield, t/ha</td>
<td>2,5</td>
<td>1,4</td>
</tr>
<tr>
<td><strong>Spring Wheat</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area, ha</td>
<td>3375</td>
<td>3500</td>
</tr>
<tr>
<td>Yield, t/ha</td>
<td>2,1</td>
<td>0,6</td>
</tr>
<tr>
<td><strong>Spring Barley</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area, ha</td>
<td>1017</td>
<td>800</td>
</tr>
<tr>
<td>Yield, t/ha</td>
<td>2,4</td>
<td>0,5</td>
</tr>
<tr>
<td><strong>Peas</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area, ha</td>
<td>475</td>
<td>550</td>
</tr>
<tr>
<td>Yield, t/ha</td>
<td>1,6</td>
<td>0,8</td>
</tr>
<tr>
<td><strong>Sunflowers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area, ha</td>
<td>214</td>
<td>2800</td>
</tr>
<tr>
<td>Yield, t/ha</td>
<td>1,3</td>
<td>0,8</td>
</tr>
</tbody>
</table>

*During season 2009/10 the central part of Russia was affected by a historic drought, the worst in over 100 years.*
### VF Agriculture report, July 2010

**Agricultural Operations**

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>W. WHEAT</strong></td>
<td>12,644</td>
<td>12,644</td>
</tr>
<tr>
<td>Leks</td>
<td>939</td>
<td>939</td>
</tr>
<tr>
<td>Bereznikskaya</td>
<td>503</td>
<td>503</td>
</tr>
<tr>
<td>Kharkovskaia</td>
<td>251</td>
<td>251</td>
</tr>
<tr>
<td>Bira</td>
<td>182</td>
<td>182</td>
</tr>
<tr>
<td>Shoritka</td>
<td>220</td>
<td>220</td>
</tr>
</tbody>
</table>

**S. WHEAT**

<table>
<thead>
<tr>
<th></th>
<th>12,644</th>
<th>12,644</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triza</td>
<td>3,500</td>
<td>3,500</td>
</tr>
</tbody>
</table>

**BARLEY**

<table>
<thead>
<tr>
<th></th>
<th>800</th>
<th>800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanadu</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

**SUNFLOWERS**

<table>
<thead>
<tr>
<th></th>
<th>2,800</th>
<th>2,800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syngenta / Pioneer Hybrids</td>
<td>2,800</td>
<td>2,800</td>
</tr>
</tbody>
</table>

**PEAS**

<table>
<thead>
<tr>
<th></th>
<th>550</th>
<th>550</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoenix / Rocket</td>
<td>550</td>
<td>550</td>
</tr>
</tbody>
</table>

**SPRING RAPE**

<table>
<thead>
<tr>
<th></th>
<th>400</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratnik</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th></th>
<th>22,789</th>
<th>22,745</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINISHED</strong></td>
<td>FINISHED UNDER BUDGET</td>
<td>FINISHED OVER BUDGET</td>
</tr>
<tr>
<td></td>
<td>2009-10</td>
<td>2010-11</td>
</tr>
<tr>
<td><strong>FINISHED</strong></td>
<td>22,789</td>
<td>22,745</td>
</tr>
</tbody>
</table>

**LAND CULTIVATION**

<table>
<thead>
<tr>
<th></th>
<th>Budget, ha</th>
<th>Actual, ha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultivation</strong></td>
<td>12-14 cm</td>
<td>6,685</td>
</tr>
<tr>
<td>Deep cultivation</td>
<td>25-25 cm</td>
<td>5,685</td>
</tr>
<tr>
<td>Derelict land cultivation</td>
<td>23-25 cm</td>
<td>5,685</td>
</tr>
<tr>
<td>Spraying</td>
<td>12,644</td>
<td>220</td>
</tr>
</tbody>
</table>

**SEEDING**

<table>
<thead>
<tr>
<th></th>
<th>Seeding, ha</th>
<th>Seeding rate, kg/ha</th>
<th>Fertilizer rate, kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12,644</td>
<td>200</td>
<td>50</td>
</tr>
</tbody>
</table>

**CROP MANAGEMENT**

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seed dressing, ha</strong></td>
<td>N34,4</td>
<td>N34,4</td>
</tr>
<tr>
<td><strong>Herbicides, ha</strong></td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td><strong>Fungicides, ha</strong></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td><strong>Insecticides, ha</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Top dressing, kg/ha</strong></td>
<td>N34,4</td>
<td>N34,4</td>
</tr>
<tr>
<td><strong>Fertilizer, kg/ha</strong></td>
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<td>N34,4</td>
</tr>
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<td>200</td>
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<td><strong>Top dressing, kg/ha</strong></td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

**GROSS YIELD**

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
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</thead>
<tbody>
<tr>
<td><strong>Budget, t/ha</strong></td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td><strong>Predicted, t/ha</strong></td>
<td>20,000</td>
<td>20,000</td>
</tr>
</tbody>
</table>

**Fertilizer rate, kg/ha**

<table>
<thead>
<tr>
<th></th>
<th>2,1</th>
</tr>
</thead>
</table>

**Date:** 11/07/2010

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**Finishing**

**In Progress**
### Winter Wheat:
Winter wheat plantings are suffering from severe May-June drought. The extent of extremely high temperatures and devastatingly low precipitation is yet to be established. Plant development stages passed faster than normal and harvesting began 14 days earlier.

Extremely hot weather created no conditions for disease development on plants, that is why nearly no fungicides were applied this season. Insecticides application had to be stopped for economic reasons because chemicals simply did not work under such extreme conditions.

Absence / low precipitation prevented us from doing top dressing on winter wheat thus creating 500 mt stock of fertilizers which can be used for winter crops planting this autumn.

### Spring Wheat:
Similar situation with chemicals application can be found on spring wheat plantings. Intensive rainfall still may improve situation with this crop at final stage of grain formation.

### Malting Barley:
On 7 July Sun Inbev specialist visited Grain Company with the purpose to inspect barley plantings. The barley is at the stage of milky ripeness with the potential of 1,8 - 2,0 mt/ha. Sufficient rainfall is required to preserve this potential. Sun Inbev agronomist expressed his concern over kernel size of barley being too small this season. This situation is typical for all the regions suffering from drought. SunInbev may have to adjust their quality specification as certain parameters (kernel size, protein) are not likely to be achievable this season.

### Peas:
Dry and warm weather created no conditions for spread of diseases on peas. However these weather conditions were perfect habitat for appearing of several generations of bean beetle. This fact accounts for 2 applications of insecticides on peas.

### Sunflowers:
Unlike cereals sunflowers having natural resistance to drought are developing steadily. However in comparison to last season the plants are at a lower development stage due to deficit of moisture in soil.

### Spring Rape:
Development of spring rape is hindered by lack of moisture in soil. Rape is known to be a crop actively responding to Nitrogen. However extremely low precipitation level in May did not allow us to do Nitrogen top dressing at the right development stage.
Laborers and social development

During a season, the company employs 240 persons on a full-time basis. In peak periods of the season (spring planting, harvesting) head count can go up by 30% due to seasonal workers. In future the company plans to employ an additional 500 people which will provide the further social development of the project-affected districts through the creation of new workplaces, increases in tax and land rent revenues to local budgets, increase of attractiveness of agricultural business for young and qualified personnel. Thus it is important to notice that the majority of employers (except very few foreigners) will be (or yet) employed from locals which also will promote the aspiration to raise their skills and provide the stimulus to the general growth of intelligence of the personnel recruited from the local settlements.

The project further provides knowledge and experience exchange to be compared and applied also for other farming operations regarding improvements on machinery technology, modern agronomy, process-oriented organization approach, modern management and coaching, training and career development, IT and communication infrastructure.

The Project will give a boost to local processing industries, fodder industries for livestock and biotechnology, storage, logistics and trading industry and improved quality of products.

Volga Farming is working hard to implement western safety standards to prevent accidents occurring. Volga Farming has a 100% ban on alcohol, always use safeguards during dangerous activities and continues training in proactively actions to prevent future accidents. In Volga Farming’s first season (2008/2009) producing 15 000 ha of crops there were no accidents in the company. Volga Farming’s engagement in safety is contributing to the well-being of the employees and the surrounding environment.

Competence transfer and training

Volga Farming is a strong believer in training and coaching. The Executive Team and Management Team have training experience in agricultural technology, business processes, project management, organizational development and land administration which is systematically being transferred to the company employees.

Volga Farming has well-functioning management training programs for the top 15-20 managers. The company has also launched an extensive training program for middle management and key specialists and further programs are being developed to cover the whole competence demand in the organization.

SWOT analysis

Volga Farming is following the environmental laws and regulations of Russia and is consciously meeting Western standards by trying to minimize the consumption of fossil fuels and chemicals and recycle scrap and waste materials. The company is also contributing to improved living standards, promoting capacity building for rural development in the region, without negative ecological and social consequences.

For this purpose, at a preliminary stage of the development of its operational strategy, the company made a SWOT analysis with the following project characteristics outlined:

Strengths
- Concentrated land platform of 65 000 ha within a 60 km radius with excellent opportunity to expand and maximize economies of scale
- Organizational set-up designed for sustainable modern agriculture holding a team of young, competent and motivated key Russian specialists and a management with an on-the-ground presence and hands-on policy
- Process-oriented organizational set-up with cost control, continuous improvement, team work and IT solutions as guiding principles to become a lean low-cost organization
- In-house expertise on land acquisition
- Investors and Board of Directors with sector-specific interest and strong profile on raising capital and strategic decision-making

Weaknesses
- Not enough grain storage capacity
- Insufficient grain trading competence including export
- Insufficient competence in the agriculture technique for no-till planting
- Limited experience and competence in food/grain processing and vertical integration

Opportunities
- Opportunity to acquire existing farming operations and/or land at a discount and with synergies to the existing 65 000 ha platform
- Lock in a low capital cost for land thus making low-cost production possible compared to western production
- Expand North-South to spread climate and decrease risk together with better capex utilization due to season difference
- Increased harvest volumes will increase export negotiation power with external companies and motivate build-up of internal competence to export
- Access to food security buyers for long-term contracts
- Access to livestock and food producers for long-term contract
- Western government debt situation leading to smaller agriculture subsidies thus benefiting low-cost production in Russia
- Close location to Europe, Middle East and North Africa compared to Australia and Americas

Threats
- Continuous low prices on grain
- Nationalization of land
- Unexpected weather conditions, today no geographical differentiation
- Too small governmental support to infrastructure development projects to allow improved export opportunities
- Corruption

Apparently from the SWOT analysis, social and environmental issues have not been considered yet among the main features of the project. There can be two reasons for that: either no major importance of specified aspects in generation of project risks or scanty risk analysis performed.

To complete the picture the current environmental and social impact assessment (ESIA) has been conducted
ENVIRONMENTAL AND SOCIAL ISSUES

In order to directly address the requirements of the MIGA Environmental and Social Clearance Process, this report contains chapters corresponding to the IFC Performance Standards (PS):

- IFC PS1: Environmental and Social Impact Assessment
- IFC PS2: Labor and Working Conditions
- IFC PS3: Pollution Prevention and Abatement
- IFC PS4: Community Health, Safety and Security
- IFC PS5: Land Acquisition and Involuntary Resettlement
- IFC PS6: Biodiversity Conservation and Sustainable Natural Resource Management
- IFC PS7: Indigenous Peoples
- IFC PS8: Cultural Heritage

These Standards are addressed in different levels of detail in this document, depending on the importance of the issues to the Volga Farming project and its applicable use.

This report’s findings and conclusions, concerning local soil and water resources, biodiversity, labor resources, and social and socio-economic baseline conditions, can be updated once additional experience is obtained from e.g. the latest harvest of the company. Summaries of the scope and objectives of these studies are provided in appropriate sections of this document.

PS1. Social and Environmental Assessment and Management Systems

An ESIA was prepared for the farming operations on 65 000 ha of land, however, principles and procedures for environmental and social management are also presented for future projects. The ESIA contains analyses related to main project activities: land use and land degradation, soil and water resources and their pollution, air emissions, biodiversity issues, waste management, pest management, emergencies, socio-economic impacts, community and worker safety. The majority of current environmental and social risks are evaluated as low or low-negligible. The most important attention is paid to the mitigation of the risks of soil erosion and over-compaction, pollution of soils and waters with chemical toxicants and loss of trained and skilled personnel.

Management Program:

The Project’s environmental and social management program describes mitigating and supporting activities during the project.

The Planning matrix for ESMP/ESMF contains three sections: (1) Risk assessment and mitigation measures, (2) Improvement of the natural and social environment and (3) Capacity buildings and trainings. It considers relevant standards and regulations of RF and MIGA/IFC that address the roles and responsibilities of the project parties involved. The Planning matrix contains more improving, supporting and capacity-building activities than mitigation measures, e.g. improvement of current soil fertility, increased water supply and quality of local water resources, support biodiversity conservation activities in the region, decrease waste products, strengthen vulnerability in emergencies, etc.

Additional action plans and procedures will be prepared and/or updated in the project framework, including: Integral and annual PMP updated, Safety manuals for pesticide use cycle, Plan for gradual replacement of old techniques, Plan of supporting activities for workers in winter time, Integrated soil survey plan, Plan on communities cooperation development, Cooperation plans for biodiversity and cultural heritage conservation, GIS integrated system for decision-making, Training program etc.

Organizational Capacity and Training:
Organizational capacities for the implementation of the ESMP are estimated as high and risks are minor. To improve capacity, the company plans to specify environmental responsibilities in job descriptions of personnel, to recruit an environmental specialist, a GIS-specialist and a PR-specialist.

The current training program already includes environmental land management and pest management issues and will be enhanced with special courses on environmental and social risks assessment, use and application of geo-information systems, express soil testing and other topics. Agreements with high schools and professional schools to train personnel and external students are also being prepared.

Community Engagement:

VF’s social responsibility policy has a systematic character. Providing consistent support to the community’s educational system was defined as priority. Municipal regular and high schools were identified as targets. The company provides also in-kind support, for example by repairing dirt roads which are used not only by the company’s cars and tractors but also connect separate small villages.

The company regularly organizes meetings with local population where different economic, social and environmental issues are discussed. During preparation of land transactions, the company discuss with the local administration. To strengthen capacities and possibilities of communities and following the requirements of Performance Standards, the company will update internal regulations of Grievance Mechanism and will inform the affected communities about the mechanism in the course of its community engagement process.

Monitoring and Reporting:

The EMSP and Planning matrix provides a set of basic indicators to monitor possible adverse project impacts on the environment and also describes the requirements to monitor and evaluate social risks, mitigating and supporting measures, as well as project outcomes. The integrated GIS will also help to monitor planned activities and state of the environment as it is supposed to contain different environmental, agro-ecological, technical, financial, operational, etc. parameters.

Reporting procedures specify both internal and external reporting. Specialists of the company responsible for monitoring will report current results to the company management according to developed regulations. External reporting will consist of (i) preparation of regular (at least – annual) reports on company activity in environmental and social management and impact monitoring, (ii) preparation of press releases, performances in mass media, (iii) presentations and reports at the meetings with communities and also to local and regional authorities.

**PS2. Labor and Working Conditions**

Labor and working conditions in the company are regulated and correspond to the strict Russian Labor Code. It prohibits discrimination, child and forced labor, regulates employee relations, the rights and obligations of the worker and the employer, regulates labor safety and establishes basic principles of social partnership. Each workplace has a passport (full description of duties and labor conditions) served as a supplement to the individual labor. Also the company plans to make a collective agreement between labors and administration to improve their relationship and grievance mechanisms.

Volga Farming Company, acting as a large investor, has created new workplaces (240 regular staff members with planned expansion to 500) and essentially lowered the social tension. Possible latent conflict raised by winter gaps in occupation of field workers is on the current business of the company administration.

Labor safety conditions and salaries are better and higher than those in other agricultural companies in the region. Workers get qualified medical checkups at the expense of the company and are equipped with safety means while working in hazardous working conditions.
PS3. Pollution Prevention and Abatement

The project does not expect harmful pollution of soils, water and air as the company follows the integrated approaches in environmental safety. Risks of local pollution of soil, water, grain and air are minor and negligible and mitigated by a number of safety manuals and instructions regularly updated in the company. For this purpose the company also uses modern safety equipment and machinery for the application of toxic products, applies less harmful pesticides and tank mixtures, uses individual safety means, etc.

PS4. Community Health, Safety and Security

The grain production cycle does not bring risks to community health and safety as all settlements in the area are not subject to direct impact by the company’s activities. The majority of villages and small settlements are located on the distance (not less than 300 meters) from the farmland. The use of agrochemicals on the fields close to settlements and water protection zones is prohibited by the company’s administration and farm managers and agronomists are strictly responsible for enforcing this rule.

The company takes measures aimed at providing health and safety awareness among the local community. Such measures include regular community members and land shareholders meetings, field days arranged by the company annually with participation of local authorities and local residents. The program includes demonstration and discussion of modern machinery, innovative approaches in soil cultivation, seed treatment, crop protection and precision input application techniques. Special attention is paid to the pesticides used.

Regarding requirements to security personnel, Volga Farming has arranged that the selection, checkup and monitoring of security guards are made by the Chief of security service assisted by local farm managers. Before employment, the chief of security service checks potential security guards on the possible previous convictions, communications with criminal structures, presence of fatal predilections, etc. Watchmen have no special means of protection/detention, except a mobile phone used for notification means. Thus, the risk of unauthorized use of guns caused by the company’s security personnel is absent.

PS5. Land Acquisition and Involuntary Resettlement

This Performance Standard is easy for Volga Farming grain production project to comply with as the company has acquired or leased land, and further plans to buy and lease land, for agricultural purpose only. According to Russian legislation, no residential buildings may be constructed on this land.

In case of circumstances leading to economic displacement - in other words if land acquisition for the project causes loss of income or livelihood - regardless of whether or not the affected people are physically displaced, the company will to be guided by the requirements stated in Performance Standard 5. All the land that has been acquired (or is in the process of being registered as ownership rights) by Volga Farming from private individuals is resulted from voluntary land market transactions in which the seller has not been obliged to sell (or lease) and the buyer could not resort to expropriation or other compulsory procedures if negotiations fail.


Even if this performance standard is not applicable to the project and there are no expected negative impacts of the project activities on local biodiversity, the Volga Farming company - promoting western standards that presuppose biodiversity conservation activities - plans to build capacities to support the biodiversity conservation in the surrounding and adjacent areas of its agricultural land platform. The company will do this indirectly through development of internal regulations concerning land use in water protection zones, restoration of small local ponds and water reservoirs, assessment of the
biodiversity in the project area, and through development of more effective measures on biodiversity’s protection and restoration in the region with attraction of local scientists and foresters.

**Methodology of the social and environmental impact assessment (evaluation of risks and possibilities)**

The assessment is based on the following approaches:

- The major possible risks of the agricultural activity of the company are related to grain production. The basic operations in the project are following standard procedures for the sector: tillage – sowing of crops – crops surgery – harvesting – transportation - preliminary sorting – storage – sale and shipment. Within that overall objectives are of sustainably high grain yields at the minimum cost price.

- The main difference of the studied project compared with other large agricultural operations in Russia – is that VF emphasizes the production of high-quality grain instead of development of wide multi-purpose and multi-functional agricultural infrastructure. Therefore, the livestock sector and any processing of plant production are excluded from the company’s activities.

- As abandoned laylands are included in the project and gradually incorporated into crop rotation, special attention should be given to the use and management of soil resources as a main natural resource for grain production. This should be made in terms of the assessment of soil quality, management efficiency, present state, protection and replicability, maintenance of fertility, including paying attention to such activities as fallow, plant protection means, tillage of laylands, minimal soil treatment, etc.

- All other resources and impacts on the environment are considered through a prism of soil resources management.

- Integrated environmental training sessions are considered as a basic approach to increase the skills of the personnel in the field the environmental protection.

- Social issues are considered through the prism of grain production, and include assessment of the project impact on the social conditions in project-affected area, risks and possibility of conflicts, taking into account the social and cultural traditions and mutual relations which have been developed in the project area.

- Environmental impacts are considered as part of integrated systems: “natural – generated by the previous owners of land – actual – potential according to the development of the project”.

This study summarizes environmental and social impacts of the project activities. It has largely been based on a combination of original observations and data available from the following sources: open internet sites of local governments, mass media, internal company statistics, preliminary studies made by contracted organizations (as well contracted by previous owners), official land cadastre documents, orders by supervisory authorities and other sources as appropriate.
CHAPTER I

ENVIRONMENTAL AND SOCIAL ASSESSMENT AND MANAGEMENT SYSTEM (IFC PS 1)

The objectives of IFC Performance Standard (PS) 1 are:

i. Identify and assess social and environment impacts, both adverse and beneficial, in the project’s area of influence

ii. Avoid, or where avoidance is not possible, minimize, mitigate, or compensate for adverse impacts on workers, affected communities, and the environment

iii. Ensure that affected communities are appropriately engaged on issues that could potentially affect them

iv. Promote improved social and environment performance of companies through the effective use of management systems

I. SOCIAL IMPACTS AND RISKS

1. Positive Direct Impacts
   A. Creation of Workplaces

The creation of workplaces represents the most significant positive social impact of the project. During the last 20 years, agricultural activity in the region has reduced and the local active population has been either forced to leave their native places for ever, or temporarily, migrating to large cities, or to struggle in a subsistence economy on the farmsteads, developing small kitchen gardens, livestock, being engaged in fishing, etc. Transport communications with the regional centre have been broken and farming infrastructure has been almost completely destroyed. For these reasons, youth do not see the work prospects in agriculture, and tend to migrate to cities. Only pensioners and a small number of mainly governmental employees stay living in the villages.

The appearance of agricultural investors in the region brings hope of the revival of rural infrastructure, native villages and regional centers which have been long since focused on agriculture. Large investors, such as Volga Farming Company, having created new workplaces and essentially lowered the social tension. According to the expert evaluation, the company attracted approximately 40-50% of active able-bodied population from local settlements.

B. Increase of Income into Local Budgets

Creation of workplaces in the region results in the increase of taxes paid to local budgets. This fact predetermines the positive relation of local administration to investors as it improves the rural social conditions and allows increased efforts for social development and improving rural infrastructure.

«Grain Company» as part of Volga Farming Group is registered in Nizhnelomovsky district of Penza region. Therefore the company’s payments and taxes stay mainly in the budget of this district. This circumstance is very important as in modern Russia many enterprises are registered in big cities, so local budgets of small municipal unions suffer. In this respect, the policy of the company is directed towards the support of the district level development which goes in line with the current policy of the Russian Government. So, according to the fiscal results for 2009, the total amount of taxes paid by the company to all kinds of budgets amounted to 10,7 million rubles (0,36 million USD), or about 3% of its turnover. It is noteworthy that this figure is comparable with the amount of governmental subventions in 2009 to Nizhnelomovsky district for the execution of the state powers and granting settlements which in turn amounted to 9,4 million rubles (0,32 million USD). The total amount of taxes and non-tax incomes in the
district for 2009 was 165.4 million rbl. Thus, the income from «Grain Company» is about 6.5% of the total income to the district.

The current assessment shows that the replenishment of regional budgets will be achieved not only in the district of official registration, but more or less proportionally in all districts (including Pachelmsky both Belinsky), and any other area in which the company operates, e.g. by creation of branches and affiliated structures. In this case, the tax participation of the company in programs of rural will promote the improvement of the business climate and strengthening of the social and economic role of the company in the districts’ plans for social and economic development.

C. Reduction of Migration and Outflow of Local Population

Apart from the fact that the company pays taxes in the local budget and creates workplaces, it also uses modern production techniques that in turn involve highly-skilled personnel, and essentially reduces migration and outflow of local population. This makes the agricultural sector attractive to work in, not only for adult population but also for youth, thereby promoting their professional and social orientation.

In the talks with the head of the Department of Agriculture of Belinsky district, Nikolay Korobkov, he pointed out that local administrations note the important role of the company in the district’s social development.

D. Development of General Agricultural Business Climate

The positive social impacts of company activity can be found in the development of agro-business in the region. So, as offered by General Director of Grain Company and at the initiative and with support of the Minister of Agriculture of the Penza region the specialized association – Agro-business Club of Penza region has been created. This club unites participants of the agricultural market, and promotes an exchange of experience and ideas in the field of agriculture. One major component of these processes is the integration with local authorities and a few specialists of the company are members of local and regional councils. This helps to, for example, solve problems of rural development.

By playing an active role on the agricultural market, Volga Farming aspires not only to use modern technologies (high output machinery, precision farming, moisture conservation techniques), but also gradually to develop high technologies and production in agriculture, thus, obviously, paying attention to economic possibilities.

The “ecologization” of the company activity should promote as well strengthen the main business, and can be considered as favorable economic investment, despite additional expenses. In particular, it will strengthen the faith of investors in the company, increase capitalization of the company funds in midterm and long-term prospects, strengthen the company’s image due to their responsible civic stand (ecologically responsible business), which is very important on the domestic market.

2. Positive Indirect Impacts

A. Company Goodwill and In Kind Support

Since its foundation, Volga Farming has been demonstrating its goodwill in the form of in-kind support provided to the local community. The company supported local administrations in the improvement of the local park, repairing the school, in strengthening of fire prevention measures in connection with extreme danger of fires during the catastrophic drought season of 2010, etc.

The following indirect positive impacts of the company activity can also be briefly pointed out as marked by local residents:

i. Volga Farming takes over land tax burden from stake (pai) holders (when leasing land from private pai holders, the company pays land tax for them);
ii. Possibility to procure cheaper fodder for livestock and poultry kept in private households;
iii. Support to health and safety of local population;
iv. Improvement of local roads between settlements.
3. **Negative Direct Impacts**

Negative potential social impacts have not been noticed neither regarding influence on worker-employer relations, nor regarding influence on social environment in the region.

In particular, there are no grounds to consider that project will deteriorate working conditions (more in detail – in chapter 2), allow compulsory or child labor, or lead to gender discrimination among workers. The project will not cause resettlement of people and deterioration of living conditions (more detailed – in chapters 05 and 04), the project will not promote deterioration of cultural traditions of indigenous and minority groups (more detailed – in chapter 07), and also will not reduce value of the cultural heritage of the region (more in detail – in chapter 08).

4. **Risks**

A. **Corruption**

It is equally necessary to point out that there are a few risks connected with possible deterioration of relations with local administration. The reasons of these risks are associated with both subjective and objective circumstances.

Subjective circumstances: in Russia there is a risk that some officials and supervising bodies will create obstacles for business in order to provoke and receive bribes. Although there have been no such cases yet noted by the company, there are many instances described in the press and are known to have occurred in other regions of Russia. The main reason of occurrence of such cases, in VF opinion, is due to the “optionality” of Russian legislation, some companies aspiring to cut down taxes and expenses on observance of requirements of current legislation, prefer to pay bribes to officials, rather than to incur expenses on complying with the requirements.

**Mitigation Measures**

In VF opinion, in order to avoid the risk of becoming involved in this environment, the unique way is the observance of necessary requirements of the legislation, and not to give in on unreasonable requirements from any officials that provoke corruption. For this purpose it is necessary to have a competent lawyer in the company, who will trace such situations, receiving the information directly from any employee of the company, and also will analyze the situations, and in time will inform the responsible governmental structures authorized by the decree of the President of the Russian Federation “On the measures to counteract corruption”.

B. **Deterioration of Employer-Employee Relations**

Due to the seasonal character of agricultural production the company cannot provide adequate employment for its employees for more than 7-9 months in a year. For the rest of the time the employee is offered to go on vacation without pay. This is a potential source of social conflicts between the employees and the employer. Such policy is harmful for both parties. The employer can lose qualified workers who find alternative employment to support their incomes.

**Mitigation Measures**

Different ways (creation of insurance fund, alternative employment on subsidiary repair work, arranging training courses at the expense of the company, etc.) are offered but these measures require special study and probably an individual approach to each worker.

C. **Health Deterioration**

It is necessary to pay attention to possible potential risk of health deterioration of workers as a result of labor intensification.
Mitigation Measures

The mitigation of these risks is performed by a labor protection policy in the company to which the great value (in details described in chapter 2) is given. This policy is in line with all of the government programs of health support, including the national project "Health", medical aid of obligatory medical insurance, demography program act in the area.

D. Qualified Personnel “Drain”

One of the potential social risks connected with development of the company is the risk of exhaustion of qualified personnel for sustainable development of the company. Having identified this risk the company initiated a number of actions on advanced personnel training.

Mitigation Measures

It is necessary to analyze personnel skill level more accurately, to create lists of a personnel reserve, and purposely raise a skill level of key personnel.

II. ENVIRONMENTAL RISKS AND IMPACTS

Volga Farming carries out its operations in line with the program aimed at improvement of major environmental components (soil and water) which are considered as main production resources of the company. This program also includes mitigation measures.

1. Impacts on Soil

Soil, as the basic natural resource operated in agriculture, is the main natural object impacted by the project. The following impacts are usual in the process of modern soil cultivation for the purpose of grain production:

i. Mechanical impacts by agricultural machinery during tillage;

ii. Chemical impacts in the form of crops and soil treatment by various agrochemicals (fertilizers, pesticides, means for plants protection, growth factors, etc.);

iii. Biological impacts in the form of crop varieties and crop rotations which differ from natural biocoenoses, and change the character of biological circulation in agrocoenoses by changes in natural food chains.

Direct impacts on soils have indirect influence on surface and groundwater, change their functioning and the water balance of territories, and in some cases also changing the chemical content of surface and groundwater.

Direct impact on soil make indirect influence on the content of a ground layer of atmosphere, change the dust content (basically as a result of tillage), and also the content of vapor and carbon dioxide.

The impact on soil and water resources can indirectly affect natural plants and animals, as well as ecosystem functions and mechanisms mostly located in project-adjacent territories and objects (forests, meadows, rivers) and also partly in forest belts of the project area.

Small local impacts on environment can appear also during the processes accompanying the basic activities of the project:

i. Repairing and operation of motor transport while using oil products as lubricants and for energy consumptions;

ii. Storing and transportation of agrochemicals;

iii. Granaries and grain treatment by antimicrobial agents, fungicides and insecticides.

As a rule, the evaluation of such local and case-specific environmental impacts is regulated completely by the existing Russian legislation and regulations. This part of the legislation of the Russian Federation and even operational enforcement is well developed. Therefore any, even the small project, should be
adopted by the state ecological supervision and needs the ecological examination. For example, two such small projects in Volga Farming can be named: building of the petrol station in Belinskiy and building of the basement for grain dryer facility in Bolshoy Michkas. The petrol station project at the moment has passed the procedure of the governmental environmental expertise which is a framework of all design and permission documentation prepared by licensed project and design company “Povolgie”. The procedure includes:

i. Topological survey of the site;
ii. Geological survey of the site;
iii. List of ecological measures to be taken into consideration during construction of petrol station.

The construction of the foundation under the grain dryer was carried out in accordance with the permission of ecological regional committee issued on 12th July 2010.

The environmental impact evaluation for such small projects is regulated by the Russian Federal Law “About ecological expertise”, No. 174FL (see annex 3).

For such construction projects the company contracts certified organizations.

The environmental risks during small construction works that do not need special certified research assessments according to Russian legislation are evaluated and counted by the engineering service of the company. For example, it could be repairing of roof for granaries, restoration of grain transporters, repair of windows and doorways, construction of metallic pillars for any mechanisms and machines.

Roof repaired (left granary) and not repaired (on the right)
In this chapter are described the results of the assessment of only the basic impacts and risks connected with increase of grain production, and special attention is given to the risks assessment issues of the basic life-support environments: soil, water, air in those aspects which are not reflected in detail in chapters 03 and 06.

Biodiversity and pollution issues are described in details in the chapters 03 (pollution) and 06 (biodiversity).

Integrated Actions on Soil Improvement and Soil-Ecological Risks Mitigation

According to the Civil Code and the Land Code of the Russian Federation, land owners and tenants are obliged to support land quality and to take measures to ensure environmental protection.

The materials of agrochemical assessment of the agricultural field describe the local arable soils as leached and typical chernozems (about 80%), podzolic chernozems (about 8%), meadow chernozemic soils (about 10%), dark grey wood soils (about 2%). Granulometric composition varies from clay and semiclay to light silt and sandy soils.

Despite satisfactory agrochemical characteristics of soils in general, the quality of soil structure is far from ideal, natural to virgin of well-treated chernozems. It is a result of with soil degradation during their heavy use in Soviet period, and weak activity of natural regenerative processes during the laylands period. During brief field assessment we found that soils structure in arable horizon contains a lot of angular and single-grain particles. Humic horizons are not thicker than 40-50 cm. Even after several years of Galega growing (local name kozlyatnik – a bean plant with deep and branched root system), the soil structure keeps the angular and single-grained structure and is inclined to fast destruction during tillage. At the same time, it is important to notice that according to the materials of the agrochemical examination being conducted by Penza agrochemical centre, in general over the last 10 years the agrochemical features of soils has not worsened. In VF estimation, this is a result of abandoning while the degradation of soils that was connected with intensive agricultural use has been suspended.

At present, Volga Farming uses the materials of 2007-2008 years’ agrochemical testing of soils of Kuvak-Nikolsky and Nizhnelomovsky branches and also the researching materials provided by Kemira Ltd for Heartland Farming Co in 2006-2007. In the near future Volga Farming plans to carry out soil and agrochemical study using express methods (whenever possible) so that monitoring of soils should be operative, mainly provided by the skilled company’s agronomists for their current purposes. This issue is closely connected also to the development of the multifunctional chemical laboratory on the basis of already existed analytical complex in Belinskiy, which is certified now by the Center of Standardization and Metrology of the Penza region only for the analysis of grain quality.

The agrochemical testing has been based on good cartographic material at the scale 1:25000 and with borders of existing fields defined. The cartographic material also provides basis of geographic information for VF to develop a multi-purpose Geographic Information System (GIS).

Volga Farming chief specialists pay much attention to the improvement of soils quality and fertility. Destructive methods used by other agricultural companies such as, for example, eddish burning, are prohibited. Volga Farming widely applies sparing treatment of soils, plans to use minimal handling technologies (plowing without turn, e.g.) and even zero soil treatment. Special equipment has been bought for this purpose.
The company restores laylands with different age of abandonment, up to the land grown with 15-years old pine trees. It confirms that these lands have been abandoned, not only as a result of the economic and political crisis of the 1990s, but also because of deep degradation and exhaustion of soils. While being layland, they have recovered the fertility a little, but not to a natural state. Natural chernozems have been saved only in the natural reserve called “Privolzhskaya lesostep” (Volga forest-steppe), and have the humic topsoil with a thickness of 80 cm. Now these unique chernozems are put in the Red book of Russian soils. But in the most project-affected areas chernozems and grey wood soils have rather low thickness of humic horizon (not more than 30-50 cm), eroded and re-deposited to some extent.

Reintegrating laylands into an intensive agricultural cycle can provide the following environmental risks:

i. Deterioration of soil structure (growth of single grains in light textured soils and of blocky and massive – in clay soils) that leads to the decrease of a soil moisture capacity and rise risks of abrupt decrease of potential productivity in drought years;

ii. Soil erosion intensification (deflation during tillage and plowing, water erosion – on arable lands and especially intensive on fallow lands during snow melting and rainy periods). The studied area has a number of gullies and the growth of local ravines is marked as well as the lightening of soil surface due to the thinning of humic topsoil.
The company uses the system of integrated measures to combat soil erosion, including combating linear and plane erosion: soils on the slopes to gullies, ravines, rivers or springs are not treated but meadowed, plowing along slopes is minimal. Farms aspire to use modern methods of soil treatment, aspiring to minimize use of heavy machines, use of the combined tools, reducing of the number of handlings. The general strategy of the company in the soil treatment – to use minimal and even zero technologies.

In the long-term perspective of the project, it is recommended to establish a regional consulting service on land use and land management, attracting regional authorities and scientists as consultants.

Multifunctional machinery reducing soil treatment due to combination of handlings
(Illustration from training materials for agronomists)

Zero technologies: sowing of wheat straight into the hard soil with stubble
(Illustration from training materials for agronomists)

For more efficient measures to combat soil erosion - which is the main process of soil degradation on the lands of Volga Farming - it is necessary to study the erosive condition and erosive danger of soils. Fields and lands should include measures to reduce erosion and restore the fertility of eroded soils, and plans and framework should be developed to combat linear and plane erosion according to the priorities estimates during the erosion assessment.

The integrated system to prevent soil erosion is a part of the system to improve soil moisture holding capacity. These measures are both economically and environmentally effective as they do not only promote soil conservation but also water and moisture necessary for crops growing. Such integrated
activities that are not used in the project-affected areas yet are: forest belts conservation and maintenance, coulisse planting, eddish leaving, reducing of the number fallows fields, etc.

At the same time, these measures need the increased use of chemical means for plant protection. The policy of the company on this issue is based on application of modern effective pesticides which are sufficient in minimal working concentration (few to tens grams of effective substance on hectare) and quick decaying (more detailed described in chapter 3).

Further it is necessary to develop and adapt integrated measures to combat soil erosion, soil moisture conservation and soils fertility improvement to each field that can be realized with a help of integrated managerial GIS (see in more details below).

The measures for soil improvement on the fields of Volga Farming are effective but carry more likely casual character, than systematic. These positive activities include the following:

i. Prohibition to burn the eddish, straw crushing and plowing in instead;
ii. Use of mineral fertilizers, compensating nutrients carrying out with harvesting and providing the expanded reproduction of soils’ fertility.

Despite the correctness of these measures, the company understands that for correct calculation of necessary doses of fertilizers it is necessary to expand its own analytical base. Agrochemical testing of soils has been conducted some years ago for the company’s predecessors. The recommendations contained in that assessment reports correspond to the VF’s modern strategy of land management and used crop rotations a little. Also the company is unable to get operative data, which allow the correction of process charts of soils and crops handling according to current conditions, both market and environmental.

In order to continue the improvement of the scientifically base agricultural practice the company plans to develop internal regulations, instructions, and algorithms, also to plan and expand analytical activity, to strengthen chemical laboratory, to implement express methods of soils analysis, to train specialists, etc.

2. Impacts on Water

The assessment found two main potential impacts of the project on local waters:

i. Potential pollution of water objects and sources of drinking water supply by agrochemicals and local toxicants (this issue in more details is described in chapter 3);
ii. Increase in consumption of technical water from local sources (first of all, surface water sources)

Local residents noticed that in comparison with 20-30 years ago the total watering of the area became worse: the quantity and total surface of ponds has decreased; dams are abandoned, total water quantity is insufficient for the demands of people. Intensification of agriculture will increase the water consumption. Water is required for current household and technical needs and also for maintenance of municipal objects (including hygiene and recreation, gardening of industrial areas), as well as for irrigation of small gardens. The large rivers or channels are not present in the area. Stocks of surface water here have been traditionally created by making dams on the local small rivers, streams and seasonal waterways by ravines. The intensification of water consumption will inevitably result not only in decrease of economic efficiency of basic production in VF as a result of soil drying, but also in deterioration of sanitary and environmental conditions, will worsen working conditions of workers and life of local communities.

Mitigation Measures

This issue is urgent for the company and demands restoration of the old ponds and pools, and creation of new ones. Solving of economic and specified environmental and sanitary issues, the creation and improvement of water objects will also promote to biodiversity conservation (see chapter 6)
3. Impact on Atmosphere

The assessment shows that the land use and land management practice of Volga Farming exclude the burning of stubble, so other air pollution problems will be of local character, have insignificant degree and are limited to the following points:

i. Air pollution by machines and mechanisms;
ii. Atmospheric pollution (dust) during plowing and other soil treatment by heavy machinery;
iii. The contribution to the change of global carbon balance as a result of mineralization of plants and soil organic matter.

These problems are described in chapter 3

Other problems:

4. Excess of Wood Plants

Excess of wood plants is an original but insignificant problem for the project. It appears in two cases:

i. Trees and the bushes occupying long-term laylands and subjected to cutting down and stubbing;
ii. Overgrown forest belts which need special care for a number of reasons is a nursery of wreckers. The underbrush in forest belts interferes with winds and in turn disturbs correct accumulating of snow on fields during the winter period, also interferes with migration of some animals.

Mitigation Measures

In both cases the correct decision on the issue has not been found yet. This matter requires integrated study not only to find ways of wood recycling and to assess the volumes of wood, but also to assess the environmental value of forest belts (see in more details in chapter 6), to find possible alternatives to use overgrown fields (for example, creation of nurseries of decorative plants).

5. Energy Efficiency and Water Savings

This problem at present is not among company’s priorities. All key sources of energy and household maintenance are performed by centralized supply. The electric power and water are supplied from central networks. At the same time, in the long-term, the company is considering the possibility of using alternative energy sources, especially in the remote field camps (for example, by installation of wind-driven generators), use of installations on water recycling, processing of sewer drains, including possible utilization for biogas purposes, etc. All these activities will promote increase of power efficiency and water savings.

6. Green Standards

The company aspires to raise gradually its own standards in the field of environment protection and quality of production conforming to the requirements of Russian legislation and simultaneously aspiring to achieve the international standards and to receive relevant international certificates. For the project development the company plans to assess possible prospects to develop the approach plan to the given standards.

III. MANAGEMENT CAPACITY AND PROCESS

1. Social and Environmental Management Organization and Capacity

*How does the company identify and allocate the human, technical, and financial resources, including external experts, necessary to manage social and environmental performance?*

At present, Volga Farming is at the initial stage of the identification of resources and capacities necessary to manage social and environmental performance. Except consecutive, regular and planned
work in the field of labor protection, at present time the company has not yet developed its social and environmental policies and has not designed all necessary related documents. At the same time, the company has proclaimed as a part of its mission and purposes the aspiration to be socially focused and environmentally responsible. So, this assessment is directed to specify the basic ways to identify and allocate the human, technical, and financial resources. In the future, the company plans to clarify its position on how to conduct ecologically and socially responsible business. But at the present time it considers this claim to be justified and need more weighed approach as well as carrying out of necessary studies.

The company is well familiar with such modern express methods as SWOT-analysis (Strengths - Weaknesses - Opportunities - Threats), and plans to expand the result of the last evaluation by the materials of this economic and social assessment report.

**How has social and environmental management been integrated into the overall business management process?**

Social and environmental management in the company are the part of general Business plan and Organizational Development Plan and corresponds to the current management in the company. At present, social and environmental management is completely regulated by Russian legislation. Internal social and environmental regulations of the company are absent, except for design and development of job descriptions for the personnel, certification of work places, development of safety rules for all workplaces, including those with dangerous substances, danger of machines and mechanisms, etc.

Company management considers these activities to strengthen socially and ecologically responsible business as a part of general strategy of the company, and as the actions which raise its capitalization, strengthen its image among general Russian grain producers, local authorities and communities. Therefore in the near future the company will start to develop its own plans, regulations and policies after finalization of this preliminary analysis according to the ESMP.

Besides, the managers of the company (both top and bottom levels), and also many non-management employees understand the responsibility for natural resources conservation and protection of the environment, maintenance of sustainable social development. They have basic ecological and social or related education and experience and are ready to raise their skills in the related field.

**What is the process for balancing and resolving conflicts between social, environmental and other business objectives and priorities?**

The basic components of such process are:

i. Adjustment of systematic work to decrease risks of social and environmental conflicts occurrence (revealing of risks – definition of ways to mitigate and framework design – monitoring – evaluation – correction of the framework);

ii. Training of key experts on early diagnostics and prevention of conflicts;

iii. Bottom-up approach to discussion and decision-making;

iv. Open social policy and readiness to help local communities and administrations according to available resources and plans.

**What are the responsibilities and accountability of personnel who manage, perform, and verify work affecting social and environmental issues, and are these well defined and documented?**

It becomes clear during conversations with junior managers and workers that practically everyone feels the importance of ecological requirements, but the majority understands it from utilitarian point of view, first of all as a pollution issue. Other issues, e.g. prevention of soil degradation, biodiversity conservation, global climate changes are not clear to the majority of employers as aspects which they can impact on. At the same time, the general ecological intelligence in the company is higher than in the area around. So, the territory of the farm lands is free from spontaneous dumps, forest belts. Adjacent fields are not littered.
Job descriptions contain requirements for knowledge and skills in the field of environment protection and ecology, labor protection. These are: agricultural production director, commercial director, manager of petrol products, agronomist, chief engineer, health and safety engineer, lawyer.

At the same time, ecological issues, as well as some others, are described in the job descriptions in a very general manner (for example, «the knowledge of the ecological legislation is required»), in the form of claim to the worker, instead of in the form of his/her current duties. In future it is proposed that the job descriptions will be revised and developed, specifying the fields in environmental and social responsibility of each position.

**How has top management established, reinforced and communicated organizational commitment?**

The basic forms to establish, reinforce and communicate organizational commitment are regular meetings for managers (both senior and junior management), open discussion of current and strategic questions, development of job descriptions for the personnel.

**Is there a process for periodic review of the management program in the event of changed project circumstances?**

Yes, such a process is an integral part of business strategy of the company. However it is not fixed as a specific paper document. At the same time, the main component and base for this process is discussion of plans and problems at the regular meetings.

2. **Training**

**How does the company identify social and environmental training needs?**

The company’s Organizational development plan states that “To increase the efficiency in the processes it is not only enough to have a job-rotation, changing work procedure or cutting cost. It is necessary to add value with training to ensure smooth and intelligent work flows within the company. The overall competence objective with the Volga Farming employees is that they should become multi-skilled and that they should be able to work independently at a world-class efficiency and cost standard”.

**How are training needs of specific job functions analyzed?**

Volga Farming has started an in-house training section called Volga Farming Academy. Volga Farming Academy presently has a training program for the Management Team (Management Team Training). The company has also launched its first “trainee program” for the middle management and specialists. Initially, Volga Farming will have three levels of training:

i. Management Team Training (15-20 people) – 2-3 times a year • Build a world-class Management Team with western management tools and inspiring coaching;

ii. Middle management and senior specialist training (20-30 people) - all year around • Build a world-class Middle management and Specialist Team with basic western management tools and high-quality Agricultural, Engineering, Logistic and IT training;

iii. General training and company information (All employees) – all year around • Build a world-class information package about the company (Mission, processes, job description, management/coaching, culture, reward systems, safety, security and career programs).
Certain successful actions are undertaken for training of machine operators. So, for example, if in 2009 tractor operators were afraid to drive tractor with GPS, at present time they do not think of other techniques.

Is training developed and reviewed and modified as needed?

Not yet, but is planned to be modified also with additions on the environmental and social issues.

3. Monitoring

How regular is social and environmental performance monitored?

Within the limits of current activity. The detailed plan of monitoring is not present. In the near future for the purpose of regular monitoring it is planned to create the managerial integrated geo-information system (geo-referenced data base) with indicators of economic, natural resources, ecological and social conditions, opened for replenishment by new fields of database.

The specialists in the company work on this GIS at the present time. Thus there are base maps in hard copies, but the company prefers to improve them by “shooting” the actual borders of the arable fields and other lands by GPS instrument. These borders are put in a vector format on the electronic map which is integrated with satellite Google Earth imagery and any other sources of geospatial data. At present time agriculturists are trained to get a vector basis with a help of GPS. The IT specialist integrates it with business accounting system 1С, where the expansion of a database fields is possible with the inclusion of nonparametric features concerning not only accounting but including social and
environmental parameters, materials of soil testing, etc. Furthermore, this database should be a basis for monitoring of all indicators of the project development (business, environmental and social).

This work is not finished, but there are all positive and perspective bases for it.

In the future, the company plans to develop target algorithms for operative and online creation of different maps as well as to develop regulations of use this managerial GIS.

The process of GIS creation: The GPS information on the borders of the field is put on the map over the Google space imagery.

The process of GIS creation: The borders of the fields of Belinskiy branch are already in the system
Have specific quantitative and/or qualitative performance indicators been established that relate to the company compliance requirements and management program, and what are they?

Not yet. Planned to be established in 2010.

What control processes are in place to regularly calibrate and sample environmental measuring and monitoring equipment and systems?

At present time all processes are within the limits of current activity and requirements of national and regional legislation. The internal plan of monitoring is not yet present. It is planned to assess the necessity of drawing up of such internal plan in 2010.

What social monitoring methods are in place to track social impacts and assess progress toward mitigation and development outcomes?

Not yet developed. Planned to be established by the end of 2010.

What is the process to periodically evaluate compliance with laws and regulations, and to meet the applicable Performance Standards?

The lawyer of the company is responsible for these evaluations. State monitoring and supervision bodies include the company in their plans of regular checks also. The mechanism of periodical evaluation of the compliance with applicable Performance Standards is not defined yet. The preliminary idea is to conduct such evaluation with a help of external specialists not less than once a year.

4. Reporting:

What social and environmental information is reported to company’s senior management, MIGA, and communities?

Not yet defined. Proposed in the form of regular ESAR (environmental and social assessment report)

How is this information managed?

Not yet defined. Proposed to be managed by current specialists (including environmental specialist proposed to be recruited) according to the system of evaluation criteria

Is information made available to those who need it when they need it?

Social and environmental policies of the company (proposed to be developed in the form of internal documents) are open. Proposed regular reports should be disseminated among interested governmental, non-governmental and commercial bodies. Other information could be available by the special inquiry.
CHAPTER 2.

LABOR AND WORKING CONDITIONS (IFC PS2)

Objectives
- To establish, maintain and improve the worker-management relationship
- To promote the fair treatment, non-discrimination and equal opportunity of workers, and compliance with national labor and employment laws
- To protect the workforce by addressing child labor and forced labor
- To promote safe and healthy working conditions, and to protect and promote the health of workers

Worker-management relationship


The Labor code establishes a number of strict requirements to employers and workers and prohibits discrimination and child or forced labor, regulates employee relations, rights and obligations of the worker and the employer and establishes the following principles of social partnership:
- Equality of the parties;
- Respect and accounting of interests of parties;
- Interest of parties in participation in contractual relations;
- State assistance in strengthening and development of social partnership on a democratic basis;
- Observance of the labor legislation by parties and their representatives as well as observance of other standard legal acts regulating labor rights;
- Validation of the parties’ representatives;
- Free choice during the discussion of the labor related questions;
- Voluntary acceptance of obligations by parties;
- Reality of the obligations undertaken by parties;
- Compulsion of accomplishment of collective agreements;
- Accomplishment control of the accepted collective agreements;
- Responsibility of parties and their representatives for failure collective agreements;

The collective agreement is the important component of the Russian labor legislation. It provides social guarantees to workers and can be concluded for the whole organization as well as for its sub-units.

Although there is no collective agreement between the administration and workers in the company, VF’s open HR policy is reflected in the document with the same name (annex 5). The collective agreement is not obligatory but it could be mutually beneficial for both parties if applied in the future as, besides the rights of the parties, the obligations of workers and administration should also be described in this document, including:
- regulations of employees’ behavior and working schedules;
- human resources policy and rules of personnel selection;
- detailed labor regulations specific to employment in Volga Farming/Grain company;
- a plan to mitigate the adverse impacts of retrenchment on employees;
- grievance mechanism;
- ecological and safety requirements;
- necessity and frequency of training;
- Other requirements described in the performance standard PS2.

The administration of Volga Farming/Grain company will in the near future, and together with representatives of workers’ collective, develop and conclude such agreements to reflect all that is required from the project according to PS2.

The Russian labor legislation regulates and describes (i) labor agreement (contract) between the worker and the employer, (ii) forms of agreements, (iii) conditions for contract conclusion and termination, (iv) skills, education and medical requirements, (v) duration of working day and/or week, (vi) conditions for privilege granting, (vii) possibilities and preferences for overtime work, (viii) preferential categories of employees, including persons under 18-years old, pregnant women, invalids, etc. A special section is devoted to time, duration and organization of rest periods, including holidays and days off.

In addition, the liability of the worker and the employer are strictly regulated as well as payment procedures, amount of payment, possibilities for surcharges and deductions and the liability of employer for infringement of terms of payment.

Russian labor legislation is supervised by the Office of Public Prosecutor and regulates the labor schedule and discipline, vocational training, retraining and improvement of professional skills of workers.

A specific section is devoted to labor safety including general directions of state policy in the field of labor safety, requirements of labor safety and obligations of the employer and workers to ensure labor safety.

Thus, Russian legislation completely regulates mutual relations between the worker and the employer and in accordance with accepted international conventions, in some cases is even stricter for the employer to protect worker’s rights.

Polls of workers show that they have not settled claims to the company administration, except a wish to raise salary, which is common in any company around the world. Moreover, these wishes are difficult to fulfill as the company has just started to develop and reinvests all incomes into company development. At the same time, the level of the salaries in the company is one of the highest in the agricultural sector in the Penza region which means that workers in Volga Farming are not restrained in comparison with workers in other agricultural companies. The average monthly salary in the agricultural sector in Penza region by 1 January, 2010 was 8989 rubles, and in VF the average monthly salary in 2009 was 22967 rubles.

The company also works on the improvement of worker-management relationships – the company uses a bottom-up approach where initiatives from workers are welcomed and are discussed in a team-based manner.

Polls of workers show that they can express themselves freely and with no discrimination from the company administration. On the contrary, one can notice the initial features of team spirit and a corporate aspiration to growth and development.

At the same time, polls of workers revealed a potential source of social conflicts between the employer and workers. The conflict is not yet distinct but nevertheless it has taken place in a latent form. The problem is that the employment period of many workers is between 7-9 months per year because of the seasonal specifics when it comes to agricultural production. During rest time, in winter, the employer suggests workers to go on leave without maintenance. Such policy is harmful to both parties. The employer risks losing qualified trained workers. The worker loses earnings, to his/her consideration, and is forced to seek additional work. The company administration understands the problem but as yet,
decisions to solve this are not of a systematic nature. Different solutions have been offered (creation of
insurance fund, alternative employment on subsidiary repair work, training courses paid by the
company etc.) but as these measures so far have no systematic character they need special attention,
probably demanding an individual approach for each worker.

For acceleration of this aspiration, the company will take actions to stimulate the workers, both directly
and in an indirect manner and different competitions, awards, incentive programs and social recognition
of best workers, crews and departments, etc. will be very useful tools to achieve this.

The Russian Labor Code also regulates trade union activities and activities of other representatives of
workers, obligates employers to provide suitable conditions for workers’ representatives’ activity and
describes the rights and basic forms of workers’ participation in the management of the company. In
Volga Farming/Grain Company the trade union organization is not active. Polls of workers show that
they do not express any interest either to the creation of a trade union in the company or to be involved
by any regional trade union of agricultural workers. The reason that people have no motivation to join
trade unions is that the existing system of mutual relations between the workers and the employer is
clear, useful and suitable. The other reason is that people do not see good examples and feel no real
benefit of existing labor unions for agricultural workers.

The company does not interfere, and also does not promote the creation of labor union, because the
administration considers the current bottom-up approach as a more effective and successful model for
mutual relations between the company and its personnel than the trade union model.

Protecting the Work Force

Forced labor is prohibited according to the Russian Labor Code.

Child labor is regulated by chapter 42 of Russian Labor Code (articles 265-272) – annex 14

Child labor is not used in the company. In possible cases of child labor, the company is guided by
requirements of the Russian legislation which limits work of children under 18 years old. At the same
time, the experience of the company's predecessors shows that attraction of youth can be effective
(also if they work as volunteers landings), for example, for single actions on clearing of agricultural fields
from stones, certainly with payment and organization of working conditions according to current
legislation. Such work is not a forced labor but stimulates youth to work in agriculture and provides the
primary vocational skills. If the company in the future plans to involve local youth under 18 years old, it
is necessary to organize the work and employment to ensure not to discourage young people to return
to agriculture after university and/or military services. So, not only draft and low-skill work should be
offered to the youth but also brief trainings and short practical imitations and implementations of
activities which need high skills and creative participation.

Schoolchildren are expediently to be involved in the company's activities for the purpose to maintain a
source for future personnel, especially taking into account the considerable outflow of youth from rural
areas. These activities could e.g. include discussions at schools, competitions on decision of agro-specific
problems, organization of Days of young farmers etc.

Gender issues

Women (comprise about 40 of the 240 regular staff) are satisfied with labor conditions and do not feel
any discrimination. The gender distribution in the company is the same irrespective of the level of
working position. Because of the cultural traditions in Russia, men traditionally occupy "male" posts
connected with more severe conditions of work, work with machinery and mechanisms, regular
traveling, and women are engaged in the work which carries more "settled" and monotonous character
and require attentiveness and assiduity such as work with papers, canteens, etc. (accountants, norm-
setters, tally-keepers, laborants, storekeepers).

Traditionally in Russian culture and in the Soviet period as well, men aspired to protect ladies from
severe work conditions, whilst at the same time recognizing their equal rights. Therefore in modern
Russia these principles of the labor organization have remained, that is women have equal rights with men under the law, but ultra-feminist positions are almost impossible, as there are also no restrictions for women in common life. Women are free in the choice of the basic life strategy. Normally, in Russian families women are responsible for most of the housework and care of children. At the same time, the main monetary income of a family arrives from men. In the majority of cases, this tradition is voluntarily supported in families and does not create problems or infringe on the social and civil rights of women.

Risks of changes of the present situation that could be connected with the project impact on it are almost impossible, as the project does not mention marriage and family relations outright.

At the same time, the company policy in future is to engage women also in the main activity of the company - plant growing – as agronomists, marketing experts, lawyers

**Labor safety and health of workers**

In the company, labor safety issues are given strong focus. The company recruited a high-skilled specialist in labor safety, who organizes regular trainings provided by competent organizations. Her main function is the monitoring of labor safety in the company.

Labor safety is completely regulated by Russian legislation and numerous instructions of supervising bodies. Only the listing of different orders and instructions in this area can occupy tens of pages.

*Types of instructing (initial, primary, target, repeated, off-schedule). Training, monitoring and evaluation in labor safety (the poster describing labor safety instructing)*
Books and brochures with different instructions regulating labor safety and health of workers

Instructions and orders for health of workers (normative for special clothes and other individual safety means, orders for free delivery of milk to workers of harmful workplaces)

In general, the labor safety in the company provides the following actions and measures:
Workers periodically pass medical inspections to assess whether they can participate in work with harmful conditions. Such special examinations in local clinics and hospitals are regular and paid by the company. For this purpose special orders on the company are issued.

Order to direct personnel to physical examination (on the left) and the conclusion on the examination of personnel (on the right).

The order specially and personally underlines harmful dangerous factors in the workplace to give the doctor the necessary information about the person. Using the results of an examination, the physician recommends whether to allow to work on the targeted workplace or to change the work, or to a direct the person for hospitalization or resort treatment. Individuals that have special dietary requirements are
also listed. On the basis of these recommendations the labor safety specialist directs necessary offers to company administration.

During the project development, the company will consider possibility to cover the expenses on voluntary medical insurance for its employees and include this service in the social package provided by the company.

The list of harmful works is well-known to the labor safety specialist as it is described in one of numerous instructions of Russian legislation. The access of persons having health restrictions to harmful works is forbidden. There are the following such work places in the company: work with oil products, work with pesticides, welding works, and some others.

All necessary requirements are accurately observed at such places of work: masks, gloves, respirators, fire prevention actions, labor safety registration books. To avoid accidents when working with heavy and complex machinery the special measures are also observed: specially-designed corporate clothes, working boots and helmets.

Packing seeds after fumigation

Fire safety wall in garage

Pesticide sprinkler

Safety prevention on the pesticides tank
Medical inspection and instruction in safety precautions are necessary not only for permanent staff members, but also for temporary workers, such as combine operators and machine operators involved in sowing and harvesting. Such workers are obliged by contract to pass physical examination themselves, and to present the results when registering with the company. At the workplace, they are instructed in safety precautions.

The absences of accidents and absence of occupational diseases are evidence of the efficiency of the labor safety measures. Among those workers assessed by recent physical examinations, there were only cases of gastroenteritis and common cold, and some age diseases, for example, hypertensia.

The supervising governmental bodies regularly check working conditions and labor safety. Such bodies are in particular:

State Agricultural Control. In particular, it checks the rules on pesticides and agrochemicals, and gives regular instructions to mitigate deficiencies and infringements. Such instructions must be complied with.
The State Consuming Control regularly checks conditions of storage of harmful substances and establishes conformity or discrepancy to the state norms and the rules which regulate storage and application of pesticides and agrochemicals. Such warehouses exist in each of branches of the organization and regularly are subject to check.

Sanitary conclusion on the storage of pesticides and agrochemicals in Belinskiy farm

Epidemiological State Control regularly checks canteens, hygiene rooms, garbage sites, platforms and containers.

State Fire Control checks the risk of fires and observance of fire prevention actions. All company premises are equipped by the appropriate equipment (see pictures above). State Environmental Control monitors compliance with environmental legislation, paying attention to potential sources of contamination

At the same time, in spite of there being a number of general regulations in Russian legislation, and that the company does not receive any strict instructions from the state supervising bodies (the only instruction concerned the necessity of reception of sanitary conclusion on the pesticide storage) - which suggests the situation in the company is positive - the company pays special attention to labor safety and improvement of working conditions. First of all, it is planned to gradually improve the culture of labor and production, raising it to European standards. Particular actions concern the repairs of most premises, their equipment, and providing modern facilities for both work and rest periods.
Local Belinskiy farm office

Working place of storekeeper

Cleaned workshop on techniques repair

How it was a year ago

An example of the assessment of the working place of the storekeeper of oil products
Another initiative of the company was to invite the specialized external organization to make the total certification of workplaces, including risk assessment. Now this work is finished, and each workplace has a passport with requirements to labor safety, security measures, environmental requirements (annex 10). Each worker is acquainted with this passport and shares duties with administration on observation of these requirements.

Four thick volumes with the materials for certification of workplaces

The short-term priorities of the company on labor safety and health of workers are:
- the equipment of rest rooms
- acquisition of winter overalls and other warm clothes
- to improve working conditions in company premises for cold seasons, for example to warm garages and workshops,
- to improve bathrooms and shower installation,
- gardening of the company grounds
- designing a system for grants, privileges and stimulus for health support (for example, subsidizing of sanatorium treatment that could also serve as additional non-material stimulus to work, sports facilities).

These priority actions for the improvement of working conditions are a part of the company policy, but they are carried out at the initiative of company administration, and plans are not formalized in documents. In the future, the company plans to develop the consecutive system, and a framework of complex improvement of working conditions. The plan will include the above-listed priority actions as well as those obligatory to the current labor legislation, and also a number of others (for example, regulations to use and storage of harmful substances, rest and vocation regulations, etc), including the joint and individual responsibilities of workers and administration.

The plan will be put forward for discussion by workers, adopted by administration and should be consistently carried out during the project.
CHAPTER 3.

POLLUTION PREVENTION AND ABATEMENT (IFC PS3)

In application to the Volga Farming grain production project, the Performance Standard 3 recognizes that increased agricultural activity can generate increased levels of pollution to air, water and soil that may threaten people and the environment at the local, regional, and global level. On the other hand, along with international trade, pollution prevention and control technologies and practices have become more accessible and achievable. This Performance Standard outlines a project approach to pollution prevention and abatement.

Objectives

- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities
- To promote the reduction of emissions that contribute to climate change

General assessment of possible pollutants

The following types of pollution could be expected during project development:

1. Local pollution.

Partly the company activities to prevent local pollution have been described in chapter 2 (Labor and Working Conditions), therefore here we mention only that which was not discussed above.

1.1. Local pollution of soil and workplaces by oil products in repair workshops, garages and agricultural machinery stations.

1.2. Local pollution by firm waste products of the areas around company’s production facilities.

From former times, the company has acquired sites like garages and machinery stations that are heavily-polluted by oil products. Many buildings are still not equipped with sewage systems and supplied with running water. In some lavatories, sewage is still dumped in deep pits. Considerable areas have been cleared already from garbage, and these areas contrast strongly with uncleared sites.

Two sites of the same machinery station (on the left – cleaned and organized, on the right – still as it was for years)
The company policy on hygiene and cleanliness in workplaces, and refuse collection has started to operate, since the foundation of the Grain Company in August 2008. Strict measures are applied to infringers, up to high fines and dismissal.

In the Soviet period, the cleanliness of workplaces, especially in agriculture, was not among the priorities of former land users, and the consequences of this "culture" can be observed in the area of the company production facilities at present time. For example, despite organization of the smoking areas, some workers smoke at a workplace out of these special sites. On some repair zones and storehouses, the lack of order could still be observed yet, with scattered tools and oil spills.

In spite of the fact that the company achieved big success in changing the relation of workers to «a pollution-free condition» in premises and production areas (clean toilets, showers, containers for garbage, etc.) there are still many gaps on this issue. The company will continue the corresponding efforts at all stages of the project preparation and performance. The continuous actions for the further clearing of territory from garbage, organization of dust-collecting sites, improvement of personal hygiene rooms, and others will be included in EMP and EMF of the project. For the coordination of these actions with possibilities of the company and ranging of the related priorities the specialist on environmental monitoring and control will be employed. This person will work closely to the labor safety and health specialist and farms managers.

1.3. Local pollution of the places of agrochemicals storage.

Storage of harmful chemical substances is organized according to the requirements of state supervising bodies: State technical control, State agricultural control, State epidemiological control and also on the basis of non-formal oral recommendations of the responsible company managers. Warehouses have special modern equipment, the log-book of a temperature regime is completed, and the chemicals are stored accurately in special boxes. There are strict requirements to complete the computerized log-book for allocation of chemicals. These measures exclude casual pollution of soils and surface waters by harmful agrochemicals.

![Storage of harmful agrochemicals (boxes colored by the rate of danger)](image1)

![Monitoring of temperature regime in different boxes](image2)

At the same time, in future the company will develop internal regulations to monitoring and control the process of receipt-storage-allocation-application of agrochemicals. Besides safety requirements rigidly registered in Russian legislation, these regulations will also reflect internal requirements of the company to the record-keeping and safety of agrochemicals, control of terms and storage conditions, optimization of their application and allocation.
1.4. Soil pollution by oil products in refueling places

As previously stated, pollution of this type is largely connected with the previous owners, and at present such pollution is usually observed during use of old machinery and during casual or sloppy work of personnel in garages, tractor stations and repair shops.

The company undertakes a number of efforts to prevent new pollution. In particular, mechanisms and cars pass regular checkups to prevent oil leaks, in repair shops the special tanks for gathering of the waste oil materials are installed.

At the same time, for liquidation of especially strong old pollutions from soils and also for the prevention of possibility of occasional spills of oil products in future the company plans to carry out an inventory of such sites, and restore the polluted ground. To design and build new constructions of this kind the company will apply technologies excluding contamination of soil and waters (making screens, use of modern adsorbents, etc.).

1.5. Waste products.

Russian legislation rather strictly regulates an order of waste circulation. At the same time, the state control on the enforcement procedure at present is far from perfect.

Volga Farming, positioning itself as the environmentally-friendly company, gives much attention to questions of collection, recycling and storage of waste, cleanliness on the working places. A lot has already been done in this case during the last two years. Considerable areas in granaries, repair shops and garages have been cleaned from garbage and refuse containers were installed. The company operations do not currently involve dangerous waste. At the same time, according to international practice and Russian legislation, the following kinds of a waste are necessary to take into account from the recycling point of view:

1.5.1. Grain wastes in granaries and collection-shipment-sorting points

This waste is warehoused and used for sale of cut prices as forage for livestock and poultry. Unconditioned remainders are plowed as organic fertilizers on fields.

1.5.2. Municipal waste and sewer drains

Gradually in cities and large settlements the company’s premises and buildings are connected to centralized municipal networks with the conclusion of service contracts. In buildings far from centralized networks, the replacement of existing sanitary objects by dry closets, and building of local installations on processing of sanitary waters are gradually planned.

1.5.3. Waste matter

The company contracted certified organizations for removal and recycling of waste matter.

1.5.4. Waste of oil products (combustive-lubricating materials)

This waste is stored in special tanks, and further transported to recycling.

1.5.5. Metallic waste

Metallic waste is collected and transported to specialized points of reception.

1.5.6. Factory waste (wooden, plastic, fabrics, etc.).

The amount of this type of waste is small. They are taken out by contracted organization to specialized polygons.

1.5.7. Factory waste (stones, cement, brick, etc.)

This type of waste is used for the improvement of dirt roads and grounds.

In general the company’s activity on waste recycling completely corresponds to the Russian legislation and approaches to common international practice on waste recycling in agricultural enterprises.
Unfortunately, in Russia the infrastructure of recycling enterprises is not well-developed and waste polygons dominate instead of combustion and recycling plants. Therefore the secondary reclamation of waste materials, their separation and recycling is still insufficiently developed. During the project development the company will pay special attention to the possibilities of secondary use of raw materials. It will be one of the duties of the environment specialist.

1.6. Possible pollution of grain due to mistakes during treatment in granaries and mechanisms (e.g. during fumigation)

To prevent casual mistakes during these operations on the treatment of large granaries the company made an agreement with specialized organizations having the necessary equipment and licenses. The activities of such organizations are guided by Procurement Ministry Resolution No.41 dated 13.02.80 “On Introduction of Instructions on Pest Control in Granaries” (annexes 7, 8). Small granaries and mechanisms are treated by the company personnel according to instructions on use of preparations and spraying mechanisms. Individual target instructing is provided for this purpose by the labor and health specialist.

In the future, the company plans to develop special ecological and sanitary regulations for such actions, as ecological requirements are currently not the basis for such activities. Instead, the procedure of grain sales dominates decision-making on treatment (grain should have the certificate, which includes information on pests and residual quantities pesticides).

Main types of buildings, premises, installations and areas with possible local pollution are:

- Car and tractor parking and repair stations on the open grounds (actions to prevent pollution are described above)
- Warehouses and granaries (actions to prevent pollution are described above)
- Repair shops (actions for prevention of pollution are described above)
- Office buildings and premises (contracts with service organizations for garbage removal, water supply, drainage system, etc. are described above),
- Cowshed and surrounding territory (now it is abandoned and is not used for the designated purpose, waste and polluting substances are not formed, in the long-term it will be converted into granary)

2. The areal pollution of soils by pesticides and other agrochemicals on agricultural fields

The soils analyses made by agrochemical services in Penza region, by Kemira Company, and research on individual samples of soils by a laboratory in Sweden have shown that soils are not polluted and are “ecologically clean”, meaning they do not contain harmful quantities of heavy metals and organic toxicants.

Potential sources of heavy metals that can contaminate soil while using current technologies were not found.

It is obvious that development and intensification of agriculture, grain production, especially using minimal and zero technologies preventing the loss of soil organic matter, decrease of moisture and nutrients’ holding capacity, soils erosion, require the use of relatively high amounts of pesticides. To preserve crops, it is required to destroy weeds and wreckers to combat plant diseases. This is well-understood by the company’s specialists, who have high qualifications in horticulture. The Production Director of the company (in fact, the chief agronomist of the company) Dr. Willi Drews, is a highly-skilled specialist in a scope of plants protection. He has extensive experience in western companies on application of chemical frames of plants protection in Russia, Ukraine and other CIS countries. Therefore he is responsible for all agrochemicals issues: application, storage, training personnel, procurement and purchases etc.

Actually all activities in the company concerning pest management completely comply with requirements of this PS3. On the basis of Russian Federal Sanitary Regulations and Standards “Hygienic
requirements for storage, applications and transportation of pesticides and agrichemicals” the company developed its own internal documents that regulate the process of pest management and application of pesticides (annex 12), and uses “Material Safety Data Sheets (MSDS) for each chemical substance (annex 12).

Volga Farming uses pesticides that are low in human toxicity, known to be effective against the target species, and have minimal effects on non-target species and the environment. The selection of pesticides is based not only on their prices and efficiency, but also on their impact on different pests and on whether the pesticides are packaged in safe containers, are clearly labeled for safe and proper use, and have been manufactured by a company currently licensed by relevant regulatory agencies. All pesticides used by Volga Farming have the so-called “certificate of allowance” provided by Russian State Technical Control.

*Pesticides allowed by Russian regularities (red arrow points on the mark of allowance)*

Volga Farming uses this pesticide application regime to minimize damage to natural enemies and prevent the development of resistance in pests. In addition, pesticides are handled, stored, applied, and disposed of in accordance with the Food and Agriculture Organization’s International Code of Conduct on the Distribution and Use of Pesticides.

Volga Farming does not use products that fall in World Health Organization Recommended Classification of Pesticides by Hazard Classes Ia (extremely hazardous) and Ib (highly hazardous); the Class II (moderately hazardous) pesticides are used only according national restrictions for their application. Such chemicals are accessible to personnel with proper training, equipment and facilities to handle, store, apply and dispose these products properly.

The company uses the following chemicals for plant protection (according to the Calculation list on necessary pesticides for spring/summer 2010): Sekator-turbo, Lintur, Granstar Pro, Calibr, Logran (Laren), Banvel, Diamax, Serto plus, Pulsar, Agritox, Dual Gold, Uragan Forte, Total, Dividend Star, Alto super, Rex S, Zeppelin, Trophy 90. All chemicals are under class II of WHO classification.
At the same time, the list of effective remedies for plants’ protection changes and updated regularly, therefore it is difficult for non-experts to follow occurring innovations. In this context, the Production Director regularly trains agronomists at the farms of the company. Understanding the risk of losing highly-skilled specialists, the company plans to include a cycle of trainings in the plan of improvement of professional skills of agronomists and to attract external scientists and experts. Such trainings will include not only training in the field of efficiency and ecological compatibility of the remedies for plants protection, but also training in diagnostics of plants diseases, early diagnostics of wreckers and carriers of diseases, training in the integrated systems of protection of plants.

According to this PS3, Volga Farming plans to strengthen its Emergency Preparedness and Response. Volga Farming will evaluate the operational risks, accidental and emergency situations and their potential negative consequences and prepare a plan that addresses the training, resources, responsibilities, communication, procedures and other aspects required to effectively respond to emergencies associated with possible project hazards. For this plan, Volga Farming will: (i) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project’s proximity to ecologically-sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (ii) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. These strategies include, but are not limited to, evaluation of project location alternatives and emissions offsets.

According to the requirements of this PS, Volga Farming will formulate and implement an integrated pest management (IPM) and/or integrated vector management (IVM) approach for pest management activities. These plans will entail coordinated use of pest and environmental information along with available pest control methods, including cultural practices, biological, genetic and, as a last resort, chemical means to prevent unacceptable levels of pest damage.

PMP is not documented but in fact is an integral part of company activity and unites integrated pest management and integrated vector management. In process of project development assumes to develop and constantly improve (with updating not less than once a year) the PMP document both pest management frameworks.

The proposed prior activities to be included in these plans are the following:

- Optimization of fallow soils as measures to combat weeds and wreckers, and to improve soil fertility
- Minimization of mechanical soil treatment up to zero tillage
- Optimization of crop rotations
- Decrease in pesticide pressure through the use of new generations of remedies for plants protection. Though they are more expensive, they also are more effective and environmentally-safe. So, for example, according to Dr. Drews (Production Director), to combat annual and some perennial weeds on
wheat, using the Secator-turbo at an application rate of 100 g/ha at the price of 302 rubles for 1 ha instead of Diamax at application of 700 g/ha at the price of 175 rubles for 1 ha, is generally more effective. As a matter of fact, the pesticidal pressure decreases 7 times though costs increase by 70%.

Use of highly effective modern machinery excluding pollution of soil and casual losses of chemicals

Preparing of tank mixtures of pesticides with complex action

Development of laboratory base for assurance of soils and waters quality on the basis of existing laboratory on assurance of grain quality

Personnel training on methods of pesticide use and early diagnostics of weeds, wreckers and diseases of plants

Working out of internal regulations for the cycle of “storing-preparation of acting solutions-application-utilization” of pesticides and agrochemicals

For drawing up of the IPM plans, the company understands that the basic nuclei of wreckers’ reproduction are concentrated in forest belts and on fields where they appear in the form of small ulcer spots that are hard to notice. Therefore, providing the integral use of forest belts (see chapter 06 on biodiversity conservation), the company places special value on such methods as early diagnostics of spotty occurrences of wreckers and diseases which can be in their initial stages suppressed quickly even by manual spraying. That can decrease not only the total expenses on pesticides but also lower pesticidal pressure on agro-ecosystems, promoting improvement of environmental conditions. The invitation of the entomologist who would carry out trainings with agronomists on indication of the early centers can become good help in this case. Some other ways to combat certain categories of insects can be the use of pheromone traps, which not only promote the improvement of situation on fields, but also the general improvement of forest belts. The forest belts treatment also could become an effective method to combat wreckers but it can negatively affect the environmental conditions in ecological corridors for animals (see chapter 6). Therefore, this method requires careful research of possible risks and consequences. The teamwork of the company specialists and ecologists can help to find reasonable methods to combat dangerous agricultural wreckers essentially reducing the grain quality up to a fodder level (for example, Eurygaster sp. bugs, local name - klop-cherepashka), at preservation of conditions of migration for birds and animals.

Except pesticides, there is a potential risk of the over-application of fertilizers in soil and the subsequent pollution of local water reservoirs by decomposition and migration products. This phenomenon was widespread in the Soviet period when fertilizers were used without control in the doses essentially exceeding requirements of plants.

To decrease the over-use of fertilizers and simultaneous increase of their efficiency the company started to use of machines which allow fertilizers to be spread directly under a sowed seed in root zone (photo).
Complex sowing machine

Besides, in the near future, the company plans to conduct a repeated agrochemical study by a uniform technique in order to make results on different fields comparable, to strengthen agrochemical and soil testing methods in analytical laboratory to carry out analyses by own specialists, to get the equipment, allowing to make express analyses of soils and plants directly in the field, to train personnel to use these equipment and information.

3. Pollution of waters

3.1. Pollution of sources of drinking water

The risk of pollution of sources of drinking water takes place only where there is no centralized water supply network – in small villages and on field stations where well and brought water are used. In other places water supply systems are centralized and maintained by contracted organizations. At the same time, the above-described measures on soil and water protection from contamination with pesticides, oil products and other pollutants exclude the penetration of these toxicants in potable water sources.

3.2. Pollution of surface waters

This type of pollution in the current activities of the company is only possible if there is non-compliance with the actions listed above. Assuming IPM and EMP will establish personal responsibility of the company personnel for infringements of the regulations, both which exist and will be developed during preparation and performance of the project. According to the Russian water and nature conservation legislation (Water Code and Environmental protection Federal Law), to preserve the water sources and resources the water protection zones along water objects must be established. The width of these zones depends on the type of object and its nature protection value and can vary from 30 meters (for small rivers, streams and ponds) to 300 meters and more for larger water objects. Basically in the project-affected area the width of water protection zones do not exceed 100 meters on both sides of the stream. Within coastal protective strips of water security zones, agricultural activity is forbidden, including tillage. Use of agrochemicals is forbidden in all whole water protection zones. Borders of these water protection zones are mapped and available through cadastre documentation stored by the company lawyer but the zones are not demarcated on the ground.

However, managing directors and agronomists are aware of water protection zones and coastal protective strips. Their arrangement is considered at once while planning and placing of crops that need pesticides to grow. For example in 2010 the sowing of peas (the growing of peas needs 2 treatments against Bruhus pisorum) was transferred to fields located far from water protection zones and
settlements. Agronomists in local farms carry out the control of agricultural works in water protection zones, and close to settlements.

In the near future, the company plans also to restore landmarks of water protection zones and coastal protective strips in nature.

3.3. Pollution of ground waters

Even if all the above-described protective actions are performed, the risk of this type of pollution is possible, especially in humid years, as a result of washout and leaching of pollutants from the sites polluted earlier by previous owners. As it was marked above in this chapter in item 1.4., the company plans to make a special inventory to reveal such sites.

4. Air pollution

4.1. Dusting of atmosphere as a result of wind erosion during tillage

This kind of pollution is usual for agriculture. At the same time, the measures to decrease air dusting during soil tillage, which are applied and planned for application in the company, include some actions already described above:

- Cultivation of soils with deep tools only in the optimal moisture conditions excluding the intensive dispersion of humic topsoil
- Transition to minimum, and in certain cases – to zero soil tillage, including sowing and use of fertilizers in the eddish-covered soil with special tools
- Optimization of crop rotations
- The prohibition of tillage in water protection zones, steep slopes to ravines, beams and reservoirs especially on light-textured soils

4.2. Pollution of atmosphere by cars and mechanisms as a result of combustion of oil products

Decrease of this kind of pollution is achieved by acquisition of modern energy-efficient equipment that has necessary filters and devices to enable reburning of fuel.

4.3. Greenhouse gases and carbon balance

The main sources of greenhouse gases connected with the company’s activities are emissions from cars and machinery running on hydrocarbon products and more importantly, the relatively quick mineralization of organic residuals going in soil after harvesting.

If the first source is minimized and reduced by purchasing energy efficient machinery and consuming less fuel at simultaneous improvement of emissions quality, then the issue concerning the latter source is not so obvious.

The problem is that without scientific study and calculation of carbon balance on company fields it is impossible to make conclusion about positive or negative balance. Negative components appear from losses of soil humus while tillage and fallowing, alienation of a part of organic matter with crops, intensification of biocirculation and microbiological activity. On the other hand, positive components include fixing of atmospheric carbon by biomass (including roots), and plowing of stubble fields in soil where they integrated in soil humic substance.

As soils have been substantially degraded before the land was coming into use by Volga Farming, more exact calculation is needed in order to forecast positive or negative effects on carbon balance and special research is necessary which can be included in the company environmental management plan.
According to the PS3, during the development or operation of projects that are expected to or currently produce significant quantities of GHGs, VF will quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions will be conducted annually in accordance with internationally recognized methodologies. In addition, VF will evaluate technically and financially feasible and cost-effective options to reduce or offset project-related GHG emissions during the design and operation of the project. These options may include, also carbon financing, energy efficiency improvement, the use of renewable energy sources, alterations of project design, emissions offsets and the adoption of other mitigation measures.
CHAPTER 4.

COMMUNITY HEALTH, SAFETY AND SECURITY (PS4)

Objectives

- To avoid or minimize risks to and impacts on the health and safety of the local community during the project life cycle from both routine and non-routine circumstances
- To ensure that the safeguarding of personnel and property is carried out in a legitimate manner that avoids or minimizes risks to the community’s safety and security

Assessment of possible risks

Grain production does not bring risks to community health and safety as all settlements in the area are not subjected to direct impact by the company’s activities. The majority of villages and small towns are located relatively far (not less than 300 meters) from the farmlands (see also chapter 5), therefore people are not disturbed by the noise of heavy machinery while soil plowing, sowing and harvesting, grain transportation and storage. Agrochemicals are not applied on the fields close to the settlements.

The example of the location of settlements (red thick lines on the top and on the right of the picture) and land platform of the company (grey) in Kevda-vershina farm of Belinsky branch
Despite the minimal risks, the complete cycle of works in Volga Farming is organized in a manner to ensure that evaluation of risks and impacts on the health and safety of the affected community is conducted during the design, construction and operation of any activities as well as during decommissioning of the project objects. Managers in farms and agronomists are obliged to establish preventive measures to address them in a manner commensurate with the identified risks and impacts. As PS4 recommends, the favorable measures are the prevention or avoidance of risks and impacts over their minimization and reduction.

The company managers understand that the application of pesticides on agricultural fields should be considered among the most important indirect dangers for communities, and in this case undertake the integrated mitigation measures and pest management (annex 12).

As noted in chapter 1, the company aspires to lower pesticidal pressure on agricultural fields and adjacent landscapes. For this purpose:

- Less harmful to people and animals, modern pesticides with faster terms of decomposition are applied
- Selective pesticides are used in smaller concentrations, in comparison with earlier applied
- The company considers it essential to treat forest belts with care, despite these being the basic centers of wreckers’ reproduction
- New more-effective mechanisms of soil management in fields are applied to reduce uncontrolled scattering of harmful substances, pollution of atmosphere, soils and waters

In the first year of the company’s operations, local people complained to local administration about supposed environmental contamination by pesticides coming from the company. However, the checks conducted by authorized supervising organizations have shown that all measures on environmental conservation and preservation of people health have been observed. Such precedents enabled the company to take measures aimed at providing health and safety awareness among the local community. Such measures include:

- Regular trainings to the personnel of the company which are meant to upgrade the general level of knowledge of the employees in the areas of advanced farming practices and environmental aspects of agricultural production;
- Regular stake (Pai) holder meetings held a minimum of twice a year. The agenda of the meetings include Question-Answer block in which company agronomists highlight technological aspects of farming operations with respect to soil cultivation and crop protection techniques in particular;
- Field Days arranged by the company annually in June. Local authorities, farming companies as well as local residents are regular guests to these events. The program includes demonstration
of modern machinery, innovative approaches in soil cultivation, seed treatment, crop protection and precision input application techniques. Special attention is paid to the questions concerning which hazard class pesticides are used and at what rates.

The subsequent explanations from the company for local residents have convinced them that the company does not seek excess profit as the purpose to the detriment of population health. Further such conversations, especially in the beginning of agricultural season, began to acquire regular character. It completely corresponds to the requirement of PS4 that «where the project poses risks to or adverse impacts on the health and safety of affected communities, the client will disclose the Action Plan and any other relevant project-related information to enable the affected communities and relevant government agencies to understand these risks and impacts, and will engage the affected communities and agencies on an ongoing basis consistent with the requirements of Performance Standard 1»

For improvement of interaction with local population and administration on environmental issues, the company aims to further expand the themes of such conversations, and also, as far as possible, to organize a series of lectures, performances in mass media, publication of the company environmental reports. For this purpose, the company is considering recruiting a PR-specialist who will assess the current situation, plan necessary actions within communities, make reports and press releases.

To a much lesser degree for local communities are the risks created by shabby buildings and constructions acquired or leased together with lands: old warehouses, factories, garages, etc. In the majority of cases, these buildings have shabby roofs, walls, windows, etc. To decrease risks the company makes the best efforts to reconstruct these buildings, and in the case of inefficiency, to dismantle them. The decisions on priorities of investments for these targets are accepted jointly with participation of engineers of the company, and in case of their insufficient skills the specialized organizations or external experts are involved. Simultaneously, the company has undertaken a number of efforts to limit population access to such weak constructions, having organized protection and having restored fences round such objects. In the near future, the company will make a detailed inventory of shabby buildings and constructions, define priorities and develop the detailed plan of their restoration/dismantling.

For designing and building of new constructions having high risk of operation not only for the company (for example, grain dryer construction), but also for communities (for example, the petrol station), design is provided by the specialized company under the contract. Small building and engineering works are projected by the company engineer, if necessary after coordination with state supervising bodies.

Community Exposure to Disease

The risk that diseases will spread during grain production is relatively low. At the same time, certain risks are available concerning possibility of infection of commercial grain and forages sold to population. This risk in Volga Farming is anticipated by the following measures:

- Treatment of granaries and grain put on storage by antimicrobial chemicals and fungicides
- Regular granary and laboratory control of grain on the content of harmful impurity and wreckers

Potential risks for community exposure to water-borne, water-based, water-related, vector-borne disease, and other communicable diseases in agricultural projects basically are connected with livestock and use of organic fertilizers on the fields, manure in particular. In the company, animal breeding is not planned, so, this risk is absent.

The risk of transmission of communicable diseases that may be associated with the influx of temporary or permanent project labor is minimized by medical examination of short-term seasonal workers.

Emergency Preparedness and Response

As it noted above, Volga Farming plans to assess the potential risks and impacts from project activities and inform communities of significant potential hazards in an appropriate manner.
Also Volga Farming is open to assist and collaborate with the community and the local government agencies in their preparations to respond effectively to emergency situations, especially when their participation and collaboration are necessary to respond to such emergency situations. If local government agencies have little or no capacity to respond effectively, Volga Farming do not hesitate to play an active role in preparing for and responding to emergencies, even those which are not caused by or associated with the project. The current example of such emergency is the extreme drought and fires in the region, which possibly can affect the project, especially when wheat on fields stay dry and can to fire up from any spark.

In the future, Volga Farming plans to document its emergency preparedness and response activities, resources, and responsibilities, and will disclose appropriate information in the Action Plan or other relevant documents to affected communities and relevant authorities.

**Security Personnel Requirements**

In the case of requirements for security personnel, Volga Farming is guided by requirements of Russian legislation and good international practices concerning psychological and physical health of the personnel in terms of hiring, permission to use firearms, rules of conduct, training, equipping and monitoring of such personnel, and also assesses risks to those within and outside the project site posed by its security arrangements.

Selection of security guards in each of the company branches are made by the Chief of security service assisted by local farms managers. Chief of security is also in charge of training, deployment and monitoring security guards. Before employment, the chief of security service checks potential security guards on the possible previous convictions, communications with criminal structures, presence of fatal predilections, etc. Watchmen have no special means of protection/detention, except a mobile phone used for notification means.

At present, the company has introduced video control system in Volchkovo branch (big granary centre). The same monitoring systems are in the process of implementation in the workshops and stores on all of the farms. In the framework of general Farm Development Program each farm unit (machinery yard, workshop and storage area) will be perimeter-fenced in order to improve farm security status.

Drivers of the cargo motor transport of the company started also to use GPS gauges in a test mode that allow to trace a route in real-time mode.

The company has no experience to contract specialized security organizations. In the future as an experiment the company plans to contract the private security company for the term of harvesting.

Volga Farming consider that if necessary, it will make reasonable inquiries to satisfy itself that those providing security are not implicated in past abuses, will train them adequately in the use of force (and where applicable, firearms) and appropriate conduct toward workers and the local community, and require them to act within the applicable law. The company will not sanction any use of force except when used for preventive and defensive purposes in proportion to the nature and extent of the threat. A grievance mechanism that should allow the affected community to express concerns about the security arrangements and acts of security personnel is under discussion in the company and should be adopted in the beginning of 2011.

According to this mechanism, Volga Farming will investigate any credible allegations of unlawful or abusive acts of security personnel, take action (or urge appropriate parties to take action) to prevent recurrence, and report unlawful and abusive acts to public authorities when appropriate.

**Community Grievance Mechanism**

In the matters concerning protection of labor rights, the employees are guided by grievance mechanism specified in the Labor Code of the Russian Federation, Part 5, articles 352-419 (annex 13).

Grievance mechanism for local communities in relation to Volga Farming activities is represented on three levels.
1. **Company Level.** Local community representatives can address their concerns/complaints to company management in the form of a written complaint/request or a verbal message either at regular share (pai) holders meetings or in the company office at the meetings with company Legal and Health & Safety specialists at specified office hours. In both instances the complaints are documented, circulated inside the company and brought up for discussion at the next Management Meeting.

*Notice on the office door (at the bottom) informing of the hours when representatives of local communities are accepted (Tuesdays and Fridays, from 10 to 12 a.m.)*

2. **Local Council and District Administration Level.** Written requests/complaints are to be addressed to Head of Village Council.

3. **Prosecutor’s Office Level (The authority is entrusted with supervision of the observance of laws).** In this case a written request/complaint is to be addressed to a district Prosecutor’s Office. The result of this procedure is an official inspection of company’s activity by relevant authority (Federal Service for Veterinary and Phytosanitary Surveillance, Federal Labor Inspection, Russian Federal Service for Ecological, Technical and Atomic Supervision or Russian Federal Consumer Rights Protection and Human Health Control Service) initiated by Prosecutor’s Office.
CHAPTER 5.

LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT (IFC PS5)

Objectives

- To avoid or at least minimize involuntary resettlement wherever feasible by exploring alternative project designs
- To mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons’ use of land by: (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected
- To improve or at least restore the livelihoods and standards of living of displaced persons
- To improve living conditions among displaced persons through provision of adequate housing with security of tenure at resettlement sites

This Performance Standard is easy to comply with for the Volga Farming grain production project as the company has acquired or leased land, and further plans to buy and lease land, for agricultural purposes only. According to Russian legislation, there cannot be any residential buildings on this land. For the purpose of residential areas there is another land category – land for settlements. Volga Farming will not acquire such land except for very limited land areas where there are existing grain storage, workshops, grain production sites or similar which, in some cases are defined as land for settlement. However, no people are living on those sites and there has and will not be any resettlement issues related to the land acquired by Volga Farming. In addition, Volga Farming has no intention to transfer farmland into other land categories. Thus, people are neither formally nor informally living on nor using land owned or leased by Volga Farming. The same will apply to future land acquired or leased by Volga Farming.

In case of circumstances leading to economic displacement - in other words if land acquisition for the project causes loss of income or livelihood - regardless of whether or not the affected people are physically displaced, the company will to be guided by the requirements, stated in Performance Standard 5:

- Promptly compensate economically displaced persons for loss of assets or access to assets at full replacement cost
- In cases where land acquisition affects commercial structures, compensate the affected business owner for the cost of reestablishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery or other equipment
- Provide replacement property (e.g. agricultural or commercial sites) of equal or greater value, or cash compensation at full replacement cost where appropriate, to persons with legal rights or claims to land which are recognized or recognizable under the national laws
- Compensate economically displaced persons who are without legally recognizable claims to land for lost assets (such as crops, irrigation infrastructure and other improvements made to the land) other than land, at full replacement cost. Volga Farming will not compensate or assist opportunistic settlers who encroach on the project area after the cut-off date
- Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their income-earning capacity, production levels and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected

- Provide transitional support to economically displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living

**Land Market**

The past decade in Russian economy was marked by a number of reforms, the most significant of which is the Reform of the Russian Land Code. Among the major processes that underwent significant changes were unified land cadastre and transactions with land objects. Introduction of new electronic land cadastre system, transparent processes of purchase and lease of land objects resulted in the subsequent development of land market. Continuous growth of a number of agricultural land operators (small-to-medium size private farms) in the first half of the decade was followed by emergence of national agricultural holdings which provided massive influx of funds into agricultural sector from other developed economy sectors as well as speculative land market players. Average acquisition prices for land doubled by 2008 reaching USD 800 per ha.

One direct consequence of the recession was a significant drop in land prices which put average price tags back to the level of pre-recession year 2007, i.e. USD 200-400. Recent legislative changes made it virtually impossible to own land just for speculative purposes in Russia. Under these circumstances favorable conditions were created for direct investments into agricultural sector of Russia.

**Current land platform**

From the beginning of 2008, Volga Farming prioritized a complete in-house competence to expediently and safely secure all of its land rights and ensure acquiring prime land at market price.

The acquisition team includes former employees and key consultants from the Russian Land Administration. The team has extensive practical experience from acquisition and transaction procedures, in-depth knowledge about bureaucratic pitfalls and how to avoid them, as well as a full understanding of how to best apply the guiding laws and regulations and be proactive to legal changes over time.

The acquisition team started purchasing land in Penza oblast in 2008, both public 49 year leases (20 000 ha) and ownership of private pai land (23 000 ha). In spring 2009 Volga Farming acquired the Penza based (Belinsky district) farming company Heartland Farms with private 49 year leases (12 500 ha), public 49 year leases (4 500 ha) and ownership of private pai land (1000 ha). In total Volga Farming have around 61 000 ha land under control within 60 km radius in three districts of Penza region (Belinsky, Nizhny Lomov and Pachelma). An additional 4 500 ha land in Belinsky district is on an 11 months lease term.

The land controlled by Volga Farming consists of the following land categories:

a) **VF Owned Land (40%)**. Ownership is the right to possess, use and utilize land without limitations provided for by purposeful use of land. The land is purchased under the contracts from private individuals (pai holders). In the 1990s, pai holders acquired ownership right for the land as a result of the breakup of Soviet collective farms (kolkhoz) during the process of privatization. Ownership right provides the owner with maximum legal security. The limitations are land tax and utilization of land in line with its category.

b) **VF Leased Land (60%)**:

i. Leases with pai holders (20%). Lease is the right to use and utilize land provided by the Lessor (pai holders) to the company at a charge for a specified period of time (49 years in most cases). Land rent is reviewed on an annual basis and is subject to the agreement between the parties.
Leases with Municipal Authorities (33%) and Penza region (7%). Land rent under Municipal leases is determined by the municipal authority, reviewed on an annual basis and takes into account cadastre value, type of activities of the company and tax rate. Type of activity and tax rate are determined by the municipal authority. Land rent under Regional leases depends on cadastre value. All the leases are signed for 49 years and registered. Volga Farming has the right to purchase this land after 3 years of lease.

The benefit of lease is associated with the ability to start land utilization and gaining profits immediately. In the case of Volga Farming, the leases are considered as initial step in land acquisition (ownership rights can be obtained after three years). The downsides of the lease are possible increase of land rent, dependence on the will of the lessor and the possibility of terminating the lease if contract conditions are not fulfilled.

All the land that has been acquired (or is in the process of being registered as ownership rights) by Volga Farming from private individuals results from voluntary land market transactions in which the seller has not been obliged to sell and the buyer could not resort to expropriation or other compulsory procedures if negotiations fail. In the event of adverse economic, social, or environmental impacts from project activities other than land acquisition (e.g. loss of access to assets or resources or restrictions on land use), such impacts will be avoided, minimized, mitigated or compensated for through the process of Russian legislation and of Social and Environmental Assessment under Performance Standard 1.

The private land owners have shares (pais) of the former collectively owned farm land (Kolkhoz and Sovkhoz land). A pai is often between 5 and 10 Ha in size and is not demarcated on the ground. The process to go through this followed by registering ownership rights for that demarcated land object is a cumbersome, time-consuming and, for the pai owners, costly procedure. Thus, they in most cases do not go through this procedure and instead are more interested to either sell or lease the shares to another physical or juridical person who collects a number of shares in order to demarcate larger land objects more appropriate for efficient farming in the vast agriculture land areas where Volga Farming is operating. The procedure of acquisition of pais for registration of ownership rights to land objects (where a number of pais are included) is further described in annex 11. Technically, the process might differ slightly from case to case but this does neither affect the end result nor the relation with the pai owners. The process of land acquisition is transparent and regulated by Russian legislation (the Land Code and the Federal Law on Turnover of Agriculture Land).

Most of the municipal land has been in production and the company also took on some of the employees for this ongoing concern. When it comes to pai owners, many of those working for Volga Farming are former pai owners. For Belinsk farm it is e.g. estimated to be 65% of the employees.

Out of the 61 000 ha, more than 50 000 ha is registered as ownership or lease rights and the remaining land is in the final stage of the registration process. In general, registration of pai land is much more time-consuming to conclude compared to the public land leases which are all completed. The public leases are according to the legislation possible to purchase after three years at a price corresponding to 20% of the cadastral value (defined by the federal authority not less than one time every fifth year). With current exchange rate this is approximately equal to 140 USD/ha which could be compared with the average market price of pai land which is between 200 and 400 USD/ha within the areas where Volga Farming is located and plans to expand. This is also the approximate prices for which Volga Farming has acquired its current land.

**Future acquisition of 90 000 ha agriculture land**

The long-term target is to increase Volga Farming land stock to in total 150 000 ha, including the 61 000 ha agriculture land already under control which is located in Penza region and concentrated within a radius of 60 km. The strategy for identification and registration of the remaining 90 000 ha land rights is outlined. The land is located in Penza region (to expand the existing 61 000 ha platform to around 100 000 ha) and in the neighbouring Tambov region (about 50 000 ha). The land rights will be both in the form of long-term lease rights and ownership rights.
It should be noted that all 150 000 ha land is for agriculture purposes, neither settlements nor forests are part of this land. Most land is already in production, although parts are abandoned former collective farm land. Further, VF will not take on any land which could be in conflict with conservation of biodiversity or counteract sustainable natural resource management and which comply with the IFC standards.

**Location of the land in relation to settlements**

Generally, the majority of settlements in the territory are located close to main roads, not on land suitable for agriculture purpose and with much of the neighboring land being pastures, etc. and not arable land. The vast majority of Volga Farming land is located far from settlements. In Belinsk district and Pachelma district the Volga Farming fields are not located close to settlements. In Nizhny Lomov district a smaller part of the arable land is bordering the settlements of Sorokino, Atmis, Mayorovka and Rassvet, see small and large-scale maps below. Today, in total about 300 ha of VF agriculture land in production is located closer than 300 m from settlements and when all of the 65 000 ha land platform is in production about 500 ha will be within 300 m from these four affected settlements. Volga Farming is not, and will not, apply any chemicals within these areas.
Nizhny Lomov district map. Name of settlements (Sorokino, Atmis, Mayorovka and Rassvet) where Volga Farming has agriculture land in production closer than 300 m to the settlements are underlined and the location of the fields marked with dark blue ellipses.

Rassvet settlement, population about 200 people. A part of (approx 40 ha) field no 4 is in production and located closer than 300 m from the settlement
**Mayorovka settlement**, population 200 people. Field 10 (10 Ha out of total 57 ha), field 37 (40 ha), field 33 (40 ha out of 144 ha) and field 54 (38 ha and located just south from map extract) are land in production closer than 300 m from the settlement.

**Atmis settlement**, population about 350 people. Field 6 (30 Ha out of 150 Ha), field no 2(18 Ha) and field 39 (35 Ha out of 47 Ha) are land in production and located closer than 300 m from the settlement.
Sorokino settlement, population about 150 people. Field 10 (38 ha), field (30 ha out of 122 ha) and field 12 (24 ha) are land in production and located closer than 300 m from the settlement.
CHAPTER 6.

BIODIVERSITY CONSERVATION AND SUSTAINABLE NATURAL RESOURCE MANAGEMENT (IFC PS6)

Performance Standard 6 recognizes that protecting and conserving biodiversity—the variety of life in all its forms, including genetic, species and ecosystem diversity—and its ability to change and evolve, is fundamental to sustainable development. The components of biodiversity, as defined in the Convention on Biological Diversity, include ecosystems and habitats, species and communities, and genes and genomes, all of which have social, economic, cultural and scientific importance. This Performance Standard reflects the objectives of the Convention on Biological Diversity to conserve biological diversity and promote use of renewable natural resources in a sustainable manner. This Performance Standard addresses how clients can avoid or mitigate threats to biodiversity arising from their operations as well as sustainably manage renewable natural resources.

Objectives

To protect and conserve biodiversity

To promote the sustainable management and use of natural resources through the adoption of practices that integrate conservation needs and development priorities

Biodiversity issue in the region

The total area of the project is rather extensive. Only the area of land involved in crop production is more than 40,000 ha at present time. In the future it plans to be expanded to 150,000 ha, and the region area where clusters of the project lands occur is about 400,000 ha.

Despite such a large area, the project does not impact on the local natural biological diversity as there are no natural habitats in the region where project clusters are located. The land platform of the project totally consists of arable lands that had been transferred anthropogenically from natural forest steppe several centuries ago. Only small plots of natural habitats, such as forest sites and meadows along rivers (described below) remained in the region but they do not belong to the company’s lands. In this case this performance standard is not applicable to the project.
The general view of the area (satellite image by the “Google Earth”: green spots of small woods and small river flood plains do not belong to the company’s lands.

Typical landscape of the project-affected area
Even if there are no expected negative impacts of the project activities on local biodiversity, the Volga Farming company, promoting western standards of life, that includes biodiversity conservation activities, plans to build capacities to support biodiversity conservation in the surrounding and adjacent areas of its agricultural land platform indirectly. For this purpose, even though no research on biodiversity in the project-affected area had previously been conducted, the company collects available secondary information on biodiversity and also obtained data from conversations with local people. On this basis the VF now started to undertake a number of measures to support biodiversity conservation in the region based on the bottom-up approach.

Natural habitats

There are practically no natural habitats in the region where project clusters are located, as this area has cultivated for an extremely long time. In the past (more than 600 years ago) the area was covered with natural forest-steppe with fertile black soils (chernozems) which were cultivated mostly on steppe plots since the 14th century. In comparison with the steppe plots which have been completely plowed and used for crop production, the small sites of pine and broad-leaved forests are rather conserved, and the most diversity of living species is concentrated there. The value of woods in the region is not so much of raw materials, but in more cases of water and soil protection, and recreational importance. Pine woods are basically cultural, that means afforested artificially.

Chernozems (black soils) are among the main riches of the area. Leacheden varieties of chernozems are more widespread, to a lesser degree – podsolic and typical varieties. Thick chernozems with a thickness of humic topsoil of 80 - 100 cm and more were conserved only in nature reserves that are not present on the project-affected area. However these chernozems were described in the Red book of Russian soils and they should be referenced as etalon soils for forest-steppe zone of the Penza region, and also as a target for soil conservation and restoration activities. Grey forest soils also occupy significant areas, mostly in woods.

Steppe sites are cultivated as usual. Only small sites of virgin steppes are preserved in state natural reserve «Privolzhsky forest-steppe». They are the samples of zonal steppes, which are preserved almost nowhere else in Europe. The project area does not cover the sites of this reserve (the closest branch of this reserve –Poperechenskaya steppe - is 50 km to the east from the VF’s lands).

Natural Protected areas, supporting a landscape and biological variety, interfere with strengthening of negative environmental processes. The total area of protected areas in Penza region is 17 700 ha, including 9 100 thou ha as the area of the mentioned natural reserve (zapovednik – local name) especially protected areas of regional value (a category I IUCN). 99 natural sanctuaries are defined in Penza region, among those are: 13 springs, 17 lakes and bogs, 20 steppe sites, 32 woods, 4 dendrology and 6 cultural-historical sites (Golitsinsky wood, Kurakinsky, Zubrilovsky, Belokamensky parks, Obolensky garden, etc.) . These parks were founded in the 18th and 19th centuries, are not only the sites of growth of rare plants, but also monuments of the landscape gardening art, created on the basis of natural oak forests. More to these territories, 15 protected areas have been organized for preservation and restoration of animals and birds (IUCN category IV, local name – zakaznik) on a total area of 106,600 ha (Adamovsky zakaznik, Barabanovsky, Belinsky, Demkinsky, Zemetchinsky, Kadadinsky, Kamzolsky, Kondolsky, Kuznetsky, Lomovsky, Malosedobinsky, Mokshansky, Nizhnelomovsky, Penzensky, Sosnovoborsky). Belinsky and Nizhnelomovsky zakazniki areas are not far from Volga.
Farming lands though do not adjoin them directly. In these zoological zakazniks wild-hoofed animals, fur animals (except muskrat, fox, and wolf), black grouses, and partridges are specially protected.

Number of plants varieties in Penza region is about 1200.

A few are included to the Red Book of Russia: 1 kind of mushroom (Amanita strobiliformis) and 8 kinds of vascular plants (Fritillaria ruthenica Wikstr., Neottianthe coccullata (L.) Schlechter (Orchidaceae), Cephalanthera rubra (L.) Rich. = Serapias rubra L., Epipogium aphyllum (F.W.Schmidt) Sw. and 4 species of feather grasses: Stipa dasypylla (Lindem.), Stipa pennata (S. Joannis Celak.), Stipa pulcherrima K.Koch, Stipa zalesskii Wilensky).

In the list of rare and endemic plant species of the Red Book of Penza region there are 182 species of plants and 46 species of mushrooms. There number and distribution over the region is extremely non-uniform.

The fauna of the area is diverse enough and totals 316 kinds of vertebrate animals, including amphibian – 10, reptiles – 8, birds – 200, mammals – 68. It is introduced basically by medium-sized animals - a fox, a hare, a polecat, a badger, a squirrel.

7 kinds of animals have been acclimatized also in the area in the Soviet period in connection with plans to reconstruct hunting-trade fauna of the country: the American mink, a muskrat, a raccoon dog, a wild boar, Siberian roe, noble and spotty deer. Works on re-acclimatization of steppe marmot, beaver and desmans were led in parallel.

Now the beaver population is completely restored. The muskrat and the American mink are widely settled in water reservoirs.

Such valuable hunting-trade kinds of mammals as roe and wild boar became ordinary inhabitants in region forests.

There are is about 50 kinds of fishes in water reservoirs and rivers of the Penza region. The basic trade kinds are: bream, pike perch, ide, and catfish. In the rivers and small reservoirs of the area there are small fry, perch, crucian, carp, pike. The most valuable fish inhabiting natural reservoirs is the sterlet. It is rarely encountered and is included in the Red Book of the Penza region. In total there are 10 species of fishes included to the regional Red Book.

To preserve environmental and resource potential of regional forests, and their biodiversity the regional target program "Reproduction, afforestation and forest conservation in Penza region (2008-2012) serves also, developed by the Forest administration of Penza region.

There are 26 kinds of trees and 34 kinds of bushes in the region. Main forest-forming trees are pine, oak, birch, and aspen. Linden, maple and elm are slightly less. Willows and alders grow in bottomlands of the rivers and brooks in crude and boggy places, with a poplar occasionally.

The listed kinds of trees form upper layers of forests which make considerable impact on all structure of plant communities. The shrub layer circle is made by undersized trees. There are mountain ash, bird cherry, maple, willow, guelder-rose, buckthorn, wild apple-tree and pear-tree.

Among bushes there are euonymus, honeysuckle, dogrose, broom and greenweed. The last two kinds grow both in steppes and in dry pine forests. Hawthorn blood, elder and barberry can sometimes be found.

The great soil variety represented by dark grey and grey forest soils under oak forests rich with nutrients and on the contrary - very poor podsolic sandy soils under pine forests with thin topsoil, provides various types of forests. The dependence on land forms is also well-observed. So, pine forests grow mainly on upper positions of landscapes, and also on sandy terraces. Oak forests occupy the leveled middle parts of slopes on river terraces. Birch forests are presented by small sites in the local depressions and on the bottom parts of slopes, transitive to bottomlands. Alder forests, and willow groves grow in bottomlands of the rivers and brooks.
Secondary forest formed on the sites subjected to felling with prevalence of birch, aspen and linden trees. The same occurs when pines are ineffectively planted.

Oak forests are the second large forest type in the region and occupy about 10% of woodlands. They grow on rich in nutrients and loamy dark grey and grey forest soils. More frequent are mixed oak-forests with birch, aspen and linden.

Birch forests develop on peaty bog clay soils underplayed heavy loams and clays. These low productive forests comprise birch associated with pine, alder and aspens. Osier-beds mainly are located to a bottomland riverside.

Steppe bushes and grasses vegetation remains along ravines and in forest belts. The most numerous of steppe bushes are dogrose, sloe, almonds, cherry-tree, spirea, and broom.

Main impacts of the project on biodiversity

The project’s impact on local and regional biodiversity is basically connected with its influence on the animals and plants habitats and considered to appear in two forms, each has negative and positive sides:

Form 1. Impact on animals settled and connected by nutritional chains with fallow lands. Mainly there are species which are considered ruderal for cultivated plants, also various small rodents both animals eating them, and birds of prey.

Form 2. Increase of biodiversity of species connected by nutritional chains with areas of grain production. Mainly there are different granivorous both insectivorous birds and rodents.

Taking into account that laylands of 5 to 20 years have not formed stable communities and connected nutritional chains for the present, the deleterious effect of the project recapture of long fallows in arable agriculture is possible to consider negligible. On the contrary, the project will promote restoration of communities which were traditionally connected with arable agriculture and are the valuable trade and hunting species. Observations by local people show that a variety and quantity of wild animals and birds in the region has essentially decreased for last 10-20 years (especially hares, wild boars, and deer). According to experts, this is a consequence of the abandoning of lands and decrease in a food reserve for many wild-footed animals and rodents, which eating and making stocks from fields before. Such situation is common for many regions in Russia where agricultural land use has stopped, and very much contrasts, for example, with Western Europe where large crops of grain maintain the high biodiversity.

During the project VF plans to involve researches to study mechanisms of biodiversity conservation with participation of regional and regional experts in wildlife conservation, and on the basis of their conclusions to develop the plan of action on conservation and restoration of a biological diversity in project-affected area and adjacent territories.

Forest belts issue

The influence of project interventions on biodiversity can also indirectly maintain the basic routes of wild animals’ migration in the project-affected area and also bottomlands along rivers, streams, ravines and gullies with thick wild vegetation serve as such routes by connecting core biodiversity wood clusters in the steppe and forest-steppe zones. These forest belts adjoined to protected areas or close to them provide normal migration of animals along the area and between protected areas and forest spots.

To this case, Volga Farming personnel and local people should know about necessities of preservation of biodiversity, ecosystems and migration routes. For this purpose special lectures and trainings are necessary and can be organized by invitation of the specialists from the bodies responsible for preservation of wildlife: huntsmen, foresters, biologists and ecologists.
As specified earlier, forest belts play also another positive environmental role as they promote moisture preservation in soil, interfere with development of water and soil erosion. However they indirectly harm agriculture, being nurseries of pests, cores of weeds distribution, etc. Besides, as we noted above, there is also a problem of overgrowth of forest belts while they cease to play effectively water-holding and soil-protective functions, for which they originally had been created. This problem needs the balanced approach at which pest control in forest belts simultaneously would not lead to destruction of rare plants and animals would preserve routes of their migration, simultaneously promoting systematic rehabilitation of forest belts and their effective maintenance.

For this reason the project environmental management plan should give further special value. For planning of activity concerning cooperation on forest belts maintenance and biodiversity conservation in the region Volga Farming plans to carry out further consultations with the Department on protection, control and regulation of use of fauna and also Forestry Department of Penza regional Ministry of Agriculture and to involve scientists, huntsmen and foresters in discussions to achieve a complex solution of the issue.

Managing directors and agronomists in farms should pay more attention of workers to the necessity of solicitous attitude to forest belts, necessity of cooperation with huntsmen and foresters on the issues of conservation and maintenance of biodiversity on the Volga Farming lands.

**Water objects issue**

For maintenance and conservation of biodiversity in the region the problem of water objects is no less complex and important than that of forest belts. Abandoned, overgrown and dirty ponds and shallow lakes created years ago as water cascades along temporary water flows and shallow small rivers and brooks, play a considerable role not only in the economic maintenance, promoting improvement of sanitary conditions, being sources of local water supply and irrigating waters for gardens and orchards as well as for kitchen gardens, but also serve as ecological corridors for migration of fishes, amphibian, reptiles, places of nesting of a waterfowl, and also rare water mammals, such as a beaver, a muskrat, etc. Volga Farming also started introducing actions for restoration of ponds and creation of the new ones. However, the fishery farming reconstruction in the project-affected area is irregularly organized, without taking into account the possible quick agriculture development. Frequently owners and tenants of the lands adjoining water objects are limited to fishery farming without keeping environmental interrelations with grain production and vice versa. Fish farming restoration in the region needs the systematic work requiring the integrated approach taking into account interests of local population, agricultural producers, biodiversity conservation, etc.

Within the project Volga Farming will promote discussion on the district and, probably, on the regional level, on the issue of reconstruction and maintenance of water objects, more strict regulation of a regime of a natural management in water protection zones, and further – exploitation and economic activities monitoring on water objects and adjacent territories in the project-affected area.

**Actions planned on biodiversity issue**

To mitigate possible negative impacts of the project on biodiversity two main groups of actions are offered:

Specific actions on preservation and restoration of natural habitats. As a rule, these actions are not exclusively measures on biodiversity conservation but part of measures important to increase economic efficiency of the project, to improve of ecological conditions, to preserve natural resources. Mainframes of actions include the following.

Various methods to decrease pesticidal and machinery (mechanical) pressure on soils of agricultural fields (preserves animal population directly in soils and on adjacent terrains).
Integrated approach for forest belts management (keeps the rare species growing in forest belts, preserves ecosystems of forest belts, conserves ecological routes for animals’ migration)

Integrated approach for ponds and lakes management (the same, and in addition – involves waterfowl on nesting)

Fixing of gullies and ravines and their slopes (interferes with destruction and further degradation of soils on steep slopes, creates possibilities for settling by animals and plants, creates new ecological corridors)

Capacity building for further biodiversity conservation, strengthening of institutional arrangements

As the project is planned to be expanded over new farming lands (it is not defined yet where and when, but is expressed that it will take place), it is not excluded that Volga Farming land will adjoin more close to legally-protected areas. In these circumstances, Volga Farming in accordance with the requirements of PS6, will meet the following:

- Act in a manner consistent with defined protected area management plans
- Consult protected area sponsors and managers, local communities, and other key stakeholders on the proposed project
- Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area

Also, according PS6, Volga Farming will not intentionally introduce any new alien species unless this is carried out in accordance with the existing regulatory framework for such introduction, or is subject to a risk assessment to determine the potential for invasive behavior. The company will not deliberately introduce any alien species with a high risk of invasive behavior or any known invasive species, and will exercise diligence to prevent accidental or unintended introductions.

For these purposes the company considers to develop its own Plan of Actions for biodiversity conservation that will be integrated as a part of general EMP and EMF. As necessary activities of this plan, VF aims to:

- organize and support the full and professional assessment of biodiversity conservation on the project-affected area,
- on this basis to suggest and develop the integrated system for biodiversity conservation in the region
- for this purpose to recruit an environmental consultant who should organize the necessary consultations with local scientists and authorities as well as with huntsmen and foresters, and also should prepare and organize trainings for labors and communities.
CHAPTER 7.

INDIGENOUS PEOPLES (IFC PS7)

Objectives

To ensure that the development process fosters full respect for the dignity, human rights, aspirations, cultures and natural resource-based livelihoods of Indigenous Peoples.

To avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not feasible, to minimize, mitigate, or compensate for such impacts and to provide opportunities for development benefits in a culturally appropriate manner.

To establish and maintain a relationship with the Indigenous Peoples affected by a project throughout the life of the project.

To foster good faith negotiation with and informed participation of Indigenous Peoples when projects are to be located on traditional or customary lands under use by the Indigenous Peoples.

To respect and preserve the culture, knowledge and practices of Indigenous Peoples.

This standard is not applicable to the project. The nationality structure of the region is described in the table (to the 2002).

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Size of population in 2002</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russians</td>
<td>1 254 680</td>
<td>86,35%</td>
</tr>
<tr>
<td>Tartars</td>
<td>86 805</td>
<td>5,97%</td>
</tr>
<tr>
<td>Mordva (both erzya and moksha)</td>
<td>70 739</td>
<td>4,87%</td>
</tr>
<tr>
<td>Ukrainians</td>
<td>12 421</td>
<td>0,85%</td>
</tr>
<tr>
<td>Chuvashi</td>
<td>6 738</td>
<td>0,46%</td>
</tr>
<tr>
<td>Others</td>
<td>21972</td>
<td>1,50%</td>
</tr>
</tbody>
</table>

The national structure of the company’s workers and of the people living in the project-affected area approximately corresponds to the general national structure of the area with a small shift from Tartars to Mordva.

For centuries, Russians have been the dominant group in the project-affected area. National minorities which live in the region cannot be considered as Indigenous Peoples in recognition with the Performance Standard 7. These minorities are fully integrated in the social structure of the community and are not distinct from dominant groups, nor do they belong to the most marginalized and vulnerable segments of the population. Their economic, social and legal status does not limit their capacity to defend their interests. They are not tied to their traditional or customary lands and natural resources on these lands.
National erzya (mordva) celebration “Rasken-Ozx”

On the other hand, Volga Farming recognizes that in modern Russia the tendency for cultural revival of minority peoples has become more significant, especially as cultural traditions and identity were to a considerable degree lost during the Soviet period. Recognizing this situation as having great value in social development in the project-affected area and having representatives of different nationalities among workers, Volga Farming aspire to create necessary conditions for their cultural and religious identity and does not interfere with religious rites or cultural traditions if they do not disperse from requirements of the local legislation and promote strengthening of a social climate in a project team. There are representatives of the following nationalities and religions working in Grain Company: Russians, Mordva, Ukrainians, Germans, Jews, Tatars, including Muslims. Considering these circumstances, Volga Farming/Grain Company will make an estimation of a variety of cultural and religious traditions of the workers to develop possible ways for the most effective and painless cooperation and integration of representatives of all nationalities and religious faiths.

Moksha (Mordva) girls in national dress
CHAPTER 8.

CULTURAL HERITAGE (IFC PS8)

Performance Standard 8 recognizes the importance of cultural heritage for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to protect irreplaceable cultural heritage and to guide clients on protecting cultural heritage in the course of their business operations. In addition, the requirements of this Performance Standard on a project’s use of cultural heritage are based in part on standards set by the Convention on Biological Diversity.

Objectives

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.
- To promote the equitable sharing of benefits from the use of cultural heritage in business activities.

This performance standard is not applicable to the project on grain production, in spite of the fact that the project area has rich historical and cultural heritage. The grounds of the historic memorial estate "Tarkhany", ancestral home of well-known Russian poet and writer Lermontov, are very close to the lands of Belinsky farm. Also in Belinsky area, the memorial estate of the famous Russian writer and literary critic Belinsky is located. The project agricultural activity will not influence the lands of cultural monuments directly as it does not cover the area of the cultural heritage lands.

Historical memorial estate "Tarkhany"

At the same time, understanding that historical and cultural heritage includes not only direct preservation of heritage in places of its protection, but also preservation of the historical and cultural landscape of the area, Volga Farming/Grain Company plans to incur voluntary obligations to make efforts on preservation of this heritage according to the Russian legislation and the international practice. For this purpose the company plans to involve experts to develop the strategy of the company on this subject. Such a strategy will include following obligatory approaches, including required by PS8:

- To comply with relevant national law on the protection of cultural heritage, including national law implementing the national obligations under the Convention Concerning the Protection of the World Cultural and Natural Heritage and other relevant international law.
To protect and support cultural heritage by undertaking internationally-recognized practices for the protection, field-based study, and documentation of cultural heritage. If debatable circumstances appear, to retain qualified and experienced experts to assist in the Assessment.

To apply Chance Find Procedures means that Volga Farming considers itself responsible for siting and designing a project to avoid significant damage to cultural heritage. When the proposed location of a project is in areas where cultural heritage is expected to be found, either during construction or operations, the company will implement chance find procedures meaning that the company will not disturb any chance finds further until consultations and assessment by a competent specialist is made and actions consistent with the requirements of this Performance Standard are identified. Consultation will also involve the relevant national or local regulatory agencies that are entrusted with the protection of cultural heritage.

Volga Farming will not use the cultural resources, knowledge, innovations, or practices of local communities embodying traditional lifestyles for commercial purposes.
The social and environmental assessment of the Volga Farming grain production project revealed the basic directions for further planning and implementation which are described in this volume and serve as a basis for the detailed environmental and social management program which will be constantly monitored and updated during the project.

Management program

During the environmental and social assessment (see vol.1) it has been shown that the present activities of the company do not involve any serious risks of strong impacts on the social relations in the company, mutual relations between the company and communities and local authorities, and also did not cause any accidents of environmental problems, despite there being no relevant formal plans or programs.

Therefore the basic content of the management program is arranged in the following mainframes:

- Improvements of a social climate in the company and further mitigation of social risks
- Improvements of mutual relations between company and local authorities and communities
- Complex integrated actions on environmental protection and preserving and improvement of natural resources
- General environmental and social management issues and institutional arrangements

Improvements of a social climate in the company and further mitigation of social risks

During the environmental and social assessment procedure it was suggested and agreed to perform the following measures which follow the requirements of Performance Standards:

- To prepare, discuss and make the collective agreement to regulate relations between workers and administration, considering the possibility to make different collective agreements in different company departments and divisions. Besides rights and obligations of the parties the agreement can include internal regulations of employees discipline, human resources policy, detailed relations of production specific for Volga Farming/Grain Company, etc.
- The complex assessment of the possibilities to exclude an employment gap of workers during the winter period, search of the system problem resolution. Discussion with workers, accepting of adequate measures, updating of collective agreement and individual contracts
- Research in the field of creation of additional material and non-material stimulus to work
- Development and documenting of the company’s policies, discussion with employees and whenever possible, with communities. Accepting and open declaring of:
  - The ecological policy
  - Social policy
  - A policy on improvement of working conditions
  - Strengthening of the team and bottom-up approach, e.g. by means of competitions, awards of prizes, etc.
- Development according to the action plan on improvement of working conditions with allocation of priorities among which are improvement of working conditions during winter time, possibilities of sanatorium treatment for workers with complete or partial covering of expenses,
- Assessment of cultural and religious traditions of workers to develop possible ways for the most effective and painless cooperation and integration of representatives of all nationalities and religious faiths.
**Improvements of mutual relations between company and local authorities and communities**

The assessment of social relations between company and local authorities and communities shows that the following plans of the company on these issues can improve the image of the company and support community engagement:

- Study of necessities and possibilities, and in case of positive decision – to strengthen the filial branch structure of the company, for optimization and uniform payment of taxes to the local budgets for improvement of the social and economic role of the company at regional and municipal level, and also for improvement of a business climate.

- A situation assessment and study of prospects of non-financial mechanisms of maintenance of social image of the company, including, for example, the conclusion of intentions reports, agreements on commonwealth, including those with state organizations such as high schools, schools, administrations and municipalities.

- Assess the necessity of development of strategy/action plans in the field of preserving historical and cultural heritage of the region

- Analysis of the cases provoking corruption, creation of internal system and regulations for fast reaction to such situations

**Complex integrated actions on environmental protection, preserving and improvement of natural resources**

The company uses different measures on nature conservation and environmental protection. The majority of these are listed in volume 1 of this ESIA, and belong to the necessary technological operations of multi-purpose character. It means that these activities are related to the basic production, and are a part of technologies (for example, observance of crop rotations, application of soil protection technologies and mechanisms, and so on) or relate to the common of production accepted in the company (for example, clean and accurate premises, installation of waste containers, etc.). Therefore we do not list such measures here, and specify those which require attention and development at present. Many of specified measures are cross-linked, and valid for the improvement of different components of environment and living conditions.

**Direct actions**

Measures on preserving and improvement of soils and landscapes

To assess erosive conditions and risks of soil erosion, to range lands and fields on the priorities of anti-erosion measures and measures on restoration of fertility of eroded soils, to develop the plan to combat linear and plane erosion according to the priorities allocated during erosion assessment

Development of measures to decrease mechanic (machinery) pressure on soils

Development and introduction of methods to decrease the quantity of applied mineral fertilizers

Enhancement of soil protective crop rotations technologies

Development of measures to decrease the pesticides pressure (*pest management plan*), including the following prioritized activities:

Optimization of fallowing soils as measures to combat weeds and wreckers, and to improve soil fertility

Minimization of mechanical soil treatment up to zero tillage

Optimization of crop rotations

Decrease in pesticidal pressure through the use of new generations of remedies for plants protection.

Use of highly-effective modern machinery excluding pollution of soil and casual losses of chemicals

Preparing of tank mixtures of pesticides with complex action
Development of laboratory base for assurance of soils and waters quality (on the basis of existing laboratory on assurance of grain quality)

Personnel training on methods of pesticides use and early diagnostics of weeds, wreckers and diseases of plants

Working out of internal regulations for the cycle of “storing-preparation of acting solutions- application-utilization” of pesticides and agrochemicals

Measures on biodiversity conservation
  - Research of complex economic, ecological and sanitary value of forest belts, program development on their improvement

Cleaning and restoration of forest belts
  - Studying of alternatives of use of the fields overgrown with woods and bushes

Measures to improve water objects

Reconstruction of water reservoirs

Restoration of landmarks of water protection zones and coastal safety strips

Development of internal regulations of land use in water protection zones

Measures on energy savings and improvement of air quality

Plan development of consecutive replacement of old techniques

Repair of premises and reducing of power inputs on heating

Research of the carbon balance on the model sites decision making on the technologies reducing the greenhouse gas emissions.

Measures on waste reduction and improvement working conditions

Inventory of the buildings and constructions with unsatisfactory or emergency technical and ecological condition and planning of priority actions for their repair, restoration or dismantling and detoxification with further replacement by the technologies preventing inflow of pollutants to soil and waters

Plan development of the recycling of wood formed while clearing forest belts or stubbing of overgrown fields

Plan development to improve site and premises for personal hygiene

_Capacity building_

- System design and development for the control, monitoring, encouragements and penalties for infringements in the environmental protection area

- Development of multi-purpose company management and environmental geo-information system (GIS)

- Complex soil and agrochemical testing of fields on a uniform methodical and methodological basis

- Strengthening of own instrumental and analytical base, including improvement of existing laboratory and express methods for early and operative field diagnostics

- The development of regulations on land use in protection zones (including water protection): from reception of the information on their existence and borders to the methods of land management, order of monitoring and control, personal responsibilities, etc.

- Initiation of discussion of a problem to reconstruct an agricultural water husbandry, a mode of water protection zones management, and further operation and monitoring of economic activities on water objects in the project-affected area
- To analyze the cases and danger of emergencies, to document emergency preparedness and response activities, resources, and responsibilities,

- To research possibilities of recycling and use of secondary materials

- To assess the biodiversity in the project-affected area and to develop more-effective measures on its protection and restoration by involving scientists and responsible departments of the Ministry of Agriculture of the Penza region.

**General environmental and social management issues and institutional arrangements**

Creation of the company image through declarations on the core ecological and social policies

Development of own standards and requirements to the production on a basis of environmental criteria: to evaluate possibilities and develop the approach plan to such standards

To improve the design of the pest management plan document that unites integrated pest management and integrated vector management. To clarify obligations of the personnel according to the whole company cycle of pesticides and agrochemicals.

To include environmental responsibilities in every agreement with external organizations of workers that may lead to negative environmental impacts.

**Organizational capacity**

Organizational capacities for the implementation of the ESMP are estimated as sufficient. Senior managers of the company understand the role and necessity to solve social and environmental issues, therefore risks existing on the given moment are minor. Substantial decrease in risks is promoted by the strict Russian legislation in the field of labor safety and environmental protection. This is clear to the company staff, despite rather weak control from the state supervising bodies. The integrated team management and bottom-up approach means that almost all management have a good understanding of how the company’s economic success depends on performance in ecological and social fields.

Job descriptions for different specialists outline the necessity of knowledge and skills in the field of environment protection and ecology (e.g. director of production, marketing director, manager of petrol products, agronomist, chief engineer, deputy director on the human resources, specialist on labor protection, lawyer).

At the same time, ecological issues, as well as some others, are described in these job descriptions in a very general manner (for example, « the knowledge of the ecological legislation is required »), in the form of claim to the worker, instead of in the form of his/her current duties. In future it is supposed to revise these job descriptions and to develop them, specifying the fields in environmental and social responsibility of each position.

It is necessary for the job description to reflect more widely on the need for regular training and improvement of professional skills and knowledge in the field of environment protection for the following categories of employees: deputy directors and the chief engineer, agronomists and managers of branches, heads of laboratory, the mechanics, storekeepers, and heads of petrol stations and stores.

Besides documents of job responsibilities, personal responsibility of the company staff for infringements of the existing regulations and those provided to be developed during preparation and performance of the project must be stated in each of regulations.

Social aspects are not designed in the documents of job responsibilities except for labor safety aspects.

Labor safety specialist is a highly-skilled person who is regularly trained according to the requirements of Russian legislation.

The basic part of the questions connected with social aspects, in particular communities’ engagement, is traditionally the task of the company management. As the management has many other duties, these aspects remain a little outside the basic focus of the company. As a matter of fact, these issues are
solved by the workers of the company themselves as they live in same communities. For many of communities the Grain Company is the basic employer. For this reason social risks here are minimal, especially considering the traditional tolerance of Russian society. At the same time, for improvement and performance of plans of social development, external communications, for the analysis of current situation, and work with mass media etc, the PR specialist is needed.

The ecological service in the company is absent. Actually the main responsibilities on observance of ecological requirements are imposed on the Production Director and Labor safety specialist. In spite of the fact that duties on environmental monitoring and control are distributed between some other personnel, and that high risks are not present, the environmental specialist is also required for coordination, monitoring and updating of the environmental management plan within the project framework and current activity of the company.

In the near future, the GIS-specialist will be necessary for the GIS management, collecting of data, designing on target working algorithms, support working, training of personnel.

To solve some key environmental and social issues it is possible to involve others organizations and their personnel on a voluntary basis in the mode of mutual assistance and cooperation.

The listing of the personnel reserves will also help to increase organizational capacities and to improve the system of non-financial stimulus to work.

**Training**

The overall competence objective with the Volga Farming employees is that they should become multi-skilled and that they should be able to work independently at a world-class efficiency and cost standard.

For the most part, Volga Farming personnel are trained on the job and at current meetings. But the company has also started an in-house training section called Volga Farming Academy. Volga Farming Academy presently has a training program for the Management Team (Management Team Training). The company has also launched its first “trainee program” for the middle management and specialists.

The current environmental and social impact assessment revealed the following trainings are necessary to increase the intelligence of the personnel and should be included in the current training program.

- General and on-job trainings on the major environmental and social risks of the company’s activities
- Trainings on the use and application of geo-information systems
- Trainings on the soil express testing and use of the results for agriculturalists
- Training course on the means for plant protection

At present, there are the following possibilities of trainings policy improvement:

- Year planning of trainings
- Agreements with higher schools and professional schools to train personnel and external students on the production base of the company
- To organize the internal experience exchange between branches
- To organize the internal competition on the “best farmers practice” with prizes to winners
Community engagement

The communities’ engagement issue in this project is not simple to assess as the project differs from any local engineering activity that obviously needs community engagement and the last can be organized by available means.

According to Russian legislation, any large engineering project affecting environment requires “public hearings”, wide and open discussion that corresponds to the requirements of the Performance Standards. At the same time, the Volga Farming project does not belong to such projects as it does not change the people’s way of life, and possible environmental impacts corresponds to usual practice of agriculture accepted everywhere; local communities are not affected by risks or adverse impacts from a project. Besides, the project is distributed over the area of several districts, and in the long-term – several regions. In this case the elective persons for municipal authorities, and also authorities at the district and/or regional level can be considered as representatives of public communities. In any case it is impossible to gather all residents or to hold special meetings for their representatives in the project-affected area.

Also, it is not quite possible to apply all requirements of Performance Standards to the community engagement issue to the Volga Farming project. In spite of the fact that regular share (pai) holders meetings are arranged twice a year with the agenda covering wide range of issues such as improvement of local infrastructure (road, water, power supply, historic monument renovation etc.), size of rent (for leased land), current development of the Land Code, consequences of application of fertilizers and pesticides, the company’s expansion project has not been officially disclosed neither at community nor at municipal level yet.

Moreover, the company management does not consider it necessary at this stage owing to the project-specific features. The matter is that the basic project activity provides expansion of the area for grain production by purchasing and/or leasing of new lands, and new sites are not even definitely specified as they are discussed and coordinated with present owners. The company technically cannot discuss the future of the project with all potential communities, living in the area of lands which are under the process of discussion and talks. If we consider people acting as shareholders of such lands, as communities or their representatives (during land privatization in Russia all people who worked in former soviet farms has got a share of the land and at present time most of them living in the area are pensioners), then it is possible to make a positive conclusion that the Volga Farming’s community engagement involves free, prior, and informed consultation and enables the informed participation of the affected communities, leading to broad community support for the project within the affected communities. That is because these people are involved personally in the process of talks and discussions of land renting or purchasing by Volga Farming. If to consider other owners or lessors, the work with communities living around these types of lands starts only after finalization of all transactions. So were the lands of British company Heartland Farming, where similar agricultural activity on the same lands was carried out since 2002, and no additional environmental or social impact has been made by Volga Farming as it is the same business.

However, once the expansion land blocks have been completely identified Volga Farming intend to disclose the expansion project framework on:

- Community level through regular share (pai) holders meetings described above;
- Municipal and regional levels through attendance of regular meetings of the Board of Nizhny Lomov Administration and Advisory Board of Ministry of Agriculture of Penza Region. General Director of Grain Company as the Advisor of the Governor of Penza Region is included in the above named administrative bodies.

Current progress of Volga Farming activities is made available to the community on all levels through regional newspaper articles, farming issue-related TV program and seasonal public events such as Golden Autumn Fair and Field Day.
During preparation of land transactions, the company negotiates with local administration, the representative of shareholders sign the transactions documents on behalf of the communities, and the company is open for discussion of possible problems with local residents.

To strengthen capacities and possibilities of communities and according to requirements of Performance Standards the company will develop internal regulations of Grievance Mechanism which should be scaled to the risks and adverse impacts of the project. VF will inform the affected communities about the mechanism in the course of its community engagement process.

At the same time, in general the company works with communities through its personnel as they are the major active part of the same community. Except small conflicts on the application of pesticides at the beginning of company’s activity in the area (described in chapter 4), there were no other sharp situations as the company find ways to predict conflicts and mitigate risks through regular meetings with local people, explaining the companies policy and reporting on new initiatives.

For expansion of interaction with local population and strengthening of its social positions the company aims to expand further a spectrum of such conversations and meetings, and also, as far as possible, to organize a series of lectures, performances in mass-media, publication of the reports on its nature management and environment protection activities, and social activities. For this purpose the company will employ the public relations specialist who should evaluate the current situation and problems, plan necessary communities engagement actions, prepare corresponding reports and press releases, thereby relieving the company management of the PR pressure.

Besides, the company specialists and workers constantly make use of consulting help concerning land use for local people, and further plans to organize the special consulting service on land use and land management, possibly together with the regional authorities, involving of scientists, etc. It will strengthen the social trust in the company.

**Monitoring**

The basic indicators to monitor possible adverse project impacts on environment will be:
- Decrease in soil fertility in comparison with initial parameters, such as soil structure, quantity of nutrients, humus content, water holding and nutrients holding capacities
- Strengthening of degradation processes, such as water and wind erosion, bogging
- Decrease in productivity of the basic agricultural crops
- Pollution of soils and waters by chemical toxicants
- Increase in danger and number of emergencies
- Decrease of watering of the area
- Decrease in a biological diversity

Return indicators will serve as to monitor the decrease in risks.

The environmental specialist of the company will be responsible to monitor these basic indicators according to the corresponding proposed regulations to carry out operative and periodic monitoring, and results will be reported to company management.

A set of indices which can be checked up quantitatively will be developed to each of these indicators.

Indirect indicators to monitor adverse project impact on a social environment will be:
- Increase in outflow of able-bodied population
- Reduction of number of company workers elected to the local authorities
- Decrease in level of incomes of the company workers
- Growing number of conflicts and grievances, fixed by Grievance Mechanism
The PR specialist of the company will be responsible for monitoring these indicators.

**Reporting**

**Internal reporting**

Specialists of the company responsible for monitoring will report current results to the company management according to developed regulations.

**External reporting**

External reporting will consist of (i) preparation of regular (at least – annual) reports on company activity in environmental and social management area and impact monitoring, (ii) preparation of press releases, performances in mass-media, (iii) presentations and reports at the meetings with communities, and also to local and regional authorities.

**Updating**

Analysis and updating of the management plan and management framework, key actions and monitoring indicators, current regulations, and the environmental and social impact assessment should be performed every six months by the company specialists, and if necessary with participation of the involved experts.

**Planning matrix for ESMP/ESMF**

The integrative operational matrix for ESMP/ESMF of the Volga Farming Grain Production Project in Penza region contains three main sections (see table below):

Section 1. Risk assessment and mitigation measures

Section 2. Improvement of the natural and social environment

Section 3. Capacity buildings and trainings

Section 1 explains measures to mitigate possible risks provided by the main activities of the company. Section 2 describes planned activities of the company which can promote and support the improvement of environmental and social conditions, and sustain natural resources. Section 3 describes activities that can build capacities for further sustainable growth, raise skills and responsibilities of company’s personnel and also strengthen positive environmental and social image of the company.
Planning matrix for ESMP/ESMF of the Volga Farming Grain Production Project in Penza region (version October 2010, updating every six months)

**Section 1. Risk assessment and mitigation measures**

<table>
<thead>
<tr>
<th>NN of measures/activities</th>
<th>Components affected</th>
<th>Impact</th>
<th>Risk description</th>
<th>Risk rate</th>
<th>Mitigation measures</th>
<th>Target Indicators/Results</th>
<th>Monitoring and\or reporting</th>
<th>Responsibility</th>
<th>Target date</th>
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<tr>
<td></td>
<td>Environmental issues</td>
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<tr>
<td>1.1.</td>
<td>Soils</td>
<td>Plowing and tillage</td>
<td>Soil erosion</td>
<td>L-N</td>
<td>Appropriate crop rotation, minimal and zero soil tillage technologies</td>
<td>Stable or increasing thickness of the topsoil, no evidence of water and wind erosion</td>
<td>Regular in April and October, D-base updating</td>
<td>Agronomists, GIS specialist</td>
<td>Evident positive results after 3 years</td>
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<td>1.2.</td>
<td>Heavy machinery</td>
<td>Over compaction of topsoil</td>
<td>Over compaction of topsoil</td>
<td>M</td>
<td>Zero tillage technologies, use of new machinery with low pressure on the soil surface</td>
<td>Stable or improving soil structure in topsoil and in plow-bed horizon</td>
<td>Regular in April and October, D-base updating</td>
<td>Agronomists, GIS specialist</td>
<td>Evident positive results after 3 years</td>
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<td>NN of measures/activities</td>
<td>Compone nts affected</td>
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<td>Risk rate*</td>
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<td>Target Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
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<td>1.3</td>
<td>Use of mineral fertilizers</td>
<td>Nutrients contamination</td>
<td>L</td>
<td>Manuals and instructions based on the laboratory testing of soils</td>
<td>Sufficient amounts of nutrients in soils permanently</td>
<td>Updating every year</td>
<td>Agronomists, GIS specialist</td>
<td>January 2011</td>
<td>December 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Component affected</td>
<td>Impact</td>
<td>Risk description</td>
<td>Risk rate*</td>
<td>Mitigation measures</td>
<td>Target Indicators/Results</td>
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<td>1.4</td>
<td>Combating pests and use of pesticides</td>
<td>Soil pollution, Or on the contrary – outbursts of pests, plant diseases, weeds</td>
<td>L-N</td>
<td>Optimization of pest management and control and use of pesticides, including: Annual PMP (plan for application of pesticides and relevant machinery for each agricultural field) Updating safety manuals for pesticide use cycle Renewal of relevant pesticides and tank mixtures used Personnel training on methods of pesticides use and early diagnostics of weeds, wreckers and diseases of plants Lab control of soils and plants</td>
<td>Decrease of residual amounts of pesticides in soils and plants. Decrease of quantity and variety of pests, plant diseases, weeds.</td>
<td>Yearly before vegetation period</td>
<td>Agronomists, GIS specialist</td>
<td>Evident positive results after 3 years</td>
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<td>NN of measures/activities</td>
<td>Components affected</td>
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<td>Risk description</td>
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<td>1.5</td>
<td>Water</td>
<td>Use of pesticides</td>
<td>Pollution</td>
<td>L-N</td>
<td>Regular laboratory control of local water resources. See also “soil pollution above”</td>
<td>Decrease of residual amounts of pesticides in local pools, water reservoirs, springs and rivers.</td>
<td>Regular during harvesting time, D-base updating</td>
<td>Agronomists, environmental specialist, GIS specialist</td>
<td>Evident positive results after 3 years</td>
</tr>
<tr>
<td>1.6</td>
<td>Use of chemical fertilizers</td>
<td>Eutrophication</td>
<td>Regular laboratory control of local water resources. See also “soil pollution above”</td>
<td>Prevention and decrease of algal bloom in local pools, water reservoirs, springs and rivers.</td>
<td>Regular during harvesting time, D-base updating</td>
<td>Agronomists, environmental specialist, GIS specialist</td>
<td>Evident positive results after 3 years</td>
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<td>NN of measures/activities</td>
<td>Components affected</td>
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<td>1.7</td>
<td>Use of oil products</td>
<td>Oil pollution</td>
<td>N</td>
<td>Regular technical inspection and repairing of machinery&lt;br&gt;Use of protection screens and other facilities in garages and maintenance shops&lt;br&gt;Localization and gradual removal of the ground contaminated in the past</td>
<td>No traces of oil components in surface and/or ground waters</td>
<td>According to current normative and regulations&lt;br&gt;Mapping and plan to clean up if necessary</td>
<td>Mechanics, farms managers, environmental specialist, GIS specialist, communities (grievance mechanism)</td>
<td></td>
<td>September 2011</td>
</tr>
<tr>
<td>1.8</td>
<td>Air Plowing and other soil tillage</td>
<td>Dusty air</td>
<td>N</td>
<td>Minimal and zero soil tillage technologies&lt;br&gt;Gradual replacement of old techniques</td>
<td>No complaints from local residents, no wind soil erosion indices&lt;br&gt;Plan for replacement</td>
<td>At least twice a year during soil tillage seasons</td>
<td>Environmental specialist, agronomists</td>
<td></td>
<td>Evident positive results after 3 years</td>
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<td>Components affected</td>
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<td>1.9</td>
<td>Use of old machinery</td>
<td>Greenhouse gas emissions and air pollution</td>
<td>L-N</td>
<td>Gradual replacement of old techniques</td>
<td>Plan for replacement</td>
<td>According the plan</td>
<td>GD, Farm managers, environmental specialist</td>
<td>Evident positive results after 3 years</td>
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<td>Social issues</td>
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<tr>
<td>1.10</td>
<td>Social climate in the company</td>
<td>Employment gap in winter</td>
<td>Loss of qualified trained personnel</td>
<td>M</td>
<td>Assessment of possible organizational, technical and financial support to laborers in winter time</td>
<td>Plan of supporting activities</td>
<td>2 times per year: in December – to check the readiness of the plan, in April – evaluate the results</td>
<td>Chief executive officer, General Director, personnel specialist, Farm managers</td>
<td>December, 2010; April 2011</td>
</tr>
<tr>
<td>1.11</td>
<td>National and religious tension</td>
<td>Xenophobia</td>
<td>L-N</td>
<td>Assessment of cultural and religious traditions of workers</td>
<td>Plan to mitigate tension</td>
<td>Updating every year</td>
<td>GD, personnel specialist, PR specialist</td>
<td>March 2011</td>
<td></td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Components affected</td>
<td>Impact</td>
<td>Risk description</td>
<td>Risk rate*</td>
<td>Mitigation measures</td>
<td>Target Indicators/Results</td>
<td>Monitoring and\or reporting</td>
<td>Responsibility</td>
<td>Target date</td>
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<tr>
<td></td>
<td>Social tension</td>
<td></td>
<td>Corruption and theft</td>
<td>L</td>
<td>Analysis of the possible cases provoking corruption and theft</td>
<td>System and regulations for fast reaction to such situations</td>
<td>Updating every year</td>
<td>Chief executive officer, General Director, Farm managers, chief of security</td>
<td>March 2011</td>
</tr>
<tr>
<td>1.12</td>
<td>Cultural heritage</td>
<td>Soil treatment and tillage</td>
<td>Damage to cultural heritage</td>
<td>N</td>
<td>To prepare the internal Chance Find Procedure manual</td>
<td>Manual endorsed and agreed with local authorities. Personnel trained</td>
<td>Updating every year</td>
<td>Chief executive officer, General Director, Farm managers</td>
<td>March 2011</td>
</tr>
</tbody>
</table>

Risk rate: H - High, M – Medium, L – Low, N - Negligible
### Section 2. Improvement of the natural and social environment

<table>
<thead>
<tr>
<th>NN of measures/activities</th>
<th>Components considered</th>
<th>Objective</th>
<th>Activities</th>
<th>Indicators/Results</th>
<th>Monitoring and/or reporting</th>
<th>Responsibility</th>
<th>Target date</th>
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<tbody>
<tr>
<td>Environmental issues</td>
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<tr>
<td>2.1.</td>
<td>Soils</td>
<td>To increase soil fertility and sustainability, vulnerability to climate change and accidents</td>
<td>Integrated measures on soil tillage, crop rotation, agrochemicals application etc.</td>
<td>Improvement of soil fertility in comparison with baseline parameters, such as soil structure, quantity of nutrients, humus content, water holding and nutrients holding capacities, increase in productivity of the basic agricultural crops</td>
<td>Regular in April and October, D-base updating</td>
<td>Director Production, Agronomists, GIS specialist</td>
<td>Evident positive results after 3 years</td>
</tr>
<tr>
<td>2.2.</td>
<td></td>
<td>Effective use of soil resources</td>
<td>Integrated soil survey</td>
<td>Integrated GIS soil management system and soil survey baseline for monitoring of soil resources and planning.</td>
<td>According to the updating plan</td>
<td>Deputy CEO, IT specialist, GIS specialist, Director Production</td>
<td>Draft ready in September 2011</td>
</tr>
<tr>
<td>2.3.</td>
<td>Waters</td>
<td>To increase water supply and quality of used water resources</td>
<td>Reconstruction of necessary water reservoirs</td>
<td>Increased area of water surface and/or volume of newly made or restored water sources</td>
<td>Yearly D-base updating</td>
<td>Environmental specialist, heads of farms</td>
<td>Evident positive results in dynamics</td>
</tr>
<tr>
<td>2.4.</td>
<td></td>
<td>Restoration of landmarks of water protection zones and coastal safety strips</td>
<td></td>
<td>Decrease of anthropogenic pressure on water protection zones</td>
<td>Yearly check and D-base updating</td>
<td>Environmental specialist, heads of farms</td>
<td>March 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Components considered</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
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<td>2.6.</td>
<td>Air and energy savings</td>
<td>To prevent air pollution (incl. greenhouse gas emissions) and promote energy savings</td>
<td>Repair of premises and reducing of power inputs on heating</td>
<td>Reduction of rate of energy consumption, action plan if necessary</td>
<td>Yearly, D-base updating</td>
<td>GD, farm managers, mechanics, environmental specialist</td>
<td>March 2011</td>
</tr>
<tr>
<td>2.7.</td>
<td></td>
<td></td>
<td>Use of alternative energy sources in remote farms and field sites</td>
<td>No. of solar, wind and biogas installations, quantity of energy generated, action plan if necessary</td>
<td>Yearly, D-base updating</td>
<td>GD, farm managers, mechanics, environmental specialist</td>
<td>March 2011</td>
</tr>
<tr>
<td>2.8.</td>
<td></td>
<td></td>
<td>Carbon balance test study on the model sites</td>
<td>Report and recommendations, action plan if necessary</td>
<td>Yearly updating plan</td>
<td>Environmental specialist</td>
<td>November 2011</td>
</tr>
<tr>
<td>2.9.</td>
<td>Biodiversity</td>
<td></td>
<td>Research of complex economic, ecological and sanitary value of forest belts</td>
<td>Program development on forest belts improvement</td>
<td>Yearly updating program</td>
<td>Environmental specialist, heads of farms</td>
<td>November 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Components considered</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
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<tr>
<td>2.10.</td>
<td>Support biodiversity conservation activities in the region</td>
<td>Cleaning and restoration of forest belts, Including: Recycling of woods formed while clearing forest belts or stubbing of overgrown fields</td>
<td>Restoration and conservation of natural habitats, increase of quality and variety of living specimens</td>
<td>Yearly check and D-base updating</td>
<td>Environmental specialist, heads of farms</td>
<td>Evident positive results in dynamics</td>
<td>November 2011</td>
</tr>
<tr>
<td>2.11.</td>
<td>Studying of alternative uses for fields overgrown with woods and bushes</td>
<td>Report available</td>
<td></td>
<td>NA</td>
<td>Environmental specialist, Deputy GD Commerce, Director Production</td>
<td>April 2011</td>
<td></td>
</tr>
<tr>
<td>2.12</td>
<td>Others</td>
<td>To decrease waste products</td>
<td>To evaluate possibilities of recycling and use of secondary materials</td>
<td>Recommendations, action plan if necessary</td>
<td>Updating every year in April</td>
<td>Environmental specialist, Deputy GD Commerce, Director Production, Farm managers</td>
<td>April 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Components considered</td>
<td>Objective</td>
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<td>Monitoring and/or reporting</td>
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<tr>
<td>2.13.</td>
<td>Improvement of the integrated PMP</td>
<td>To improve the design of the pest management plan document. To clarify obligations of the personnel according the whole company cycle of pesticides and agrochemicals.</td>
<td>PMP updated</td>
<td>Updating every year</td>
<td>Director Production, environmental specialist, Health and Safety specialist</td>
<td>March 2011</td>
<td></td>
</tr>
</tbody>
</table>

**Social issues**


<p>| 2.15. | Study possibilities of possible incentives (economic and non-material) | List of possible incentives and sources | Updating every year in April | General Director, personnel specialist, Farm managers | March 2011 |</p>
<table>
<thead>
<tr>
<th>NN of measures/activities</th>
<th>Components considered</th>
<th>Objective</th>
<th>Activities</th>
<th>Indicators/Results</th>
<th>Monitoring and/or reporting</th>
<th>Responsibility</th>
<th>Target date</th>
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<tbody>
<tr>
<td>2.16.</td>
<td></td>
<td>Preparati</td>
<td>Preparation of the plan of professional competitions and sources for awarding</td>
<td>Plan of activities</td>
<td>2 times per year: in December – to check the readiness of the plan, in April – evaluate the results</td>
<td>Chief executive officer, General Director, personnel specialist, Farm managers</td>
<td>December, 2010; April 2011</td>
</tr>
<tr>
<td>2.17. Cooperation with communities and local authorities</td>
<td>Improvement and strengthening good neighborly relation</td>
<td>Assessment and study of prospects of non-financial mechanisms of interrelations with state organizations such as high schools, secondary schools, administrations and municipalities, preparation of necessary agreements.</td>
<td>Conclusion of intentions reports, agreements on commonwealth. Yearly plan on cooperation and sources for implementation Decrease number of conflicts and grievances, fixed by Grievance Mechanism</td>
<td>Yearly updating</td>
<td>Chief executive officer, General Director, PR specialist, Farm managers</td>
<td>March 2011</td>
<td></td>
</tr>
<tr>
<td>2.18.</td>
<td>Assess the necessity of development of strategy/action plans in the field of preserving historical and cultural heritage of the region</td>
<td>Draft report, cooperation plan if necessary</td>
<td></td>
<td>Yearly updating if necessary</td>
<td>Chief executive officer, General Director, PR specialist, Farm managers</td>
<td>March 2011</td>
<td></td>
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<tr>
<td>NN of measures/activities</td>
<td>Components considered</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
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<tr>
<td>2.19.</td>
<td></td>
<td>Preparation of annual reports on economic, environmental and social activities of the company, and public presentation of the reports</td>
<td>Reports available, number of copies disseminated, responses in mass media and in the local, regional and national establishment</td>
<td>Issued yearly, responses checkup quarterly</td>
<td>Chief executive officer, GD, PR specialist</td>
<td>December 2011</td>
<td></td>
</tr>
<tr>
<td>2.20. Buildings, constructions and premises</td>
<td>Repair, restoration or dismantling and detoxification of old constructions with further replacement by the technologies excluding inflow of pollutants to soil and waters</td>
<td>Inventory of the buildings and constructions carrying unsatisfactory or emergency technical and ecological condition</td>
<td>Action plan</td>
<td>According the plan, yearly updating and reporting</td>
<td>Chief executive officer, General Director, health and safety specialist, environmental specialist, Farm managers</td>
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</tr>
<tr>
<td>2.21. Improve site and premises for personal hygiene</td>
<td>Plan development</td>
<td>Action plan</td>
<td>According the plan, updating and reporting twice per year</td>
<td>Health and safety specialist, environmental specialist, Farm managers</td>
<td>March 2011</td>
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### Section 3. Capacity building and trainings

<table>
<thead>
<tr>
<th>NN of measures/activities</th>
<th>Objective</th>
<th>Activities</th>
<th>Indicators/Results</th>
<th>Monitoring and/or reporting</th>
<th>Responsibility</th>
<th>Target date</th>
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<tr>
<td></td>
<td>Environmental related issues</td>
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<tr>
<td>3.1.</td>
<td>To coordinate EMP implementation, current environmental duties</td>
<td>Recruit environmental specialist</td>
<td>Person contracted</td>
<td>Quarterly and annual reports</td>
<td>Chief executive officer, General Director, personnel specialist</td>
<td>January 2011</td>
</tr>
<tr>
<td>3.2.</td>
<td>To strengthen positive environmental image of the company</td>
<td>Development of the company’s environmental policy/strategy</td>
<td>Draft document</td>
<td>Updating every year in April</td>
<td>GD, environmental specialist, PR specialist, health and safety specialist</td>
<td>January 2011 March 2011</td>
</tr>
<tr>
<td>3.3.</td>
<td>Development of own raising standards and requirements to production on the basis of environmental criteria</td>
<td>Report on evaluation of possibilities and approach plan to such standards</td>
<td>Updating every year in April</td>
<td>Chief executive officer, GD, environmental specialist, Deputy GD Commerce, Director Production</td>
<td>November 2011</td>
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<tr>
<td>NN of measures/activities</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
<td>Target date</td>
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<tr>
<td>3.4.</td>
<td>To maintain the decision-making process</td>
<td>To develop integrative multi-purpose company agro-ecological and operational GIS-based data base of the farms and fields</td>
<td>Computer-based geo-information system (GIS, data base) with a number of environmental, agro-ecological, technical, financial, operational, etc. parameters. The integrated system of relevant indicators and monitoring program.</td>
<td>Monthly updated according to the monitoring program</td>
<td>Chief personnel, IT and GIS specialist and farm specialists in accordance with responsibilities on the primary and secondary data collection</td>
<td>January 2011</td>
</tr>
<tr>
<td>3.5.</td>
<td>Recruit GIS specialist</td>
<td></td>
<td>Person contracted</td>
<td>Quarterly and annual reports</td>
<td>Chief executive officer, General Director, personnel specialist, IT specialist</td>
<td>January 2011</td>
</tr>
<tr>
<td>3.6.</td>
<td>Support biodiversity conservation activities in the region</td>
<td>Studying of alternative uses for fields overgrown with woods and bushes</td>
<td>Report available</td>
<td>NA</td>
<td>Environmental specialist, Deputy GD Commerce, Director Production</td>
<td>April 2011</td>
</tr>
<tr>
<td>3.7.</td>
<td>Assessment of the biodiversity in the project area to development more effective measures on its protection and restoration in the region</td>
<td></td>
<td>Report available</td>
<td>NA</td>
<td>Environmental specialist, PR specialist</td>
<td>November 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
<td>Target date</td>
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<tr>
<td>3.8.</td>
<td>To increase environmental responsibilities of the personnel and local people</td>
<td>To design and develop an integrated system for control, monitoring, incentives and penalties for environmental infringements</td>
<td>Adopted internal regulations</td>
<td>NA</td>
<td>Environmental specialist</td>
<td>April 2011</td>
</tr>
<tr>
<td>3.9.</td>
<td>To develop regulations on land use in protection zones (including water protection)</td>
<td>Adopted internal regulations</td>
<td>NA</td>
<td>Environmental specialist, Director Production</td>
<td>April 2011</td>
<td></td>
</tr>
<tr>
<td>3.10.</td>
<td>To include environmental responsibilities in every agreement with external organization of workers that may result in negative environmental impacts</td>
<td>Draft sections to the agreement forms</td>
<td>Updating every year</td>
<td>Environmental specialist</td>
<td>March 2011</td>
<td></td>
</tr>
<tr>
<td>3.11.</td>
<td>To update the job descriptions and strengthen them with environmental requirements and responsibilities if necessary</td>
<td>Updated job descriptions</td>
<td>Job description adopted by GD and agreed with personnel</td>
<td>Environmental specialist, personnel specialist</td>
<td>March 2011</td>
<td></td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
<td>Target date</td>
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<tr>
<td>3.12.</td>
<td>Complex soil and agrochemical testing of fields on a uniform methodical and methodological basis</td>
<td>Strengthening of own instrumental and analytical base, including improvement of existing laboratory and express methods for early and operative field diagnostics</td>
<td>List and number of methods mastered and used in the own analytical laboratory</td>
<td>Reporting and updating twice per year</td>
<td>Head of analytical laboratory, environmental specialist, Director Production</td>
<td>March 2011</td>
</tr>
<tr>
<td>3.13</td>
<td>To strengthen vulnerability in emergencies</td>
<td>To evaluate the cases and danger of environmental and social emergencies, to document emergency preparedness and response activities, resources, and responsibilities</td>
<td>Action plan and manuals</td>
<td>Updating twice a year</td>
<td>Health and Safety specialist, Chief of security, environmental specialist, Director Production, Farm managers</td>
<td>March 2011</td>
</tr>
</tbody>
</table>

Social related issues

<p>| 3.14.                     | To strengthen positive social image of the company's social policy/strategy | Development of the company's social policy/strategy                                           | Draft document                                                                     | Updating every year in April                       | GD, personnel specialist, PR specialist                                      | January 2011  |
|                           |                                                                           |                                                                                               | Approved document                                                                   |                                                     |                                                                                 | March 2011    |</p>
<table>
<thead>
<tr>
<th>NN of measures/activities</th>
<th>Objective</th>
<th>Activities</th>
<th>Indicators/Results</th>
<th>Monitoring and/or reporting</th>
<th>Responsibility</th>
<th>Target date</th>
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<tbody>
<tr>
<td>3.15</td>
<td>company</td>
<td>Development of the company’s policy/strategy on improvement of working conditions</td>
<td>Draft document, Approved document</td>
<td>Updating every year in April</td>
<td>GD, personnel specialist, PR specialist, health and safety specialist</td>
<td>January 2011, March 2011</td>
</tr>
<tr>
<td>3.16.</td>
<td></td>
<td>Evaluation of the company experience in PR activities. Planning necessary communities engagement actions, prepare corresponding reports and press releases.</td>
<td>Thematic seminars and lectures, performances in mass-media, publication of the reports on its nature management and environment protection activities, social PR actions. Action plan.</td>
<td>Updating every year</td>
<td>PR-specialist</td>
<td>March 2011</td>
</tr>
<tr>
<td>NN of measures/activities</td>
<td>Objective</td>
<td>Activities</td>
<td>Indicators/Results</td>
<td>Monitoring and/or reporting</td>
<td>Responsibility</td>
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<td>3.17.</td>
<td>To assess possibilities to organize complex consultative service (self-supporting in future) for local people on the land use and land management issues</td>
<td>Report and recommendations available. Consultation centre established, number and types of consultations</td>
<td>Quarterly reporting</td>
<td>Production Director, PR specialist, environmental specialist, agronomists, lawyers</td>
<td>September 2011</td>
<td></td>
</tr>
<tr>
<td>3.18.</td>
<td>To coordinate public relations of the company</td>
<td>Recruit PR specialist</td>
<td>Person contracted</td>
<td>Quarterly and annual reports</td>
<td>Chief executive officer, General Director, personnel specialist</td>
<td>January 2011</td>
</tr>
<tr>
<td>Trainings</td>
<td>To increase professional skills of the personnel</td>
<td>To develop training program for 2011 and perspective, including assessment of environmental and social risks, GIS applications, soil express testing, etc</td>
<td>Program endorsed</td>
<td>Updating every year in December</td>
<td>Chief executive officer, General Director, personnel specialist</td>
<td>December 2010</td>
</tr>
</tbody>
</table>