



Knowledge and technology transfer centre for local communities

Project name: Knowledge and technology transfer centre for local communities

Project number: MON/COMDEKS/2014/09

Implementing organization: “Clean Energy” NGO

Project location: Bayantsogt soum of Tuv aimag

Financing by COMDEKS (Japan Biodiversity Fund): USD 23,260.00

Co-financing: USD 18,765.00

-Cash: USD 3,951.00

-In-kind: USD 14,814

Number of beneficiaries: 400 (It will increase with years coming)

Project Summary. Clean Energy NGO constructed several types of facilities using soil-bag technology in Mongolia, including greenhouses, cattle shelter, residential houses and poultry houses. This project of soil-bag construction was funded by the the Community Development and Knowledge Management for the Satoyama Initiative Project (COMDEKS) launched in 2011 as the flagship of the International Partnership for the Satoyama Initiative and supported by Hiroshima University on a voluntary basis. The project aimed to introduce an alternative approach to construct greener and more reliable solutions for local herders and farmers for livestock production and living. The soil-bag technology has been used in other countries, such as Japan, South Africa and US for maintenance of community roads, flood dams and for other infrastructural purposes. It has been for the first time to apply the technology for constructing for living and livestock purposes for Mongolia.

Initial Situation and Context of the Project/Initiative. Over many years the Government of Mongolia has been supporting intensive livestock farming to increase supply of livestock products to larger markets and to promote entrepreneurship of local farmers and herders.

Needs for reliable and yet environmentally friendly shelters for livestock and housing are high in Mongolia due to the country harsh climate, especially in winter and spring seasons. Due to recent climate change and desertification, pastureland over-grazing has been expanding in Mongolia. Consequently, needs to have more reliable and greener animal shelters and houses are growing in the country. As usual, facilities in local areas are constructed with common construction materials such as wooden materials, concrete blocks and bricks. In harsh winter and spring seasons, it is vital to have warm and reliable shelters for livestock, birds, pigs and other animals farmed.

Project motivation and objectives

Overall motivation of the Project is to introduce a new and alternative solution of constructing animal shelters and residential houses for local communities so that they have better settled to run sustainable livestock and agricultural production.

Major goals of the projects are:

- Introduce an alternative technology of construction to Mongolia;
- Construct several pilot facilities

- Conduct on-site trainings to herders and farmers;
- Produce training materials, video, handbooks for further use of the technology
- Promote green development principles in the country

Results. It has been proven and confirmed that the soil-bag facilities are much warmer and durable than other common types of facilities built with timber materials. Replacing timber materials with soil-bags would result indirectly to reduce GHG emission in the country by number of trees saved for construction.

Replication Potential. This technology can be fully replicated in other regions of Mongolia and in other countries. It can be used for constructing many different facilities including shelters for livestock and other animal farming purposes, greenhouses, storages, garages, small office buildings, some other tourist facilities and even small houses in the countryside. The following factors shall be considered for the replication in Mongolia:

- On-site trainings shall be conducted simultaneously with the construction;
- Labor force and availability of technical shall be realistically identified;
- Labor safety and compliance with construction technology is vital;
- Documentation shall be made very well for later use and reference;
- Verbal or written agreements shall be made between communities in order to avoid potential conflicts of interest in future;



