OFDA Guidance on Fuel-efficient Stove (FES) Activities
Updated January 2009

Problem Statement: Households around the world use wood and other fuels to cook, heat their homes during the rainy/cold seasons, and generate income. Household energy needs are closely linked to humanitarian protection because collecting fuel exposes women and children especially to attack, abduction, exploitation or abuse. Often in disaster settings, fuel resources become over-exploited, which results in deforestation, desertification and soil degradation, and tensions between refugees/displaced populations and host communities.

Responses from USAID and Implementing Partners: In response to these problems, USAID/OFDA and its partners have implemented reforestation activities, supplied alternative fuels, and collaborated with peace keepers and local communities to protect fuel collectors. They have also supported livelihoods initiatives—ranging from livestock raising to craft production--that enable women to buy firewood and reduce their need to seek employment outside the security of the camp or community. FES have been manufactured and disseminated to reduce fuel consumption as well as the total number of collection trips needed.

Challenges Facing FES Programs in Humanitarian Settings: The wide variation in stove types, utilization, and training methods promoted by partners indicates that there is currently little agreement on good/best practices for FES. To help determine which types of stove programs are the most effective and why, OFDA and the USAID/Economic Growth and Trade (EGAT) Bureau undertook a technical analysis of FES in northern Uganda and Darfur beginning in late FY2006. Many of the stoves tested for those studies performed much less efficiently than partners had claimed, and some were even less fuel-efficient than a traditional three-stone fire. The poor performance resulted mainly from (1) a lack of program staff with knowledge of stove technologies and use; (2) poor design, construction, and utilization of stoves; (3) insufficient user-training; and (4) inadequate testing, monitoring, and evaluation of the FES activities.

Before proposing an FES program for OFDA funding, please review the FES reports for Uganda and Darfur on the USAID/OFDA website:
http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/sectors/files/darfur_final_summary.pdf
http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/sectors/files/uganda_final_summary.pdf

Proposed FES activities should include the following information in addition to other requirements of the OFDA Guidelines for Unsolicited Proposals and Reporting (October 2008):

I. Program Guidelines Outline
A. Justification: Provide the context for FES and explain why FES are being proposed for the target area and population.

B. Technical Description
Sector, Sub-sector, and Keyword designations:
FES programs can be incorporated into a proposal in several ways. Example 1:
Sector: Protection; Sub-sector: Gender-based Violence Prevention and Response OR Child Protection.
Example 2: Sector: Economic Recovery and Market Systems; Sub-sector: Economic Asset Development OR Economic Asset Restoration OR Micro-credit OR Temporary Employment

Keywords: Many Keywords are applicable to FES activities depending on the design of the program, including: Capacity Building/Training; Cash for Work; Children; Disaster Risk Reduction; Gender Relations; Host Communities; Internally Displaced Persons; Livelihoods/Income Generation; Micro-credit; Natural Resource Management; Protection Mainstreaming; Returnees; and/or Youth.

Sub-sector description: (provide the following details in addition to the information on the chosen sub-sector requested in the OFDA Guidelines):

Needs Assessment Summary

- All programs must demonstrate that the FES will result in fuel savings over a three-stone fire or other local traditional cooking method.
- Describe one or two key outcomes expected from the FES according to the chosen sector and sub-sector, e.g., reduced fuel consumption leading to less GBV; livelihoods supported through FES markets, etc.) Note that in addition to reducing fuel needs, FES can also reduce smoke emissions, the danger of burns to children and cooks, and the chances of a house fire, but these should not be listed as critical program components unless they are specifically monitored and evaluated.
- Explain why households need FES, if they have experience using FES, the nature of that experience, and lessons learned.
- For cost extensions, include an overview of what has been achieved to date in the FES program. Present the results of a user survey of the FES already in use, including a technical analysis of fuel efficiency and other stated improvements. (Sample stove testing protocols may be found at http://ceihd.berkeley.edu/heh.stove_perf_eval.htm). Surveys should be supplemented with one-on-one discussions with households as well as observations of stove use and cooking practices.

Technical Design

- *Stove Type and Production***:** Explain the rationale for the stove type proposed, incorporating information on local food preparation and cultural preferences. Provide information on past performance of the chosen stove(s) used either by the applicant or by other implementing organizations in the target area. To avoid design flaws and encourage standardized production and performance, stoves should be manufactured by trained individuals who are closely monitored and receive periodic refresher instruction. Describe the design and production process and how quality and standardization will be assured. If FES programs have not been implemented in the target region, provide a thorough justification of the stove type(s) to be used. The chosen models should be field-tested and user feedback solicited before they are manufactured and distributed. (The testing and feedback can be undertaken after an award has been made.)
- *Technical Staff, Training and Dissemination:* Provide the technical qualifications of the FES staff and amount of time dedicated to the activity. Describe how the households will be trained in stove maintenance and use, and how such stove-efficiency tactics as splitting wood, using covers on pots, and how the wood is fed into the stove, will be transmitted to users.

Beneficiary Details

- Beneficiary numbers and descriptions
- Beneficiary selection criteria and procedures

Indicators (Report against the required OFDA indicators for the chosen sub-sector**)**

C. Transition or Exit Strategy

- Describe if and how the FES activities will continue after the life of the program. Describe measures to be taken to ensure that existing FES can be maintained after the program ends, and efforts to create alternative models of FES production/distribution (i.e., creation of FES entrepreneurs, hand-off to local NGOs, etc).

D. Monitoring and Evaluation

- Programs must include observation and analysis of such issues as: stove use; testing of stove performance and relative fuel consumption; user satisfaction; problem identification and resolution; training techniques; and stove production, costs, and durability. Outline how these will be carried out, and how monitoring and evaluation findings will be applied to the ongoing programs.
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II. **Cost/Budget Guidelines Outline**

- Please provide a separate line item for the FES activity.

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