

MOUNTAIN PROTECTION AWARD 2015 – SUBMISSION

INITIATIVE 29 – TAJIKISTAN – LITTLE EARTH PROJECT

Initiative Form

Title Clean energy in the roof of the world

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Category Resources / Energy Consumption

We are a NGO

Name Little Earth

Location Tajikistan

Date Duration September 2013-July 2015

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1. Please describe the goal and objectives of this project

With the project “**Clean energy on the roof of the world**” Little Earth contributed to the improvement of life conditions of local communities and to the sustainable use of local natural resources through introduction of sustainable energy technologies, raising awareness of local authorities and inhabitants and strengthening the cooperation between local stakeholders. We tried to focus on alternatives that do not require complex devices or significant investment. Such technologies or activities as efficiency stoves or houses insulation could significantly reduce fuel consumption and indoor pollution, improve comfort and sanitation, save funds and lighten the work required for wood collection. Trainings and practical experience for local masters and other communities’ members enhance their capacity and enable them to be agents of changes.

Project goal: Contribute to sustainable development of mountains communities in the upper part of Bartang river valley (Pamir mountains, Tajikistan).

Project’s objectives and outputs:

1. Increase local communities’ awareness on sustainable energy.
 - Communities’ members have better understanding of links and interactions between environment, social welfare and quality of life.
 - Communities’ members gain new knowledge and skills by participating in workshops and trainings.
 - Better interactions among local stakeholders in communities established.
2. Improve quality of life of local communities through introduction of energy efficiency alternatives and renewable energy technologies.
 - Energy and sanitation conditions improved. Reduced indoor pollution, decrease of fuel consumption, reduced time for wood collection thus more time for other activities.
 - Communities are using energy efficiency/renewable energy devices and alternatives and receiving benefits.

- Applied resources efficient/renewable energy devices sparked discussions in communities on alternative technologies and new ways of development. 3. Reduce pressure on local landscapes and ecosystems through better energy resources management.
- Less biomass is collected and used for heating and cooking. Pressure on local scarce natural resources reduced. Less soil erosion and less risk of natural disasters due to vegetation conservation.
- Prevention of CO2 emission through renewable energy use and resource efficiency technologies introduction.
- Groups of activists created in some communities, which participated in sustainable energy resources management.

2. What is the contribution your project brings to mountain protection? How does it fit the category (see above) you have chosen?

Rural inhabitants of Tajikistan are particularly vulnerable to energy poverty. Factors in this are extreme weather conditions which can isolate mountain areas for several months of the year, a poorly maintained infrastructure and increasing unpredictability of the climate. Remote mountain villages already facing energy problems due to lack of access to central electricity supply and shortage of available biomass used for cooking and heating. Forest cutting leads to environmental degradation and an increased number of natural disasters. Lack of essential resources escalates conflicts for available fire wood and biomass. Lack of access to such services as power supply affects vital activities of local communities and reduces their ability and capacity for further development.

Efficient use of energy resources.

"Little Earth" not only promotes more efficient use of existing energy resources in the community, but also introduces the technology, working on renewable energy sources. Thus, the project improved the population's access to clean and independent energy sources and helped to develop more efficiently allocation of the available resources. Within two years the project covered 6 villages, 32 households, 7 public buildings. 23 solar cookers, 3 solar collectors, 5 energy efficient stoves were disseminated. 4 schools were equipped with solar panels; 2 buildings were insulated, 4 solar greenhouses were built and 4 training workshops for local artisans were held.

Conservation of ecosystems and biodiversity

Thanks to the introduction of energy-efficient stoves, solar cookers or insulation of homes reduced use of biomass - the main source of fuel for cooking and heating in the target communities. This reduced the pressure on vegetation, which in turn prevents the destruction of ecosystems and preserves the local biodiversity. Conservation of forests and vegetation in the upper part of river streams is particularly important for mitigation the possible adverse effects of climate change. General calculations show that the project's activities helped to save annually more than 50 tons of firewood. Reducing the risk of natural disasters. Forests and bushes contribute to the preservation of soil and strengthening mountains slopes. That significantly reduced the risk of natural disasters such as landslides and mudflows. Forests are natural barrier to such hazards and they significantly reduce the volume and scale of the possible damage. It also helps reduce the risk for existing infrastructure (such important in mountain communities) – like roads, power lines, etc.

3. How does your project benefit the local communities where it is implemented and how do you collaborate with them?

Project is being implemented in close cooperation with local partners (NGO "Oyandasozi" and cooperative "Zindagi"), local authorities (Jamoat - lowest level of official authorities of Savnob) and communities groups (such as women group in Nisur village). Before starting the introduction of technologies, "Little Earth" conducted a rapid assessment of community and meetings with activists from the village, and sometimes exhibitions where everyone could get information about our activity

and suggested solutions. Assistance in collecting the necessary data, monitoring on the ground and working with the local community was provided by local NGO "Oyandasoz." Practical training workshops for local artisans were organized on the basis of the local cooperative "Zindagi".

Few concrete examples of our activities.

Solar cookers – meal with taste of the sun. “Little Earth” within the project disseminated around 20 solar parabolic cookers on 50/50 scheme (where project and household owners covered 50% of the cost). Solar cookers were introduced as alternative to traditional stoves in order to reducing the use of firewood. Roughly calculations in Roshorv and Nisur villages shows that each cooker can save about 15 kilos of wood per sunny day, accounting for only 100 days of sunshine a year, it would equal about 1.5 tons of fuel saved. Accordingly, 20 solar kitchens help people save more than 30 tons of wood annually at that rate and prevent emission of more than 35000 cubic meters of CO2. Solar cookers reduced work load for women (less biomass is needed to collect, less dishes to wash), improved sanitation and safety - devices are smoke free and simple to use, and cooking process cleaner and better. Solar greenhouses to improve food security. Solar greenhouses, which we built within the project, increase the crop and vary the food ratio of mountain people. Their use to some extent, resolves the food security issue.

Additionally, greenhouses make it possible for the farmers to receive incomes from sprout sales. In the villages of Roshorv and Savnob owners of greenhouses got around 400 USD as additional annual incomes. In Kudara village owner of solar greenhouse was able to cultivate tomatoes and cucumbers. This was not possible before due to harsh climate at such high attitude. There are also examples of greenhouses replication - in Roshorv, a farmer built such greenhouse on his own, while near the village of Savnob, a solar greenhouse was built by the Emergency Committee personnel at their local station.

4. For the implementation of your project, do you collaborate with local, regional, or national authorities? If so, how?

Within the project "Little Earth" has cooperated with the local authorities at the level of the Jamoat – which is combine several villages. This is the lowest level of the official authorities. Local authorities and community activists were directly involved in round tables and workshops, which were held in the framework of the project. This has contributed to an open dialogue and free discussion of most actual issues. Practical workshops for local artisans also were performed in close coordination with local authorities and communities. Training participants, the topic for workshops and their programs were jointly developed. Jamoat authorities also helped to collect some required data and organized meetings with local communities in target villages. Local authorities received all interim and final reports on the implementation of the project.

Chairman of Savnob jamoat – Ermonov Gulomali. Contacts: Tajikistan, Gorno-Badakhshan Autonomy Region, Rushan district, Savnob village. No Internet or phone connection is available in the village, but chairman can be reached through NGO “Oyandasoz” (see contacts below).

NGO «Oyandasoz», Roziq Yaftaliev, head of NGO, Contacts: Tajikistan, Gorno-Badakhshan Autonomy Region, Rushan district, Nisur village, e-mail: roziq_78@mail.ru

Cooperative «Zindagi», Rustam Zavarshoev, director. Contacts: Tajikistan, Gorno-Badakhshan Autonomy Region, Khorog, Ohonchonova str, 58/1, Tel: +992935922699, e-mail: rustam73.12@mail.ru

5. Describe how your project goes "beyond business as usual" and is an example of (regional) best practice in the protection of mountain environment.

"Little Earth" does not offer a universal solution to the problems. The project was rather aimed at the joint search for possible ways to overcome existing difficulties and create conditions for further development. We do not see mountain communities as a "problem" area, we believe that there is hidden great potential for development, which can and should be used. The project was aimed to ensure maximum use of local resources and support local communities. For example, practical workshops for artisans from the target communities were carried out on the basis of the local cooperative "Zindagi", which staff have been trained and have the necessary technical skills. Moreover, a number of products (such as energy-efficient stoves or windows) were purchased in this cooperative for the communities.

As a result local specialists were involved in the project and cooperative received additional support. Around 25 representatives from communities took part in these workshops. Another example - the purchase of materials, such as for the construction of greenhouses was carried out (if possible) at the local markets, and some local residents have been involved in the provision of related services – such as transportation service, bricks making, etc. «Little Earth» also signed an agreement with local women group for production of a party of souvenirs. Local women prepared 40 pairs of traditional woolen socks and a number of other products. The project got unique outreach materials and supported traditional handicrafts in the communities.

Contribution from the community (cash or in-kind) was one of the requirements for participation in the project. This helped not only create a framework for a more responsible and careful use of the proposed alternatives, but to determine the most popular ones among the residents. For example, in the construction of solar greenhouses minimum contribution was 30%, and in the case of purchase of solar cookers or efficient stoves, the owners of households had to pay 50% of their costs.

6. Describe the management of your project activity

The project started in September 2013 and ended in July 2015. Three staff members of "Little Earth" were responsible for the project implementation, including one designated manager. All of them have rich experience in the field of sustainable energy and the mobilization of mountain communities. In developing the initial work plan, "Little Earth" had extensive consultations with the local partner - NGO "Oyandasoz", and in some cases, brief surveys of target communities were made. Introductory meetings with representatives of the communities and local authorities, as well as exhibitions have allowed not only generate interest in the project activities, but also to make some adjustments in the overall plan. Distribution of sustainable energy technologies and alternatives were combined with exhibitions, practical workshops, public consultations and round tables. "Little Earth" organized two round tables (at the end of the first and second year), in which representatives of local authorities and community activists were able to meet and discuss their experience, review the progress and identify challenges. Two initiative groups of local activists were created within the project in two villages. Groups continued to work in the communities on energy issues and possible solutions after the end of the project. Groups are closely cooperating with NGOs "Oyandasoz" and Jamoat authorities. "Little Earth" provides them with consultative and information assistance and searching for an opportunity to support their further development. "Little Earth" periodically monitored sites and villages, conducted interviews with residents and provided the necessary consultations and technical support. "Little Earth" initiated and organized tour for two local journalists in some of the target villages in the valley. Based on findings and interviews from the trip, journalists have prepared objective reportages and gave their independent assessment of our work. Small funds were secured within the project to support capacity building of the «Little Earth» staff members.

In two years, three members of the organization, that were involve in the project implementation, participated in the training on solar water heaters, in a workshop on adaptation to climate change, in the summer camp of young environmental specialists and the summer course related to food security in mountainous regions. Funds within the project were managed by professional administrator and according to the donor's and national regulations requirements. Financial audit of the project was

carried out annually by an independent party and give an objective opinion on the efficient management of the funds received.

7. Describe how your projects support stewardship in mountain regions; such as the promotion of volunteer participation opportunities.

As mentioned above, the "Little Earth" was actively cooperating with the local NGO «Oyandasoz», young volunteers of which were involved in the project's activities on the ground. Some of the volunteers took part in seminars and practical workshops for the artisans, organized and held within the project. So they were able to increase their capacity and gain new knowledge and skills. Over the past two years we were organized four workshops on construction of solar water heaters, insulation of buildings and construction of off grid water pumps. Two representatives of the NGO «Oyandasoz» and one of the community activists took part in study-tour trip to the Central Tajikistan, which was organized within the project. The main purpose of the visit was to familiarize with the work of «Geres» and NGO «Nau» on the introduction of energy-saving and resource-efficiency technologies in local communities. Representatives of the «Oyandasoz» visited a number of sites in the villages, including solar greenhouses, energy efficient stoves, compost pits, and building that were insulated. Pamir activists were able to communicate with their owners and share their experiences of implementation and dissemination of energy-saving alternatives in Bartang valley.

To support local women – householders in Bartang valley, «Little Earth» signed an agreement with local group for production of a party of souvenirs as project outreach materials. In particular, local women prepared 40 pairs of traditional woolen socks and a number of other products. Thus, the project was not only received an unusual products, but also was able to support traditional handicrafts in the communities and to provide women additional incomes.