THE KERKENES ECO-CENTER PROJECT

REPORT FOR THE 2012 PROGRAM

and

REQUEST FOR A CONTRIBUTION TOWARDS THE 2013 PROGRAM OF ACTIVITIES



Figure 1. New parbollic solar cooker completed in 2012.

Submitted by
The Kerkenes Eco-Center Project Team
Middle East Technical University, Ankara

in collaboration with

ŞAHDER

The Kerkenes and Şahmuratlı Village Association

Sorgun, Yozgat

CONTACTS





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http://kerkenes.metu.edu.tr

The Kerkenes web page opens up three homepages, K-Eco, the most recent one, is dedicated to the Kerkenes Eco-Center and Environmental Studies.





http://www.kerkenes.metu.edu.tr/keco/index.html

The Kerkenes Eco-Center Project web page reports on activities and annual programs.



Kerkenes House and Eco-Center

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http://sahmuratli.com

Information about ŞAHDER, the *Kerkenes and Şahmuratlı Village Association* for *Public Relations, Prosperity, Help and Support* can be found at the Şahmuratlı Village Web Page.

LOCATION



Figure 2. (a) Map of Turkey showing the location of Kerkenes on the northern edge of the Cappadocian Plain.

- (b) Road map of Central Anatolia showing location of Kerkenes Dağ, the nearby town of Sorgun and provincial capital of Yozgat.
- (c) Directions to the village of Şahmuratlı.

INTRODUCTION

When in 1993 the Kerkenes Project was inaugurated to study the Iron Age capital that had once stood on the Kerkenes Mountain, which overshadows the village of Şahmuratlı, Sorgun, Yozgat (Fig. 3), a central concern was, and continues to be, that any impact, social, cultural or economic, should be for the benefit of the village and the region.



Figure 3. Şahmuratlı village ladies using the drying racks in the solar building for their own garden produce.

The purpose of the Kerkenes Eco-Center is to promote sustainability through environmental studies. It pursues the following objectives:

- To advocate the use of renewable sources of energy;
- To act as a stimulus and a catalyst for environment-friendly building with appropriate materials and energy efficient designs;
- To act as a dynamic experimental base for testing designs, materials and activities suitable for viable and sustainable village life.
- To encourage village development and income generating activities that might halt and even reverse migration from rural areas to the cities.

THE 2012 ACTIVITIES



Figure 8. Nevin Erciyas drying tomatoes on the drying rack of the solar building at the end of October 2012. It is to be noted that the solar space allows solar drying to be continued in the autumn well beyond the normal drying season.



Figure 9. Matthieu Pedergnana testing the new solar cooker.
Temperature of 80°C was recorded even without insulating material around the pipe.



Figure 10. In October 2012 promotional events included an exhibition and mini kermes at METU. Students who took part in the Hands on Building course at the Kerkenes Eco-Center in June and September 2012 exhibited posters and presented their project work to a jury.

PROPOSALS FOR 2013

The aim is for the Kerkenes Eco-Center and Şahmuratlı Village to be a showcase for environmentally friendly, energy sensitive and self-sufficient development, promoting the use of renewable energy for a low-carbon economy and a sustainable future. It is however necessary to secure additional funding so as to pursue given goals and overcome various bureaucratic hurdles that will make the income generating activities economically viable in the medium and long term. The proposal will follow the overall goals of the Kerkenes Eco-Center Project and general objectives for rural development and improvement of living standards in the Village of Şahmuratlı. These are:

- 1. Promotion of renewable energy, energy efficient designs and income-generating activities.
- 2. Promotion of permaculture and organic gardens through resource management such as drip irrigation and composting.

A facebook page has been started and will help promoting the project and Eco-Center.

http://www.facebook.com/#!/KerkenesEcoCenter

The 2013 Program of Activities

Workshops are scheduled to start in May. Towards the end of the summer it is anticipated that local products, including those from the village organic gardens, will be purchased by \$AHDER to be dried and cooked on the solar cookers to be conserved in airtight jars, stored and marketed throughout the autumn and winter. The peak time for solar drying and cooking will be in August and September but activities are expected to continue in October in the solar building. Promotional events will be organised in Kerkenes and Ankara during the summer and autumn. New recipes will be added to the Kerkenes Cookbook. The small recipe booklet produced previously in Turkish only has been translated in English and will be added to the Kerkenes web page:

http://www.kerkenes.metu.edu.tr/keco/zgraph/leaflets/2010recipebook.html

The performance of the large solar drier with the new compartmentation will be monitored during the summer months so as to find out the most efficient way of using it as well as the products for which it is most suited. Güner Mutaf who has also designed a new solar oven adapted to a parabolic solar reflector will be following up with further suggestions as various products such as the Kerkenes Krakers, Kerkenes Cakes and others will be cooked and/or dried in the new cooker.

Proposal for the new drying racks and trays.

One important addition to the existing facilities will be the design and production of drying trays to be used in racks as well as in open spaces. It has proved very difficult to keep flies away from the drying products, even when trays are within closed racks or dryers. It is thought that small trays with netting and completely fly-proof will ensure that flies cannot enter into contact with the products. This new item will have the advantage of being portable and could be used by any villagers within their own home compound where traditionally they dry village garden products.

It is also noted that, if successful, such trays could be commercialised and sold to other villages thus perhaps becoming in itself an income generating activity as well as benefiting a much larger circle of villagers.