



Ministry of Environmental
Protection Republic of
Kazakhstan



Global Environment
Facility



Small Grants Programme



ALE "Coalition for
"green" economy and
G-Global Development



United Nations
Development Programme

UNDP



GREEN PRACTICES OF KAZAKHSTAN

Astana
2014 year



Dear reader!

You are holding now the Catalogue which contains information in a brief and simple format about “green” practices, methods, approaches and technologies implemented by ordinary people in different parts of our country on the basis of the most ordinary villages, schools, farms, houses, children's homes. This is not only examples of successfully implemented projects, but first of all, examples of leadership, which largely changed people's lives for the better and are prime examples of how “green” technologies can not only improve the environment, but also the establishment of own business, the formation of understanding and visions of new alternatives for the improvement of lives, new thinking and attitude to the resources that we have.

All examples of the projects that you will find in this Catalogue are made within the Small Grants Programme of the Global Environment Facility (GEF SGP) and aimed at solving global environmental problems at the local level, improving the quality of life and employment of the local population.

Over 17 years of experience in Kazakhstan GEF SGP gained an extensive experience in the implementation of the effective, affordable “green” technologies and management practices for biodiversity conservation, climate change mitigation, reduction of the degradation and improvement of the soil fertility, pasture conservation, distribution of the effective agricultural technologies, reduction of the use of persistent organic pollutants and chemicals, water conservation and protection, resource conservation and energy efficiency.

As the result of many years long work of the Programme, demonstration sites were established throughout the country, which became a sort of “engines” or “greenhouses” for the dissemination of proven environmental innovations. The exchange of experience and training happen on their basis. Many practices found their further promotion and dissemination not only in the regions of our country, but also abroad.

Great contribution to the successful implementation of the GEF SGP belongs to a successful and stable partnership with many organizations: United Nations Development Programme, units and departments of the Ministry of Environment and Water Resources, the Ministry of Agriculture, the Ministry of Education, local executive bodies, non-governmental organizations, international donor agencies, business companies and others.

This Catalogue may be also interesting for the business support institutions, microfinance organizations and social entrepreneurship funds that are ready to support the implementation of “green” projects. This is particularly relevant for the implementation of the Concept of Transition of Kazakhstan to “green economy”, preparation for the International specialized exhibition EXPO-2017, implementation of the Strategy “Kazakhstan-2050”.

This Catalogue is prepared by the Coalition “For green economy” and development of G-Global” as the part of the project GEF SGP “Fair of the best ideas and practices of the GEF SGP”.

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SMALL GRANTS PROGRAMME OF THE GLOBAL ENVIRONMENT FACILITY

Supports small "green" projects of local communities and non-governmental organizations, the implementation of which saves and restores nature and simultaneously increases the level and quality of life of the local population

- It works on the single principles in 122 countries around the world
- In Kazakhstan – starting from June 1997
- 300 projects throughout the country
- The grant support was provided for more than \$ 6 million.
- To 300 social organizations and rural communities
- 200 thousand people were involved in the project and benefited from it
- Projects based on the needs of the people and for the people



Work in accordance with national and local priorities of the development

It involves a wide range of stakeholders, developing partnerships

It Actively supports and extends the traditional knowledge

Actively disseminating successful experience

It supports the youth initiatives, enhances the role of women in socio-economic issues



Implemented "green projects":

- implementation of water and soil efficient technologies (drip irrigation, zero tillage, water-charging irrigation, etc.).
- sustainable use of pastures (development of distant sites, introduction of the scheme for pasture rotation, recovery wells, creating estuaries, creating artificial hay and infrastructure to distant sites and so on.)
- implementation of energy saving technologies (energy-saving furnaces, energy-saving lighting, insulation of buildings, etc.).
- implementation of alternative energy sources (solar batteries, wind installations, solar dryers, etc.).
- development of ecotourism and alternative methods for sustainable use of biodiversity (development of beekeeping, collecting medicinal herbs, sustainable fishing and so on).



THE IMPLEMENTATION OF WATER AND SOIL SAVING AGRICULTURAL PRACTICES AS A METHOD OF ADAPTATION TO CLIMATE CHANGE (AKMOLA OBLAST)



Social Fund "Akбота"

Director:

Tatiyana Nemtsan Nikolayevna

PROJECT APPROACH:

Implementation of drip irrigation systems (in home gardens and in the schoolyard greenhouse)
Modernization of sprinkler installations "Kuban-LC" with water-saving nozzles for surface irrigation

BENEFITS:

Drip irrigation (for the cultivation of vegetable crops):

saving of water by 2 times while watering

- increasing the productivity of vegetable crops by 1.5 -2 times
- reduction of number of weeding, watering automation
- reduction of soil erosion

Five households were involved at the time of the project implementation, now about 500 sites are equipped with drip irrigation in Akmola, Kyzylorda and East Kazakhstan oblasts
(replication of the project with the support of UNDP and Coca-Cola)

Sprinkler nozzles for surface irrigation:

- irrigation is done at the height of 0.3-0.5 m from the soil surface
- saving of irrigation water by 2-2.5 times
- increase crop (potatoes) – by 30%
- prevention of soil erosion and its degradation



Place of implementation:

Arnasai village, Arshaly region, Akmola oblast





«GREEN» BUSINESS PRACTICES



GROWING OF WINDBREAKS USING WATER-SAVING TECHNOLOGIES AS A METHOD OF ADAPTING TO CLIMATE CHANGE (SOUTH-KAZAKHSTAN OBLAST)



Microcredit organization "Fund for the Assistance to Farmers and Entrepreneurs" of South Kazakhstan

Director:
Rais Karaibragimov Kazimovich

PROJECT APPROACH:

- Creation of windbreaks from fruit trees
- Sowing of agricultural crops and melons between rows of windbreaks
- Implementation of drip irrigation for watering of windbreaks and agricultural crops between rows

BENEFITS:

Windbreaks of fruit trees (20 hectares):

- reduction of wind erosion, snow retention
- additional income in the form of fruit production

Crops between rows (12 hectares):

- An alternative source of income (for 53 households and 36 low-income households) - 70 tons, wheat - 12 tons, lucerne - 35 tons, cucumbers - 2 tons, watermelons - 2 tons

Drip irrigation:

- Saving of water by 2 times
- Reducing the cost of the payment for the water by 4 times
- The high survival rate of seedlings (96-97%)
- Increasing the crop yields by 2 times

Further benefits:

- "Green workplaces" 40 people
- Resources: sustainable land and water use



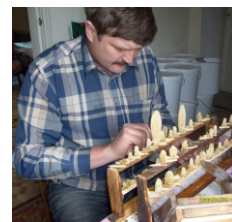
Place of implementation:

Shyrkyn village, Sairam region, South Kazakhstan Oblast



DEVELOPMENT OF CULTURAL BEEKEEPING

INCREASE OF THE NUMBER AND IMPROVEMENT OF THE QUALITY OF BEE COLONIES BY CREATING SELECTIVE - BREEDING CENTER (ALMATY OBLAST)



Non-governmental Association "Almaty Oblast society of beekeepers-fanciers"

Director:

Larisa Shikunova Vladimirovna,

Partner of the project:

Krupskiy Oleg Borisovich

PROJECT APPROACH:

Cultural development of beekeeping is an alternative to the shrinking number of wild bees for the pollination of plants, especially rare species

Creation of selective and breeding center (SBC) to provide the beekeepers with purebred highly productive female bees and bee packages

Training local people the basics of beekeeping and its importance for biodiversity

What has been done?

- purebred pedigreed selective female bees and bee packages were imported
- the work on increase of their number and distribution throughout the region and oblast was carried out
- on the basis of the SBC there is a group to study the fundamentals of beekeeping from the local community, foresters, farmers

BENEFITS:

- fully pollinated area of wild grasses, shrubs and trees increased to 1,200 hectares
- agricultural and industrial crops to 1,000 hectares
- the craft of beekeeping was taught to 40 people - additional source of income (business development)
- thoroughbred bee colonies were increased up to 1500 pieces
- the level of local knowledge about the benefits of bees and bee pollinating, the use of honey and bee products was improved
- profitability of apiaries of Almaty oblast was increased by improving the quality and number of bee colonies

Place of implementation:

Uighur region, Almaty oblast



DEVELOPMENT OF BEE STOCK BREEDING ON THE TERRITORY AROUND THE RESERVE AKSU ZHABAGYLY (SOUTH-KAZAKHSTAN OBLAST)

Non-governmental Association “AKSU MS”

Director:

Kydyrali Zhunussov

PROJECT APPROACH:

- Construction and placement of the artificial nests for wild bees in the buffer zone of the reserve in order to increase their population
- Development of cultural beekeeping in foothill and mountain areas with a focus on stock-breeding bees

BENEFITS:

Placement of artificial nests for wild bees (75 nests):

- Creation of catch for breeding and increasing populations of wild bees
- Improving the ecological culture among pupils who are actively involved in the project

Creation of the tribal bee farm in South Kazakhstan Oblast:

- provision of region's beekeepers with the breeding bee packages of high-yielding Carpathian breed
- cultural beekeeping – “ecological” alternative activities for the local population
- due to intensive pollination, a favorable environment was created for the growth of valuable species of herbs and fruit trees
- the number of bee farms was increased by 30% in the project area
- profitability of existing bee farms was increased by 25% (Carpathian breed gives 4-5 times more honey than the bees of local breed)
- full-pollination only Karatobinsk rural area not less than 500 hectares of meadow grass

Place of implementation :

Tolebi region, South Kazakhstan Oblast



DEVELOPMENT OF ECOTOURISM ON THE BASIS OF THE BUFFER ZONE VILLAGES OF SAYRAM-UGAM STATE NATIONAL NATURAL PARK IN ORDER TO PRESERVE BIODIVERSITY OF THE WESTERN TIEN SHAN (SOUTH-KAZAKHSTAN OBLAST)

Non-governmental Association “Ugam”

Director:

Alikhan Abdeshev Abdeshuly

PROJECT APPROACH:

Development of cultural tourism based on local communities as an alternative to chaotic tourism, as well as the activities of the local population, causing damage to nature (irregular grazing, logging, hunting, plowing animal habitats)

Active work and partnership with local communities, schools, administration, staff of the State National Natural Park “Sairam-Ugam” in the development of ecotourism in the region

BENEFITS:

Eco-tourism - an alternative “environmental” source of income for the local population

- **Increase of the potential of the local population:**

24 people from villages as Tonkeris, Kaskasu, Dihankol were trained and fully prepared to work in the field of ecotourism business (guides, guides, horse breeders, the staff of guest houses)

- **Reduction of the load on biodiversity from the chaotic tourism and the formation of the flow of tourists in the regulated line through:**

- creation of infrastructure
- the formation of a network of guest houses in the project villages,
- creation of yurt (of 3 yurts) and the tent (of 4 tents) camps
- development and laying of new tourist routes, allowing to remove the load from the existing recreational popular routes, equipment of new routes with garbage tanks, parking, toilets, places for bonfire and so on., which allows to minimize the negative impact on ecosystems

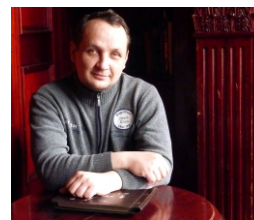
Public Council on ecotourism was created as the part of the project, consisting from all participants and partners of the project, which deals with the decision-making on all issues concerning development of ecotourism in the region

Place of implementation:

Tolebi region, South Kazakhstan oblast



REDUCING THE THREATS TO BIODIVERSITY IN THE SURROUNDING AREAS OF SATY VILLAGE THROUGH THE DEVELOPMENT OF ECO-TOURISM (ALMATY OBLAST)



Ecological Culture Integration Fund

Director:

Evgeniy Klimov Vladimirovich

PROJECT APPROACH:

Demonstration of the possibilities of ecotourism as a form of sustainable use of components of biological diversity and business development at the local level

- Development of ecotourism in Saty village and the involvement of local people in ecotourism activities
- Environmental awareness and draw of the attention to the biodiversity of the region by organizing ecological tours
- Establish stable cooperation with tourist companies

BENEFITS:

Ecotourism for the local community: the preservation of nature - a source of revenue and profit

- community that deals with the "green" business was formed
- annual growth of the welfare of the local community: (2006 profitability - \$ 5 thousand, 2013- \$ 30 thousand.)
- potential of the local population was increased: training on the principles and standards of reception and servicing of tourists
- recreational load in a national park was reduced due to:
establishment of a network of guest houses in the village (2006 - 7 houses, 2014 -60 houses)
development and laying of new tourist routes and their equipment
- reception of tourists from Kazakhstan, Europe, USA, South America and Asia - improving the image of Kazakhstan in the international arena

The project took 1st place in the competition "The Best Practice for Sustainable Development" network CARNET UNDP

The partner of the Project travel agency "Compass" received the title of The Best Tour Operator for domestic tourism" in 2007 and in 2008

Place of implementation:

Saty village, Raimbek region, Almaty oblast



EAGLE HOLDERS (ALMATY OBLAST)

Bird-fancier Society “Remez”

Directors:

Sergey Skliarenko Lvovich Club “Sayatshi” (r Issabekov Mohammed)

PROJECT APPROACH:

- Creation of a model for the conservation and restoration of eagles and other birds of prey, endangered and listed in the Red Book of Kazakhstan and the IUCN
- Support and development of ancient Kazakh national traditions of hunting eagle
- Development of ethno-cultural tourism in the project area

WHAT IS DONE AND WHAT ARE THE RESULTS?

- Measures to restore the population of prey birds were carried out
- security of 45 eagle nests was organized, winter feeding of birds
- The situation with a population of birds of prey is stabilized: more than 200 birds were counted after the project completion, museum of national types of hunting “House of eagle holders” was founded and functioning now. It included in the tour program of different travel agencies and a demonstration of national traditions of hunting with birds of prey
- Conditions of hunting eagles are improved
- Birds that are in the possession of eagle holders, have been certified, labeled with microchips
- Aviary for keeping, treatment and preparation for release into the wild of sick birds is established
- Skills eagle holders were improved - now club of Eagle holders “Sayatshy” is known in Kazakhstan and abroad
- The local community receives additional income from tourism



Place of implementation:

Nura village, Enbekshikazakh region, Almaty oblast



SUSTAINABLE FISH FARM ON LAKE KOSHKAKOL (ALMATY OBLAST)



Non-governmental Association “Alakol Tabigaty”

Directors:

Yerlan Kazhinov

Senior Consultant:

Childebayev Daulet

PROJECT APPROACH:

Issues of reproduction and increase of valuable fish species, increasing the number of migratory, breeding rare, specially protected species of birds

- Construction and commissioning of hatchery
- Creation of 2 small rearing ponds
- Involvement of specialists from Kazakh Research Institute of Fishery for expertise

BENEFITS:

- Increase of fish populations due to the annual stocking of the reservoir (800 thousand up to 4 million fish juveniles)
- Fully equipped hatchery is provided with 10 aquariums for fish to keep larvae up to 2 weeks of age and 10 baths for breeding stock, devices “Weiss” and facilities for maintaining the temperature and oxygen regime in aquariums
- 10 workplaces were opened, training of new specialties was provided
- the number of violations among fishermen (poaching, illegal hunting) was reduced

The project was implemented in collaboration with the UNDP GEF and the Government of the RK on the conservation of globally significant wetlands in Kazakhstan

Place of implementation:

Alakol, Alakol region, Almaty oblast



EXPANSION OF FODDER BY CREATION OF INUNDATIVE AND UPLAND HAY MEADOWS (AKMOLA OBLAST)



Non-governmental Association “Zhumai”

Director:

Zhomart Kyzdarbekov Baybolovich

PROJECT APPROACH:

Reducing the degradation and restoring processes of near village pastures around the village through:

- Creation of inundative hayfields by restoring the 4 dams and flood water collection
- Creation of seeded hayfields on wastelands of arable land

BENEFITS:

- **Increase of livestock fodder was provided:**

360 hectares of meadows was established, that allowed to provide villagers with 100% of hay, production of hay was increased from inundative seeded hayfields from 200-250 tons up to 1400-1500 tons per year wheatgrass crops were created on an area of 600 hectares of abandoned arable land

- The load on near village pastures is reduced
- The accumulated water is also used for watering the garden, watering livestock, fish farming
- The quality of livestock products is improved = the welfare of local residents is improved

The project was implemented in collaboration with the UNDP GEF and the Government of the RK on the conservation of globally significant wetlands in Kazakhstan

Place of implementation

Zhumai village, Korgalzhyn region, Akmol oblast.



THE REVIVAL OF THE TRADITIONAL HORSE BREEDING (KARAGANDA OBLAST)



International school-center "Kusbegi"

Director:

Tleukabyl Esembekuly

PROJECT APPROACH:

- Organization of year-round grazing of horses in remote pastures to reduce the load on the near village territory
- Development and implementation of grazing on remote pastures with the calculation of allowable load
- Creation of infrastructure on distant pasture (watering place for horses and snowmobile trailer for shepherds)
- Creation of wheat grass crops (50 hectares) for additional safety stock of feed for the winter

BENEFITS:

- The introduction of the 14,000 hectares of highly productive pastures
- Stable provision with horse feed
- Increasing the output of livestock products = improving the welfare of people
- Weight gain - an increase of 35 kg / head.
- Reducing the load on near village pastures

Place of implementation:

Aksu Ayulinsk village, Shet region, Karaganda oblast



RESTORATION OF DEGRADED PASTURES OF EASTERN PASTURES OF BALKHASH (ALMATY OBLAST)



Social Fund "Kazakhstan Farmers Fund"

The local partner of the project

PF "Youth Center "Aray"

Director:

Bolatbek Shalov

PROJECT APPROACH:

- Reducing the load on near-village strongly degraded pastures due to the transfer of cattle on highly remote areas
- Implementation of seasonal pasture rotation of pastures

What is done?

- The general herd is formed and lead to the remote pastures
- 5850 hectares of highly forage land was taken into turnover
- The infrastructure was created on the remote pastures (battery)
- 2 wells and watering sites were restored
- Seasonal pasture rotation scheme was implemented from

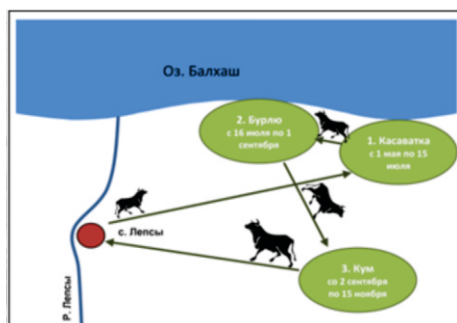


BENEFITS:

- Load on near-village pastures was reduced by 19%
- Animal nutrition was improved and the level of livelihood of local community was also improved
- Increasing the live weight of cattle by 12%
- Increasing the income of the community by 33-35%

Place of implementation:

Lepsey village, Sarkand region, Almaty oblast



FORMATION OF THE LIVESTOCK FODDER BASE IN THE FOOTHILLS OF THE KARATAU (SOUTH KAZAKHSTAN OBLAST)

Non-governmental Association “Association of land users “KARATAU”
and Non-governmental Association “Biogen”

Director:

Serik Makashev Naldibekovich

PROJECT APPROACH:

- Formation of seeded cut areas and improvement of the livestock fodder base and reduction of the load on near-village and foothill pastures

WHAT IS DONE?

- Sites for alfalfa growing was established on the lands of local community members (120 ha)
- Processing of alfalfa seeds before sowing by bioresonance activation to increase yields
- Sustainable use of rangelands was developed
- The technology of animal housing in the summer, winter and early spring was implemented

BENEFITS:

- Provision of fodder for the livestock of the local community members for a period of confinement
- Reduction of the load on near-village and foothill pastures
- Improvement of local livelihoods: the average weight gain for small cattle -10-12 kg, for black cattle - 40-50 kg for grazing period
- Due to the processing of alfalfa seed, the yield was increased by 2 times

ADDITIONAL INDICATORS:

- The area under alfalfa are being increased in:
- 2012- 380 hectares of old crops and 260 ha of new sowing
- 2013- 640 hectares of old crops and 320 ha of new sowing
- At the time of the project implementation - 8 farms had participated, in 2013 - 82 farms (about 30%) of farms.

Place of implementation:

Abai and Babai village, Turkestan region, South Kazakhstan Oblast



SUSTAINABLE PERFORMANCE OF LIVESTOCK FARMING

The creation of “green conveyor” on degraded agricultural lands of Northern Kazakhstan with the involvement of women (Akmola oblast)



Non-governmental Association “Zher-Ana”

Director:

Gulmaira Baimakova

PROJECT APPROACH:

• To demonstrate the possibilities for the development of dairy farming with limited areas of pastures in the northern region of the country through the introduction of “green conveyor” technology

BENEFITS:

- The “green conveyor” is established and operates on 244 hectares of degraded fallow land with 30-40 t / ha crop of green fodder
- Provision of dairy cows with green fodder from early summer to late autumn
- Feeding of dairy cows with green fodder in addition to pasture forage allowed to increase milk production by 1.5 times and increase the fat content of milk by 1%.
- The alternative for the women of farms (40 women of Karabulak village) participating in the project
- Green conveyor - an alternative to uncontrolled livestock grazing around villages and the way to reduce the degradation processes
- Restoration and improvement of soil structure, increase of fertility

Place of implementation:

Karabulak village, Stepnogorsk town, Akmola oblast





«ENERGY-SAVING TECHNOLOGIES» IN APPLICATION OF SOCIAL FACILITIES, HOUSEHOLDS AND HOUSING AND COMMUNAL SERVICES SECTOR



THE IMPLEMENTATION OF ENERGY-EFFICIENT TECHNOLOGIES AT THE EDUCATION FACILITIES IN VILLAGES AND SMALL TOWNS OF AKMOLA OBLAST (NETWORK PROJECT - 3 ORGANIZATIONS)



Social Fund "Akбота"

(Director and Curator of the network project: Tatiyana Nemtsan Nikolayevna)
Non-governmental association "Bulak" (Director: Galina Shevareva Nikolayevna)
Non-governmental association "Women's Ray" (Director: Oksana Mikhalskaya-Volkova)

PROJECT APPROACH:

- Implementation of energy-efficient furnaces for heating of premises
- Replacement of the standard light to LED
- Installation of solar water heaters for hot water supply
- The use of energy efficient materials (polycarbonate) in the construction of greenhouses

BENEFITS:

Furnaces:

- Provision of complete combustion of coal
- Reduction in coal consumption by 30%
- (40 tons per heating season in school building for 130 people)
- Ensuring a stable temperature in school building (+ 20-22S)
- Energy saving - 2 times (6500 kW per year)

Solar water heaters:

- Hot water is constantly available (cleaning of the school, wash)
- The amount of available non-stop hot water 5 times more
- Energy saving of 5400 kWh per year (1 school)



Place of implementation:

Arnasai village, Arshaly region, Stepnogorsk town, Kokshetau town, Akmol Oblast



DEMONSTRATION OF THE USE OF ENERGY-EFFICIENT FURNACES FOR DOMESTIC HEATING (EAST KAZAKHSTAN OBLAST)



Non-governmental Association "KASIIETTI OR ALTAI"

Director:

Didar Dalimanov Oralgazinovich

PROJECT APPROACH:

• Demonstration of the benefits of efficient furnaces Buleryan for heating of the residential and non-residential premises of various sizes

BENEFITS:

- Heating of different rooms and areas (100 to 1000 cubic meters) and planning
- Reducing the consumption of wood for heating (25-30%) to an average of 3 m3 per season
- Providing a comfortable room temperature
- Contribution to the conservation of forests
- Reducing the carbon dioxide emissions due to the complete combustion of the fuel
- Payback cost of furnace - 2 years
- Reducing the spending on firewood

The project has started the promotion of energy efficiency furnaces in the region: at the beginning of the project the lack of firm-suppliers of energy efficiency furnaces, at the end of the project - 4 suppliers, the increase of the demand for energy efficiency furnace from business companies, individuals.

7 rural districts of Katonkaragay region of East Kazakhstan Oblast: Akkaynar, Uryl, Arshat, Aksu, Belkaragay, Katon, Korobiha adjacent to the borders of Katon-Karagai State National Natural Park.



THE IMPLEMENTATION OF ENERGY-EFFICIENT TECHNOLOGIES AT THE EDUCATION FACILITIES IN VILLAGES AND SMALL TOWNS OF AKMOLA OBLAST (NETWORK PROJECT - 3 ORGANIZATIONS)



Social Fund "Akбота"

Director and Supervisor of the network project:

Tatiyan Nemtsan a Nikolayevna

Non-governmental association "Bulak" (Galina Shevareva Nikolayevna)

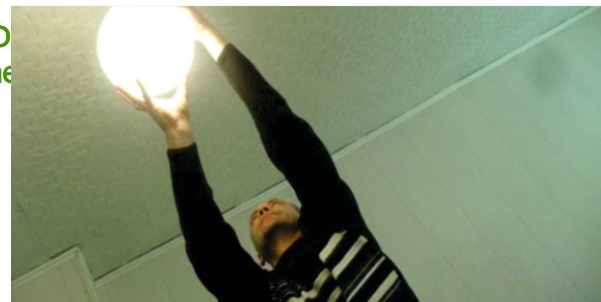
Non-governmental association "Women's Ray" (Oksana Mikhalskaya-Volkova)

BENEFITS:

LED lighting

(this component is implemented in cooperation with the GEF, UNDP and the Government of the Republic of Kazakhstan to promote energy efficiency lighting in RK) :

- Reduction of energy consumption for lighting by 6 times
- Lifetime of LED lamps 20 years
- Provision with the required level of lighting in the classroom
- 300-350 lux at the base of 50-70 lux.



Energy-efficient greenhouses

- Extension of the use of greenhouses without heating (4 months).
- Increase of the productivity by 2-2.5 times
- Total saving of the budget funds for 1
- School using 4-technologies - about
- 700 thousand KZT.

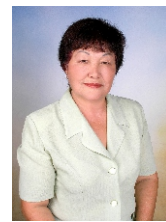


Place of implementation:

Arnasai village, Arshaly region, Stepnogorsk town, Kokshetau town, Akmol Oblast



CREATION OF THE DRYING AND CANNING COMPLEX ON THE BASIS OF THE RURAL RESOURCE CENTER USING SOLAR TECHNOLOGY(ALMATY OBLAST)



Social Fund "International Ecological Association of Eastern Women"

Director:
Urkyz Iliyeva Zlaudunovna

PROJECT APPROACH:

- The use of solar dryers for processing of fruits and vegetables (up to 2 tons per season)
- Installation of solar water heaters for hot water treatment of vegetables

BENEFITS:

- Creation of workplaces for women in rural areas
- Ensuring normal working conditions for women
- An additional source of income from the sale of dried fruits and vegetables (325 families)
- Independent hot water supply of the Resource Village Center
- Provision of hot water for low-income families
- Demonstration of environmentally friendly technologies without CO2 emissions
- Transfer of experience in Kazakhstan and in other countries



Place of implementation:
Enbek village, Almaty oblast



DEMONSTRATION SITES FOR THE IMPLEMENTATION OF ENERGY-SAVING TECHNOLOGIES AND RENEWABLE ENERGY IN THE SCHOOL FACILITIES OF KARAGANDA OBLAST AND IN ALMATY CITY (PARTNERSHIP PROJECT)

Non-governmental Association "ECOOBRAZ"

Director:

Irina Ignatovich

Non-governmental Association "Otrazhenie"

Director:

Lyudmila Kurtavtseva Nikolayevna

PROJECT APPROACH:

- Implementation of complex energy efficiency measures in 2 schools of Karaganda oblast:
- Installation of energy-saving lamps
- Installation of heat-reflective screens for radiators
- Insulation of window and door gaps
- Insulation of freezing walls
- Repair and replacement of windows
- Installation of solar collectors for hot water
- Installation of fixtures for outdoor lighting based on solar panels in 11 schools building of Central Asia Regional Ecology Center (Almaty)



BENEFITS:

- Reduction of energy costs by 20-25%
- Creation of more comfortable indoor conditions for teaching of children
- Formation of a positive attitude towards the implementation of energy efficiency measures in schools
- Outdoor Solar lighting provides lighting of school entrance area in the evening

The project was implemented in cooperation with the SPARE and Regional Environmental Centre for Central Asia

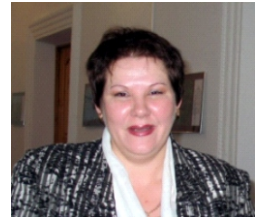
Place of implementation:

Almaty and Karaganda oblsta (Shakan village and Karkaralinsk, Karaganda, Temirtau, Shahtinsk towns)



HEAT-SAVING IN MULTICOMPARTMENT BUILDINGS

REDUCING THE CONSUMPTION OF THERMAL ENERGY FOR HEATING AND HOT WATER SUPPLY OF RESIDENTIAL APARTMENT BUILDINGS DUE TO THE EFFECTIVE MANAGEMENT OF THE HEAT CONSUMPTION BY APARTMENT OWNERS (ASTANA CITY)



Cooperative of apartment owners "Ainur"

Project manager:
Svetlana Gorbunova

SITUATION AT THE BEGINNING OF THE PROJECT:

- Two 9-storey residential brick house (built in 2003) with a connection to the district heating system
- The total heated area of the house - 3098 sqm, 35 persons living

The main problems in the heat consumption:

- overheating of the air in the transitional seasons of the year;
- insufficient heating - in the cold time;
- problems with hot water;
- temperature mode of heating network is violated
- low use of heat transfer agent
- lack of heat meters
- automatic was not working in the heat points
- payment for heat energy based on average standards

As a result: unregulated inefficient heat consumption - overpayment

WHAT IS DONE AND WHAT ARE THE ADVANTAGES?

- The modernization of thermal units, installation of ACS
- The automatic adjustment of the heat flow with the ambient temperature and the temperature of the coolant
- Thermal energy saving for four heating seasons - 720 Gcal (27% less than before the project)
- Residents have saved more than 2.9 million tenge. Payment for heat is reduced by 30-40%
- The savings are accumulated in the "Energy Efficiency Fund" and spent for implementation of additional energy efficiency measures: the installation of energy-efficient lighting, sound sensors in doorways and overall repair of cold water pipes in technical premises
- Provision of comfortable room temperature (18-20S)
- Apartment owners are trained for the principles of energy conservation and actively involved in decision-making on energy efficiency of their house
- CO2 emissions of 315 tons were prevented

The project was implemented in collaboration with the UNDP / GEF and the Government of the Republic of Kazakhstan "Removing barriers for energy efficiency in municipal heat supply"

Place of implementation:
Astana city



DEMONSTRATION OF THE POSSIBILITIES OF APARTMENT OWNERS COOPERATIVE ON THE RESIDENTIAL APARTMENT BUILDING HEAT SUPPLY IN ORDER TO IMPROVE ENERGY EFFICIENCY (ASTANA CITY)



Cooperative of apartment owners "Sary-Arka"

Director:

Dinara Abdrakhmanova Bigeldiyevna

SITUATION AT THE BEGINNING OF THE PROJECT:

- 9-storey brick house (built in 1998) with a connection to the district heating system
- the main problems in the heat consumption:
- overheating of the air in the transitional seasons, insufficient heating - in the cold time
- problems with hot water
- temperature mode of heating network is violated
- house is equipped with heat metering for heating and hot water, but the heat meter does not function
- apartments are equipped with thermostats on radiators, but tenants have no incentive to save heat energy, because the general house metering device is not working and payment is not made according to the actual consumption, but according to the norm

WHAT IS DONE AND WHAT ARE THE ADVANTAGES?

- The reconstruction of the thermal unit of residential house is made:
- The automatic control system of heat consumption, depending on weather conditions and modes of coolant (ASTRA) is installed
- The heat exchangers for heating are replaced
- Additional heat exchanger for hot water supply is installed
- The heat meters with pressure sensors are installed
- The system for the remote meter readings and monitoring of thermal energy in real time (on dial-up connection using a cellular) is installed
- The calculated heat demand of the building is provided
- The unregulated building heat is eliminated
- The residents had incentives for efficient use of heat
- The comfortable room temperature (18-20S)

The project was implemented in collaboration with the UNDP / GEF and the Government of the Republic of Kazakhstan "Removing barriers for energy efficiency in municipal heat supply"

Place of implementation:

Astana city



ECOLOGY-ECONOMIC EDUCATION SYSTEM "MY ECO-HOUSE AND ALL INSIDE"



Social Fund: Fkbota

Director:

Tatiyana Nemtsan Nikolayevna

BASIC CONCEPT:

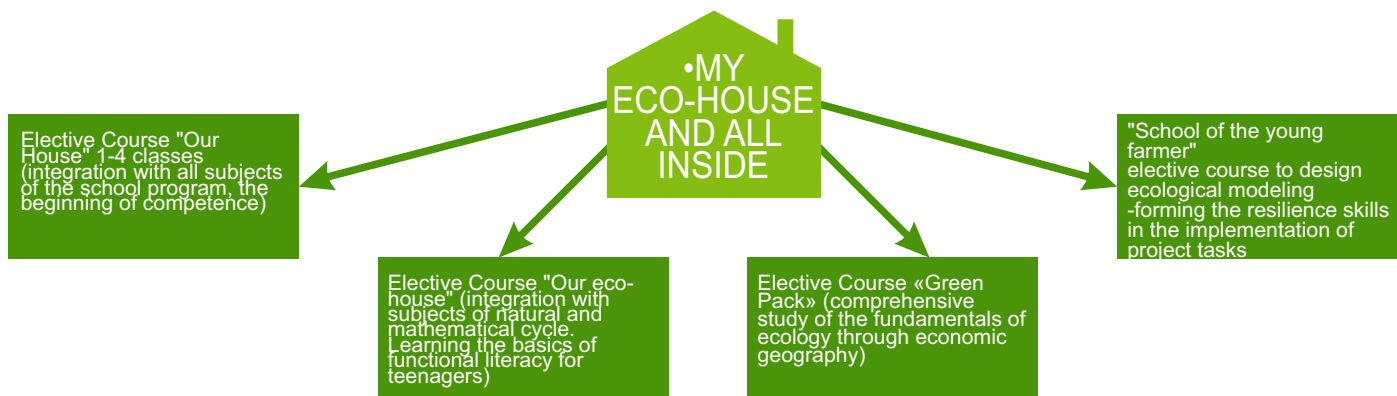
Formation of ecological culture through the development of functional literacy of teenagers

Author of the Concept: V.M. Udartseva, High achiever of Education of RK, teacher-methodologist of the highest category of physics (Almaty city)

The main focus of the work

- Education of personality able to adapt to the changing conditions of the world
- Formation of practical competencies aimed at the stability of the child in society
- Creating conditions for literacy development of child in the family, supporting its choice of future demanded profession

Site of 7 years of practical implementation on the basis of Vyacheslav High School



Place of implementation:

Arnasay village, Arshaly region, Akmola oblast



YOUTH PROJECT COMPETITION “VIEW AT EXPO-2017”

IMPLEMENTING PERSONS:
young people aged 14 to 18 years

BASIC CONCEPT:

- Formation of local youth initiatives aimed at active promotion of energy-saving technologies and practices in local communities
- Formation of ecological thinking and practical skills of environmental projects

A LITTLE BIT ABOUT THE RESULTS:

6 successfully implemented in practice youth projects in the field of energy efficiency and conservation

Place of implementation:
Akmola, Kostanai and Kyzylorda oblasts of Kazakhstan



ECOLOGY-ECONOMIC EDUCATION SYSTEM “MY ECO-HOUSE AND EVERYTHING INSIDE”

Developer:

Regional Environmental Center for Central Asia (CAREC)

Project manager:

Tatyana Shakirova Adamovna

The basic concept:

- “Green Package” - a universal multimedia educational resource for teachers and students (11-15 years)
- It is fully adapted to Kazakhstan (also including the components of the countries of Central Asia)

What is included?

- CD-ROM
- Information about the environment in different directions
- Tests for students
- Game "Dilemma"
- Card Game for students
- A Handbook for Teachers
- Lesson plans with exercises for classroom
- 30 - 40 animated educational films and documentaries

Currently, in addition the following are released: “Caspian Green Package” and “Green Package on the glacier CA”

“Green Package” is approved by the Ministry of Education and Science of RK and is recommended for use in secondary education system of RK

Approaches in the implementation of the “Green Package”

- Teachers training
- Implementation of “Green Package” in the school subjects
- Implementation of practical measures within the topics of “Green Package” at the pilot schools, involving students (EE, climate change, alternative energy, etc.) in order to consolidate the material and skills of practical work with environmental projects

Place of implementation:

Karaganda city and Karaganda oblast, Almaty, Uralsk, Aktau, Atyrau citites





Coalition “For “green economy” and G-Global development ”

Leading public organization in Kazakhstan,
with the portfolio of “green” initiatives and projects,
supporting the Concept of transfer to “green economy”,
Partnership Programme “Green Bridge”,
International Exhibition “Expo-2017”

Address: Astana city, 29 Syganak str, tel.: +7(7172) 999 402, +7(7172)999 408
Web-site: www.greenkaz.org, www.g-global-expo.org, www.project.greenkaz.org
email: greenkaz.kaz@gmail.com

KNOWLEDGE SPREAD CENTER “GREEN TECHNOLOGIES”

Organizer:

Association of legal entities “Coalition for “green economy” and development of G-Global”

• **The main goal of the Knowledge spread center:** Education of the population for green innovations aimed at the improvement of the agricultural efficiency, reduction of the greenhouse gas emissions, increase of water conservation and energy efficiency. The list of such green innovation is constantly expanding.

• **Objectives of the Knowledge spread center: "Green Economy":**

- Constantly active short-term training of residents for innovative farming techniques or other forms of business, including for personal use in the home or farm.
- Development of model business plans and drawing up of individual business plans, training for skills on risk calculation and selection of business partners.
- Practical training on the example of resource sites on innovative farming practices that enhance the effectiveness of different types of businesses, especially agro-business.
- Identification of self-taught inventors, their redirection to the appropriate framework for the patenting and commercialization of their inventions.
- Work with students and their parents that aimed at innovative thinking, assistance to identify talented children, participation in various competitions.

• **Knowledge spread center successfully functions from December 2013**

In January-May of 2014 there were 25 workshops for residents of more than 40 villages of Akmola and Almaty oblasts, more than 800 residents were trained:

- innovative cultivation of crops such as amaranth, shavnat, goat's rue, and others;
- easiest way to get biohumus, compost and vermicompost;
- manufacture and use of solar convection dryers, tumble dryer of various products;

Manuals and guidelines were developed for all types of training. These guides are written in plain language and accessible to people of any social group.

The seeders for seeding amaranth, amaranth mill for flour, another small mechanization are being prepared for implementation;

The safe effective types of wind turbines, helio-water pumps, low-cost solar water heaters and other are being prepared for implementation.

• **Knowledge spread center is not a replacement for the rural colleges or universities,** our task is to teach directly residents, farmers and businessmen. Because the task of our center is very clear - concentrated, concise information, practical demonstration, training, response to acute or controversial issues, collection of practical experience on innovative topics, prolonged assistance in the implementation of innovations.

Knowledge spread center has the support of inventors and scientists, training are conducted by successful business executives who are willing to share their experience and knowledge.

Location:

Akmola oblast, Burabai region, Okzhetpes village



PROJECT ON THE SOLUTION OF UNEMPLOYMENT PROBLEMS IN THE VILLAGES OF AKMOLA AND ALMATY OBLASTS

Organizer:

Association of legal entities "Coalition for "green economy" and development of G-Global"

- **Goal of the project:** Reduction of the unemployment proportion among the villagers and improvement of the life quality through the development of "green" rural business.
- **Implementation period:** January - November of 2014
- **Objectives of the project:** Training of more than 500 rural unemployed people of Akmola and Almaty oblasts; Creating a resource areas: growing of amaranth, receipt and use of vermicompost, the use of solar dryers and water heaters; Testing and implementation of "green" technologies in the villages of Kazakhstan

Location:

Akmola oblast, Almaty oblast

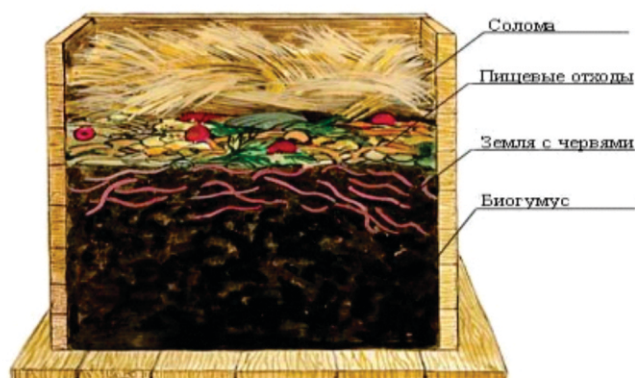


DEVELOPMENT OF VERMICOMPOST PRODUCERS NETWORK IN KAZAKHSTAN FOR ORGANIC AGRICULTURE SECTOR AND LAND RESTORATION

Organizer (start-April of 2014)

Association of legal entities "Coalition for "green economy" and development of G-global"
Individual Entrepreneur "Andrei Strelec" (North Kazakhstan Oblast)

- **The goal of the project:** Promotion of organic farming on the basis of biohumus technology. The transition of agriculture on natural farming technology is a key area of "green economy" for Kazakhstan.
- **Objectives of the project:** Creation and development of a network of producers based on vermicompost vermiculture, liquid vermicompost, environmentally friendly products.
- **A network of vermiculture is established:**
 - More than 10 farms in Kazakhstan in 2014 purchased more than 20 million worms.
 - Development of own standards.



ESTABLISHMENT OF THE SYSTEM FOR THE ORGANIZATION OF THE SEPARATE COLLECTION AND DISPOSAL OF SOLID MUNICIPAL WASTE ON THE BASIS OF COST EFFECTIVE TECHNOLOGIES

Organizer (start-April of 2014):

Association of legal entities “Coalition for “green economy” and development of G-Global” LLP “Investment Group “ECO-MART” (Almaty city and Almaty oblast”

- **The goal of the project:** Promotion to the formation and development of enterprises in the country to provide services to collect, sort, pick-up and disposal of solid waste
- **Objectives of the project:** cconstruction of model centers for the collection and processing of solid waste, storage of recycled items, composted plant and vermicomplex site.

In Kasymbek village, earthworms were brought and processing of organic waste started (manure and cleaning of vegetables from catering). 5 people were employed. Capacity of vermicomplex is designed for servicing of 4 settlements with a population of more than 50 000 people and more than 100 organizations. In this case, the budget of capital investments for building of the necessary infrastructure is not more than 35-40 mln. KZT, of which the share of local Akimats is only 5-7 mln. KZT.



VOLUNTARY CERTIFICATION OF ORGANIC PRODUCTS «KZ ORGANIC»

Organizer (start-April of 2014):

Association of legal entities «Coalition for «green economy» and development of G-Global»
RPO «Organic farming of Kazakhstan» and Trade Committee of the National Chamber of Entrepreneurs of Kazakhstan

- **The goal of the project:** Promotion to the formation of the support systems of the manufacturers, suppliers and consumers of organic agricultural products.
- **Objectives of the project:** Training, counseling the villagers, farmers and peasants on the application of natural farming technologies, business development. Development and promotion of Internet sites "KZ Organic", cooperation on the site with the producers and sellers of eco-products, as well as promotion of the eco-brand of Kazakhstan.
- **Components of the project:** it is necessary, first, to develop eco-standards of the project "KZ Organic"; secondly, the signing of mutually beneficial agreements in which producers undertake to produce under the brand name "KZ Organic" separate line of eco-products, satisfying eco-standard "KZ Organic"; Third, the introduction of a new generation of Internet technologies - virtual business network of eco-shops; Fourth, support and promotion of environmentally friendly domestic products to international markets. Now Kazakhstan has no legal framework on organic production. There are no republican standards and related technological standards of organic agriculture. Public certification of small farmers, private farms and gardens, which organize production according to the rules of organic farming, will be conducted by the Coalition. The Specialists of the Coalition had developed a sign of public certification "KZ Organic", which will help consumers to distinguish the products of environmentally conscious farmers.



DEVELOPMENT OF ECO-VILLAGES AND PATRIMONIES FOR THE SPREAD OF ECO-TECHNOLOGIES AND SUSTAINABLE LIFESTYLE

Organizer (start-May of 2014):

Association of legal entities "Coalition for "green economy" and development of G-Global"
RPO "Kazakhstan Patrimonies"

- **The Goal of the project:** Promotion of eco-villages and patrimonies in the country, allowing people to live in harmony with the environment, efficiently to use natural resources and preserve the ecosystem.
- **Objectives of the project:** 1) to promote the development of the eco-village "Almaray", which created the resource platform for the development of vermiculture, for the purpose of cultivation of environmentally friendly products (Almaty oblast), 2) to create "Eco – village "SANA" and the revival of an orchard in Kosschi village, Tselinograd region of Akmola oblast
- **Justification of the project:** Each 1 hectare estate is a particularly diverse of the biosystem, consisting of 40-50% of the park area, 20-30% of the garden, 5-15% of the vegetable garden and pond, various household building, apartment house, surrounded by a perimeter hedge. Such a large number of green spaces in the estate will provide an opportunity to create a green shield near large industrial cities and greatly improve the atmosphere and the climate inside them, and will supply the city of environmentally friendly products.



ESTABLISHMENT OF THE TRANSREGIONAL RESOURCE NET OF PROJECTS FOR THE PROGRAMS OF SMALL GRANTS OF THE GLOBAL ENVIRONMENT FACILITY

Organizer (start-April of 2014):

Association of legal entities "Coalition for "green economy" and development of G-Global"
Social Fund "Akбота", supported by Small Grants Programme of the Global Environment Facility (SGP GEF)

- **Organizers of the project** Association of legal entities "Coalition for "green economy" and the development of G-Global" and Social Fund "Ak Bota", with the support of the Small Grants Programme of the Global Environment Facility (GEF SGP).
- **The goal of the project:** Wide coverage of, experience and results of the most successful and demonstration projects, best practices, methods, techniques, lessons learned, the GEF SGP at the national level to address global environmental issues at the local level and improve the lives of local people.
- **Objectives of the project:** creation of a network of grant holders GEF SGP for further replication of the received best "green" experience and practice, as well as facilitating the implementation of "green" solutions to social field and business projects.

The creation of inter-regional network for the distribution of "green" technologies:

1. Water Conservation
2. Energy efficient lighting
3. Energy-efficient heating
4. Energy-efficient greenhouses
5. Organic farming
6. The use of solar technology
7. Green Education



COMPETITION “ECOLOGICALLY FRIENDLY BUSINESS – 2014” AND CATALOGUE OF «GREEN COMPANIES OF KAZAKHSTAN»

Organizer (start-May of 2014):

Association of legal entities “Coalition for “green economy” and development of G-Global”
National Chamber of Entrepreneurs of Kazakhstan

- **The goal of the project:** Identification of "green" companies and organizations of Kazakhstan and their wide promotion.
- **Objectives of the project:** 1) publication of the catalogue of “green” technologies and companies of Kazakhstan, 2) establishment of a register of available “green” technologies, 3) creation of a short-term movie about the potential of green growth in Kazakhstan with a demonstration of successfully implemented green projects.
- **Seven nominations:** water resources, energy resources, green office, disposal / processing of waste, housing and "green" construction, organic agriculture and transport.

COMPETITION “ECOLOGICALLY FRIENDLY BUSINESS – 2015” is announced for 2015

The winners of the Republican competition “ECOLOGICALLY FRIENDLY BUSINESS – 2014”

- **Nomination: “Organic agriculture”**
Individual Entrepreneur “Strelec A.V.” (CEO – A.V.Strelec.),
- **Nomination: “Disposal/processing of waste”** «отходов» LLP “Investment group “ECO-MART” (CEO – K.K.Bastabayev),
- **Nomination: “Green office”** LLP NGF “Ergonomics” (CEO – S.V.Poleshchuk),
- **Nomination: “Energy resources”** LLP “Santechprom” (CEO – V.A.Kryuchkov),
- **Nomination: “Transport”** LLP “ECO-PARK” (CEO – A.I.Mushtai),
- **Nomination: “Water resources”** LLP “Bread and mutton factory Aksai” (CEO – A.M.Kurbanova),
- **Nomination: “Housing and green construction”** LLP “Balkhash-Nur” (CEO – Kuttybekuly Beissenbek).



green
BUSINESS
in Kazakhstan



GEF Small Grants Program

in Kazakhstan



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КОНКУРС ЗАЯВОК Ярмарка наилучших практик и знаний ГЭФ ПМГ

Программа Малых Грантов
Глобального Экологического
Фонда (ГЭФ ПМГ) объявляет
конкурс среди общественных
организаций Казахстана на
разработку и реализацию
проекта «Ярмарка лучших идей
и практик ГЭФ ПМГ». Сумма
грантового финансирования
оставляет до \$50,000.

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Конкурс на финансирование проектов в тематике «сохранение биоразнообразия»

Программа Малых Грантов ГЭФ
объявляет конкурс на
финансирование проектов в
тематике «сохранение
биоразнообразия»,
направленных на улучшение
среды обитания как отдельных
редких, исчезающих,
занесенных в Красную Книгу
видов флоры и фауны, а также
на улучшение общего состояния
экосистем, являющихся местами
обитания (произрастания),
гнездования и пр.
краснокнижных редких и
исчезающих видов флоры и
фауны.

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Продлен прием заявок на грантовый конкурс по обеспечению широкого информирования о деятельности проектов ГЭФ ПМГ

Прием заявок продлен до 25
января 2013 г.

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This catalogue has been prepared by the Coalition for “green economy” and G-Global Development within the framework of the project GEF PSG “Fair of the best idea and practices of the GEF SGP”