







RESOLUTION

of the National Conference "Innovations towards a Safe and Comfortable Home" 23-25 May 2013, Karakol city, Kyrgyzstan

Currently, the population of the Kyrgyz Republic is largely rural with 64 % of its population. However, there is a big gap between urban and rural living conditions. The living conditions in many Kyrgyz villages, especially in remote areas, remain very difficult. Rural inhabitants face many problems in daily life. First of all, energy poverty (lack of heating, light and fuel), low drinking water quality, low nutritional status, and lack of safe sanitation and hygiene.

The project Home Comforts, which gained support from the EU, has created local capacity for improved rural living standards through sustainable energy and sanitation innovations. This project has been implemented in the Issyk-Kul and Naryn oblasts of Kyrgyzstan during 2011-2013.

The essence of the project is to adapt and implement innovative technologies with locally trained staff and local materials. In particular, special Demonstration Centres have been established aiming at disseminating the experience in construction of the facilities such as energy-efficient stoves, solar water heaters, solar fruit dryers, and ecological toilets (UDDT).

A special attention has been paid to establishing of a Resource Centres Network to ensure a centralized production of the components required for these innovative technologies, which among other things contributes in development of the ecotourism.

A preliminary analysis of the project outcomes based on the survey conducted among 407 rural residents, reviewing the guest books of the Demonstration Centres, as well as discussions and interviews confirmed appropriateness of the approach adopted by the project managers and created prerequisites for disseminating the new technologies for achieving greater comfort and improved sanitation conditions in the homes.

It was found that the energy saving stoves and solar water heaters allow to obtain a high economic pay-offs compared to the conventional heating and water heating systems. Thus, the savings they











generate are respectively €800 and €1400 over a period of 10 years, and a UDDT is cheaper than a VIP latrine after 4 years, and it increases the comfort of householders.

On the other hand, the results show that villagers, who often face challenges in their daily routines, are ready to take risks to improve their comfort and security. This is confirmed by a high number of self-financed replications of energy efficient stoves.

It is important to note that about 60% of the respondents (24% women) indicated to be willing to take a microcredit for one of the above indicated technologies; 6 to 11% of the respondents are willing to invest the full cost of the technologies, and 23 to 30% half of it.

Yet, some barriers have been identified since some people are not able to invest the full amount of an innovation. Solar water heaters need to be adapted better to local circumstances and awareness must be increased concerning the benefits of UDDT. Indeed, increased availability of microcredit with low interest rates, enabling political frameworks and additional capacity building are needed to overcome these barriers.

Based on the above, we, the participants of the conference, representatives of the local self-government bodies, government agencies at rayon, oblast and national levels, as well as members of the donor community and civil society,

- guided by the principles set in the Constitution of the Kyrgyz Republic, the international and national ecological standards and the obligations accepted by the Kyrgyz Republic;
- based on the Strategy for Development of the Kyrgyz Republic for 2012 2014. (Chapters IV and V);
- acknowledging existence of problems in the economic, social and political spheres, as well as
 the need in expanding economic possibilities and conditions for the rural development; and
- taking into account the urgency in improving quality of the rural life and the positive experience gained while introducing the innovative technologies in the rural areas of the Kyrgyz Republic,









we note that

- an effective work of the project partners in Home Comforts on the local and national level led to successful introduction of the innovative and environmentally sound technologies in rural areas:
- creating an enabling environment for rural life is needed, achieved through introducing the
 innovative technologies and contributing among other things to reducing the outflow of young
 people from the rural areas;
- capacity building of the local communities is needed to master the advanced innovative technologies as well as public awareness through training, consultation and experience sharing via the media;
- there is a need in providing financial support for introducing the sanitary-hygienic and alternative energy-efficient technologies, which are welcomed by the local community;
- excessively high interest rates of the micro-credit financial institutions do not allow the
 villagers to get micro-loans for introducing the innovative technologies, which provide
 significant benefits in the long term, from both an economic and an environmental point of
 views;
- there is a need in elaborating the socio-economic and financial mechanisms for interaction between the stakeholders aiming at introducing the innovative technologies in the rural areas.









RECOMMENDATIONS

- 1. To create more attractive conditions in rural areas it is necessary to widely introduce the advanced and affordable sanitary-hygienic and energy-saving innovations, such as energy-efficient stoves, solar water heaters, dry ecological toilets (UDDT).
- 2. For a wide spread of the innovative technologies, the political will and comprehensive support are required at all levels, as the energy efficiency and access to sanitation and hygiene provide a huge benefit to rural residents.
- 3. Dissemination of the sanitary-hygiene and alternative energy-saving technologies require a due support, and first of all financial support.
- 4. In short term, a priority State Program on Introduction of Innovative Technologies should be developed aiming at creating an environmentally safe and comfortable home and focusing on the energy efficiency as a measure to mitigate the effects of the global climate change, and that the villagers are willing to contribute their co-financing shares in implementation of this project.
- 5. The State Program on Introduction of Innovative Technologies is to foresee organizing and implementing scientific research in this area by providing a technical and financial support to educational programs for technical students.
- 6. The State Program on Introduction of Innovative Technologies should include development and implementation of a training course for students of the vocational schools with regard to constructing and operating of the energy-saving stoves, solar collectors, fruit dryers and ecological toilets (UDDT).
- 7. A significant support will be updating the list of Patent services by introducing the construction of ecological toilets and energy-efficient stoves, thermal insulation of residential houses, manufacturing of solar collectors, etc. to the category of small-scale construction works performed at reduced prices. The current patent for general construction work, covering the above-mentioned services of the innovative technologies is expensive, and the rural constructors, mostly young people, can not always afford to buy them.









- 8. A local self-government body is to consider an option for issuing the low-interest microcredits to the vulnerable part of the rural population to be used for buying and constructing facilities of sanitary-hygienic and energy-saving technologies directly through the Resource Centres, as well as to envisage co-financing of the innovative projects in the local budgets.
- It is necessary to strengthen the institutional capacity of the Resource and Demonstration
 Centres of the innovative technologies and make a common database of the existing innovative
 technologies.
- 10. A local self-government body should pay a serious attention to the early elaboration of financial mechanisms to support development of infrastructure and social housing.
- 11. A local self-government body should first of all assist local communities to open ecological guest houses, which use the above indicated innovative technologies. Besides, the touristic routes need to be tailored considering the guest houses in the database, and to organize and ecological and agrarian festivals jointly with various touristic companies.
- 12. Growth of the potential of the local communities (CDWUU, self-help groups, women's and youth organizations, etc.) is crucial in dissemination of the advanced technologies, allowing raising the public awareness, training and consulting activities to a qualitatively new level. To increase the effectiveness of their activities it is necessary to attract external financial sources and donor support.