

# THE NEW LAO STOVE (NLS)

## IMPROVED COOKSTOVES FOR IMPROVED LIVES

An improved cookstove to reduce the amount of wood charcoal consumed every day in Cambodia

### OBJECTIVES

- Reduce household fuel consumption and expenses
- Protect forest ecosystems and biodiversity
- Mitigate global warming by limiting greenhouse gas emissions
- Reduce health hazards related to indoor air quality

### BENEFICIARIES

- Cookstove producers and distributors
- Families that use charcoal and wood for cooking
- Commercial food producers and restaurants
- Micro and small-scale food service entrepreneurs

### BACKGROUND

In Cambodia, wood provides for more than 80% of people's energy needs. People have traditionally relied on wood for cooking. Today, all of the fuelwood in Cambodia comes from unsustainable and illegal logging of local forests, which has become a major issue due to the rapid pace of population growth and development. In fact, the deforestation rate in Cambodia is 2% (UN FAO, 2007).

Cooking with wood and charcoal has direct negative health impacts on users, most of which are women. Indoor air pollution, mostly from wood and charcoal smoke, is responsible for respiratory, heart and eye problems. According to UNICEF, indoor air pollution, mostly from burning biomass for cooking and heating, kills 1.6 million women and children every year.

In order to address the health, energy and environmental problems related to household cooking practices, GERES introduced an improved cookstove, **the New Lao Stove (NLS), which saves 22% of wood and charcoal** compared to traditional stoves. This increased efficiency provides both monetary and health benefits for users.

Today, 31 NLS production centers nationwide provide local markets with 20,000 improved cookstoves per month. GERES Cambodia continues to support the program through the coordination of a producers and distributors association, capacity building, monitoring and quality control.



## ISSUES AND EXPECTED OUTCOMES

### Environmental impacts

- The NLS project helps to fight against deforestation and degradation of local resources by promoting improved domestic equipment in a sustainable, market-based manner.
- **The NLS uses 22% less fuelwood and charcoal** than a traditional cookstove
- With over 850,000 cookstoves distributed since 2003, the reduction in household fuel consumption has **eased pressure on Cambodia's forests and reduced greenhouse gas emissions.**
- From 2003 to 2008, 501,024 tons of greenhouse gas emissions have been saved.

### Economic and social impacts

- The NLS emits less smoke than traditional stoves, thus **improving indoor air quality and users' health.**
- Moreover, using less fuelwood means **less time spent by poor families and children gathering wood**, time that can now be dedicated to education or income generating projects.
- The money saved by families on fuel expenses can now be spent on health, education or new economic activities.
- **New Lao Stoves are manufactured locally**, this project creates new job opportunities for local communities in production, distribution and sales.

**Note :** The NLS project has received **3 international awards** for sustainable energy and development best practice

## ACTION PROGRAMME 2008 - 2012

### Research and development

Optimization of the NLS, monitoring and quality control

### National campaign for distribution of improved cookstoves

National distribution network for NLS  
Creation of 31 production centers

### Training and networking

Association of NLS producers and middlemen  
Micro and small-scale loans for new NLS producers



## PARTNERS

- European Union
- UNDP
- AFD, France
- MIME, Cambodia
- MAFF, France
- Ministry of Environment, Cambodia
- CIRAD
- ARECOP
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