

# BUILDING IN LEH 2011

## PROBLEM ADDRESSED



A year after the August 2010 floods in Ladakh, the children at Leh Girls School were still using a partially collapsed and dangerous toilet block. This project provided a replacement three cubicle toilet block and new hand washing facilities for the school.

With the introduction of modern imported materials to the Himalayan region of Ladakh, many of the safe and sustainable construction practices appropriate to the region have been disappearing. In Ladakh, a desert region without a waterborne sewage system, the introduction of flushing toilets is wasting precious water supplies and increasing the risk of disease.

## GOAL ACHIEVED

This is a follow on project from the ASF-UK 'Learning in Leh' workshop. It demonstrates the positive outcomes and research conducted during the workshop and makes the findings accessible and useful to the local community.

The replacement design showcases safe and sustainable building technologies appropriate to the ecologically fragile and remote Himalayan region of Ladakh. The project draws on simple traditional technologies to help reduce vulnerability to future disasters (such as timber seismic banding), and demonstrates how local building materials (including salvaged materials) can be used in a modern way.

The project shows how improvements to the traditional design of composting toilets, such as use of simple passive solar technologies to assist ventilation and reduce smells, can make them a more attractive alternative to flushing toilets.



Date:

Location:

ASF Team:

Partners:

Donors:

Project type:

Time donated by ASF team, SEEDs India, & Walter Guinness Trust

July 2011

Leh, India

K. Johnson

SEEDs India

Live Project

## METHODOLOGY OF WORK



Participants on the 'Learning in Leh' workshop worked closely with school children and teachers to develop designs for a replacement block for the school. They also tested construction techniques and materials and constructed large scale prototypes during the workshop.



Thanks to funding provided by the Walter Guinness Trust and SEEDs India, demolition and construction work got underway soon after the workshop. Construction work was carried out by a local contractor, and overseen by a member of the 'Learning in Leh' team. The SEEDs India team, who have been working on post flood shelter projects in Ladakh, provided additional technical and logistical support during construction.



School children and teachers assisted during the building process. The 24 day build was also documented on an internet blog – [www.buildinginleh.wordpress.com](http://www.buildinginleh.wordpress.com) – which shares the design and build process with the wider community.

## FUTURE PERSPECTIVE

Part of the project included the provision of a strategy for further improvements to the toilet area of the school, including more hand washing facilities and replacement toilet blocks. A previous lack of forward planning and knowledge of appropriate building design and construction, had resulted in an unsafe toilet area with poor layout and restricted functioning. We hope this strategy, combined with the built prototype, will assist the school in securing funding for further improvements to the sanitation provision at the school.