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**LESSONS LEARNED FROM APPLIED
SOLAR COOKING IN COMMUNITY
TAMERA/PORTUGAL**

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Solar Village
Tamera

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- 1 Project Background
- 2 Daily Solar Cooking in our Testfield
- 3 Various Cookers
- 4 Research Outcome





1 Tamera – Healing Biotope I

- Peace Research and Education Center
- Working towards a peaceful and sustainable future, based on cooperation and trust
- Researching the ethical, social, ecological, technological and economic foundations and creating a replicable model





2 The Solar Kitchen in Tamera's Solar Test Field

- Showcases viable models for decentralized energy autonomy
- A living research kitchen
- Researching and demonstrating how to live in energy abundance using regenerative technology
- The living heart and home of our community
- Changing our cooking attitude by cooperating with the sun



2 The Solar Kitchen in Tamera's Solar Test Field





3 Direct Solar Energy and Biogas

- The kitchen combines various solar cooking tools with a small-scale biogas system running on kitchen leftovers.
- This combination of direct solar energy and stored biogas energy allows us to provide three meals a day for 35-50 people.
- With this combination we can also feed up to 160 people at special events.





3.1 Scheffler Reflector Fixed-Focus Paraboloid





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3.1 Scheffler Reflector Fixed-Focus Paraboloid





3.2 Yaholnitsky's "The Parabola" Parabolic Trough





3.2 Yaholnitsky's "The Parabola" Parabolic Trough





3.3 Rincón's Tolokatsin Linear CPC Box Cooker





3.3 Rincón's Tolokatsin Linear CPC Box Cooker





3.4 Pucca Cooker Concrete Panel Cooker





3.5 Biogas





3.6 Combination of Cookers





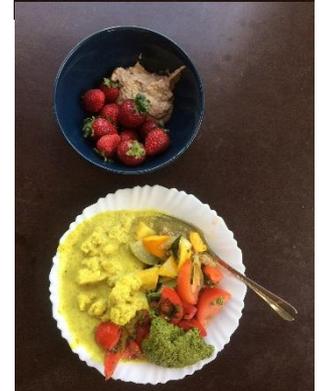
3.6 Combination of Cookers

The variety of cookers enables us to have a high cooking standard with which we can create an abundant and nutritious menu.





3.6 Combination of Cookers





4 Research Outcome

- Flexibility, adaptability and good time management are indispensable requirements for solar cooking.
- Particular cookers are suitable for particular types of food. Therefore a variety of cookers is recommended to make a rich and top quality menu possible.
- Most of the solar cookers we use were originally not intended to cook for many people. We are interested in designs for large-scale cooking.
- Safety aspects such as eye protection, as well as burn and fire risks, must be taken seriously, especially as the power of solar radiation is often underestimated.
- Close and ongoing communication between cooks and designers is a important factor for improvement and maintenance. In our experience this is a crucial issue and the present state of communication is a real obstacle to progress.
- If the cookers are designed so that the people who use them understand how they work, they can support maintenance and design improvement, because this opens the door to self-responsibility and active participation.



4 Research Outcome

By transitioning the kitchen, as a central aspect of home and daily life, into a Solar-Research Kitchen with up-to-date regenerative technology and a actively ongoing research process about communication, we direct a central aspect of our lives towards a technically and socially sustainable future.

