THE OFDA "SALVAGE-TO-SHELTER" PROJECT IN THE DOMINICAN REPUBLIC AFTER HURRICANE GEORGES: AN EARLY EXAMPLE OF TRANSITIONAL SHELTER

Situation: In the wake of Hurricane Georges in October 1998, OFDA supported a wide range of relief activities in the Dominican Republic (DR). Although emergency shelter needs were addressed, an estimated 44,000 people were rendered homeless due to high winds and flooding. Most of these disaster victims were provided emergency shelter in schools and other public facilities, but these facilities soon proved to be inadequate. The use of schools as emergency shelter was also a particularly contentious issue, in that delays in reopening schools in affected communities resulted in increasingly strained relations between community residents and disaster victims. With limited funding, OFDA was tasked with formulating a shelter program for as many of the homeless as possible.

Response: Initial damage assessment reports indicated that significant quantities of forest cover were knocked down by hurricane-force winds. Further investigation by OFDA staff indicated significant potential for salvaging downed timber for use in shelter activities. The use of salvaged timber was viewed as the only means of addressing outstanding shelter needs, given budget constraints, the high cost of locally-available and imported lumber, the high cost of pre-fabricated structures, and the high cost of substitute building materials (e.g., cement block).

Working closely with the USAID/DR mission, OFDA staff met with selected NGOs in December 1998, and eventually approved proposals totaling approximately $2.6 million. This funding level supported a salvage logging operation, provision of 3,360 transitional shelters, and the construction of 3,587 latrines. This activity commenced in February 1999.

Results: By the end of project activity in July 1999, the sanitation and shelter needs of approximately 20,160 people, or 46 percent of the total number of people rendered homeless by the hurricane, were addressed as part of the effort. (Shelter needs of the remaining 24,000 homeless people were addressed by other donors and the Government of the DR.) In addition, the sanitation needs of 21,500 people were addressed because each latrine was shared by two families. The average cost per housing unit was $506, and the average cost per latrine was $251.

The adoption of an innovative shelter solution emphasizing the use of salvaged timber proved to be far more cost-effective relative to more conventional

approaches. OFDA staff estimated that use of salvaged timber resulted in per unit housing costs that were less than 30 percent of prevailing market costs for equivalent-sized units ($506 vs. $1,750). This cost savings thus enabled OFDA to provide shelter to far more disaster victims than could have been assisted using more conventional shelter solutions (20,160 people, rather than the 5,830 that could have been sheltered using locally-purchased lumber).

The shelter solution also improved beneficiary targeting, in that the rustic character of field-cut salvaged timber dissuaded potential unintended beneficiaries from acquiring project outputs. The problem of unintended beneficiaries would have been much greater had the shelter effort featured the use of finished wood products available in local markets.

Finally, other direct results of the shelter project were:

- Reducing fire hazard potential in areas of salvage logging by reducing fuel loads
- Reducing soil erosion potential, and
- Reducing insect infestation by removing potential habitat

The effort was supplemented by USAID/DR mission funds to rehabilitate and replant the roughly 2,100 acres of salvaged timberland. The project also provided equipment and training to the DR forestry agency, and identified fire prevention training needs that were subsequently funded by the US Forest Service. This disaster risk reduction activity enhanced environmental management efforts and served as a model for reducing fire hazard in salvaged areas throughout the DR.