

Integrated Solar Cooking



--If we are truly serious about dramatically reducing fuel consumption..

...solar cooking must be a part of the solution.

--Solar cooking should be used whenever the sun is providing free energy.

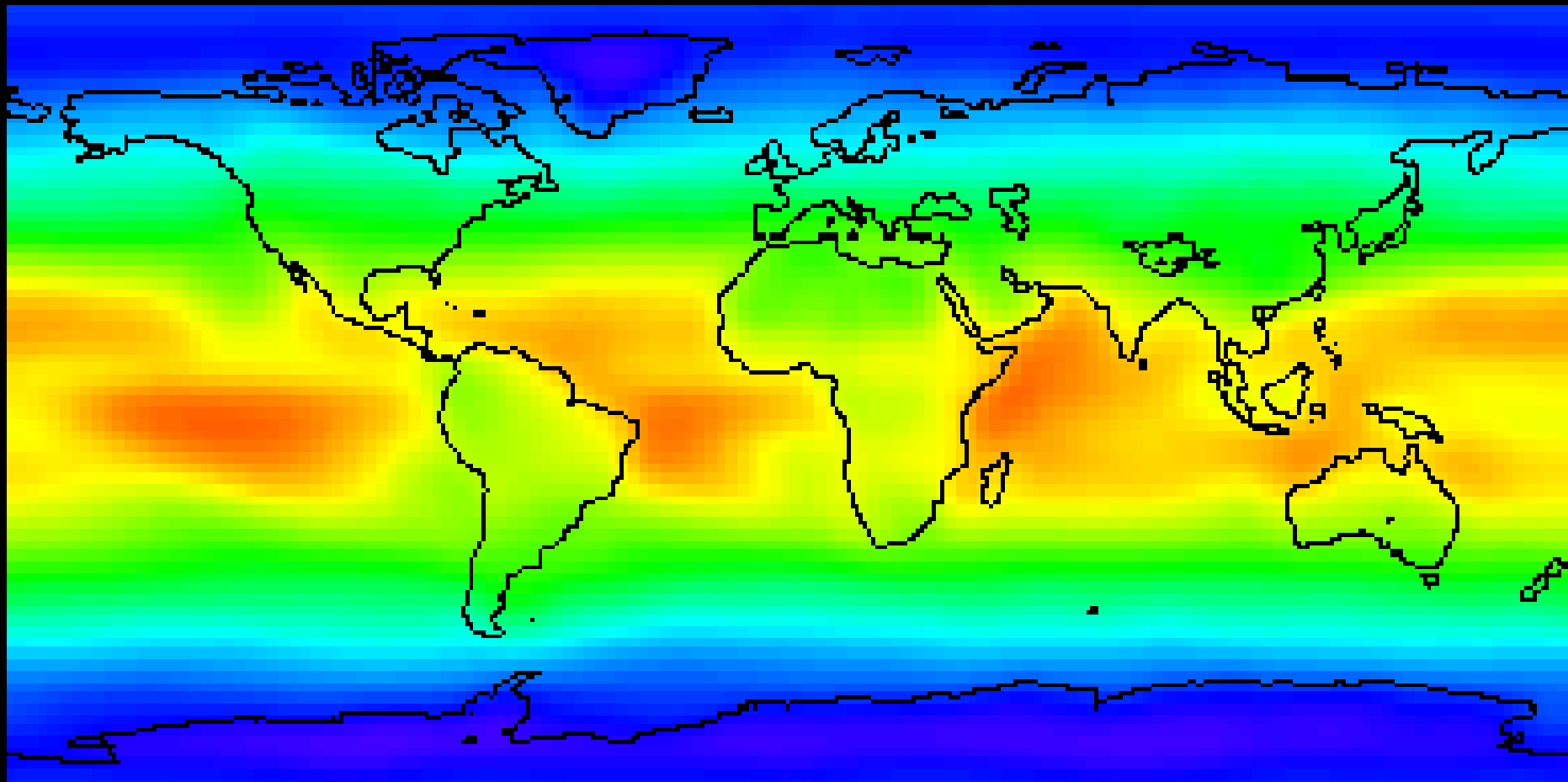
--To have the greatest impact we must all work together to promote integrated cooking in future projects.





Iridimi Refugee Camp, Eastern Chad

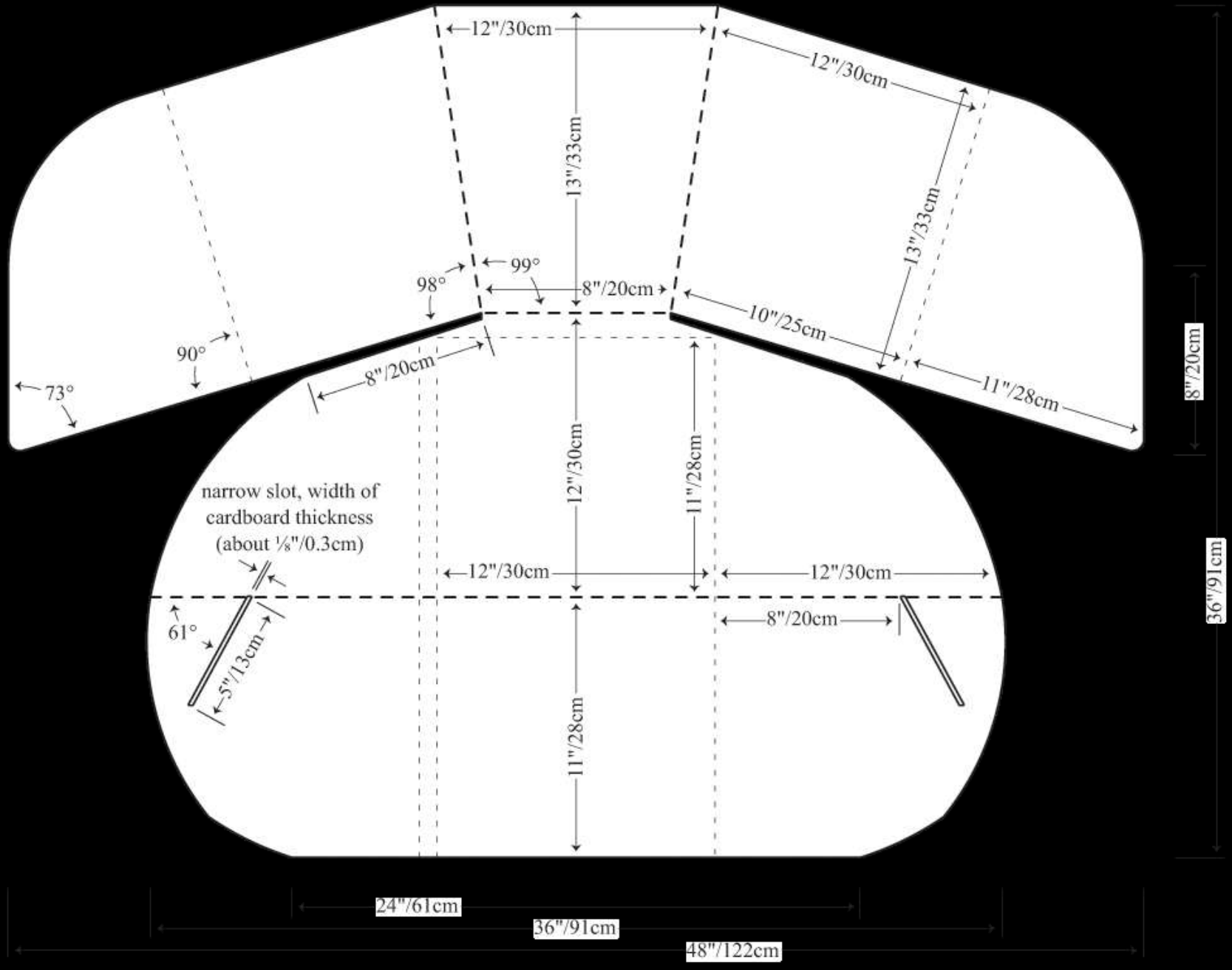




NASA solar insolation map showing abundant sunshine 30 degrees north and south of the equator.



————— CUT LINES - - - - - FOLD LINES - · - · - · - (optional fold lines for compact storage)





The “Cookit” panel solar cooker developed by Solar Cookers International of Sacramento, California.







Creating a Collaborative Alliance to Find a Solution





Two meals a day can be prepared using a hay basket and a Cookit.



Solar Cooker Project

Economic Development

Women are hired to:

- Build solar cookers
- Train women to solar cook
- Sew carrying bags
- Weave Warming Baskets







10/21/2007



*Eastern Chad: refugee camp populations
Total number of registered refugees: 243,041 (as of April 2008)*



Evaluation Team

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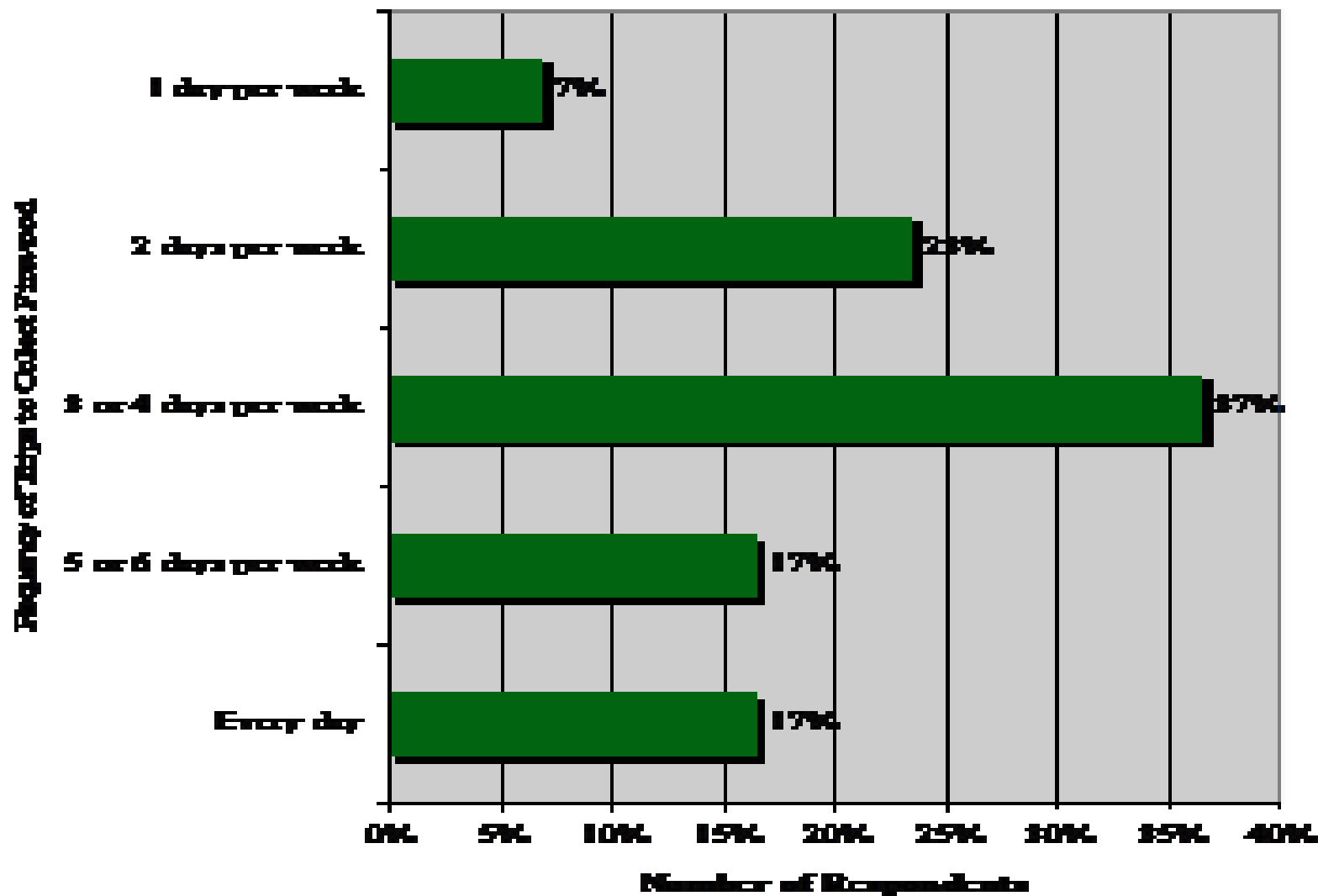




Trips Out **Before** CookIt

Evaluation Results

Trips for Firewood Collection Before Use of CookIt Cookers



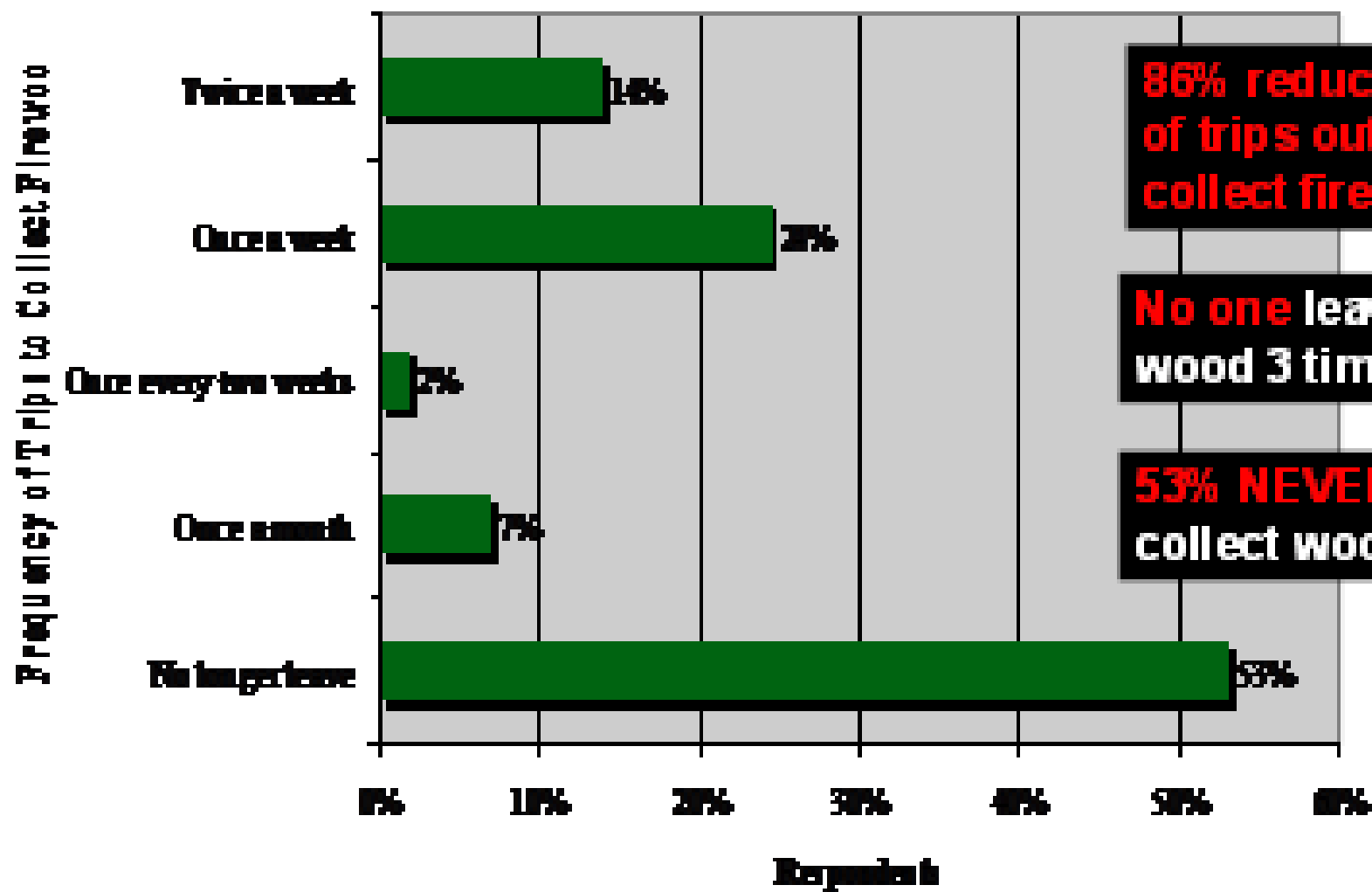
71% left camp to collect wood more than 3 times a week

Everyone left camp to collect wood at least once a week

Trips **After** CookKits

Evaluation Results

Trips for Firewood Collection After Use of CookStove Cook Kits

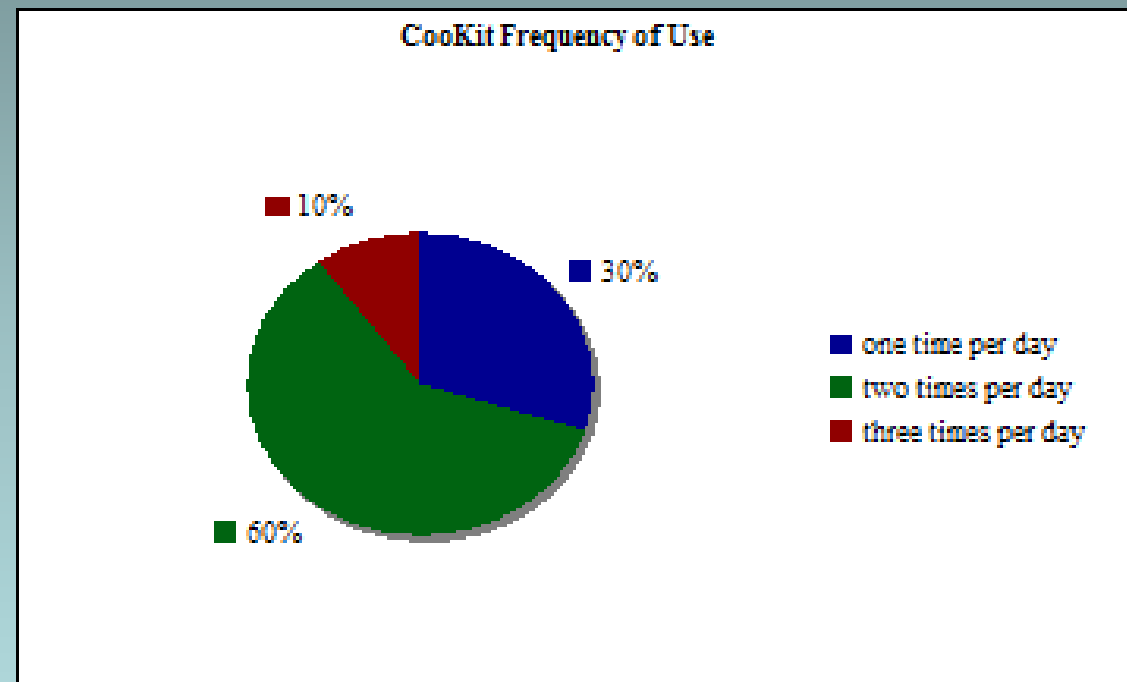


86% reduction in number of trips outside of camp to collect firewood!

No one leaves to collect wood 3 times a week

53% NEVER leave camp to collect wood

Frequency of Use







Sunny Solutions

What foods are solar cooked?

Evaluation Results

rice, macaroni, sweet potatoes, lentils, bouilli, tea, peas, grains, sauces





Solar Cooked Food















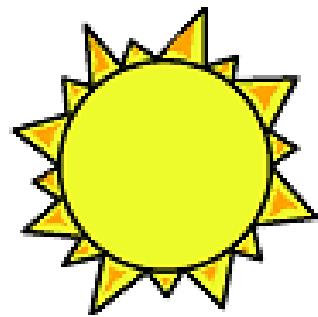
The
last
tree?







Integrated
cooking



Main Idea

Solar Cooker
Used to Fully
Cook Food

Solar Cooker
Used to Start
Cooking Food

Haybasket
Used to Finish
Cooking

Used to Keep
Food Hot 4-6
Hours



Rocket Stove
Used to Start
Cooking Food

Rocket Stove
Used to Start
Cooking
Second Pot of
Food

Haybasket
Used to Finish
Cooking

Haybasket
Used to Finish
Cooking

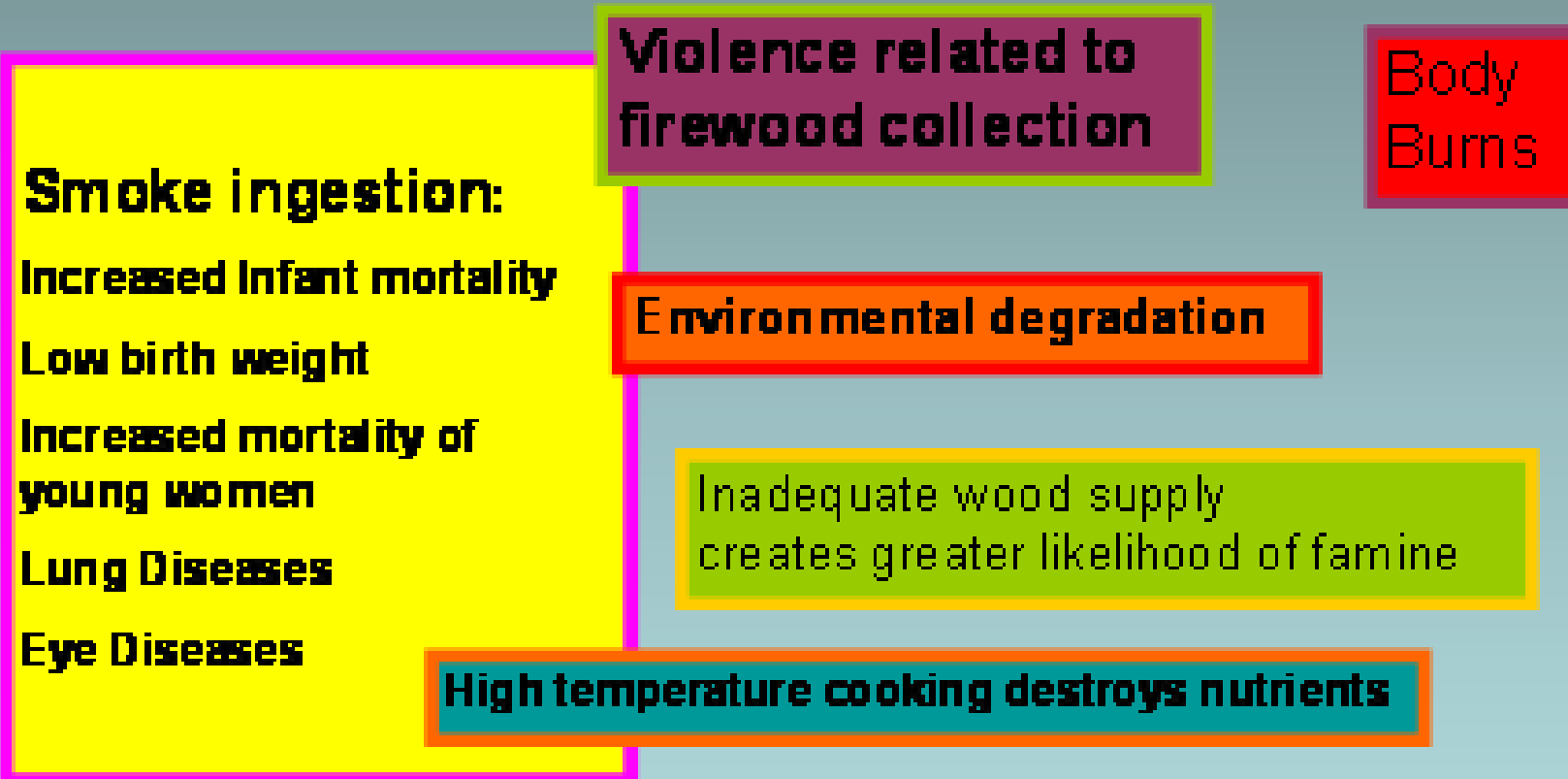
Used to Keep
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Hours

Used to Keep
Food Hot 4-6
Hours





Cooking with Open Fire Health Risks



Source: World Health Organization & Solar Cookers International

Retained Heat Cookers











Large-scale, Scheffler, roof-top parabolic solar cooker system in India



Egypt's first solar kitchen at El Sherouk Farm near Alexandria.





Indoor solar cooking



Parabolic dish reflecting sunlight on an iron heat storage unit.





Tea shops can save wood by heating water with solar cookers





