

Final Report

Zhengga Village Solar Water Heater and
Sanitation Household Bathroom Project

to

Tibetan Development Assistance Trust

from



Lotus Charity Association

15 January 2012

Summary

What?

Tibetan Village Solar Water Heater and
Sanitation Household Bathroom Project

Where?

Zhengga གྲང་ཀ། Village, Xunxian མོང་ཞུང་། Township
Hualong དཔའ་ལྷང་། Hui Autonomous County
Haidong མཚོ་ཤར། Region
Qinghai མཚོ་སྔོན། Province, PR China

Who?

430 Impoverished Tibetans
(97 households)

Value?

TDAT Contribution = 194,000 RMB
Local Contribution = 179,450 RMB

PHOTOGRAPHS



Zhengga villagers unload the solar water heaters from the truck.



Solar water heater experts from the company and village leaders distribute the solar water heaters to the villagers.



Two experts from the company explain how to use the solar water heaters.

A photograph of an elderly man, Mr. Dorji, standing next to a large, blue and white solar water heater. The heater consists of a cylindrical tank at the top and a large array of blue solar collectors below it. The man is wearing a grey jacket and dark pants, and he is smiling. The background shows a dry, outdoor setting with some trees and a building in the distance.

Mr. Dorji འཇེ། (b. 1953) is very pleased with his new solar water heater. He lives with four other people in his household.



Mrs. Cairang Ji ཚེ་རིང་རྒྱུད། (b. 1965) is happy with her new solar water heater. There are five people in her family.



Mrs. Gasang Cuo ལྷལ་བཟང་འཚོ། (b. 1987) in front of her new bathroom.

Mr. Wenchang ལུན་ཐེང་། (b.1978) is in front of his new bathroom. He lives with his father, mother, and his daughter.



Dear Ms. Ahlers,

I am very pleased to report that the solar water heater and sanitation household bathroom project in Zhengga village you sponsored was successfully completed. Villagers now use their own solar water heaters and household bathrooms. Solar water heaters supply adequate hot water to the villagers for both drinking and bathing. Here is a comment made by the village leader, Mr. Lunzhi ལུན་གྲུབ། (b. 1954):



I thank the Tibetan Development Assistance Trust for supporting us. Solar water heaters are very useful and helpful in supplying water for drinking and bathing. Before we got solar water heaters, it was impossible for the most villagers to bathe. Most elders had never had a bath in their lives. Now we have solar water heaters and simple bathrooms, and can bathe whenever we want, which improves hygiene. The solar water heaters also can supply water for drinking. That means we don't need to burn as much fuel as before. I am happy we now have solar water heaters and bathrooms, which solved many of our problems.

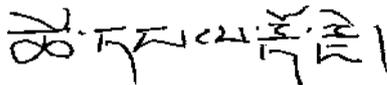
The Tibetan Development Assistance Trust provided 194,000 RMB to fund a solar water heater and sanitation bathroom project for Zhengga Village. Since November 2011, each home has had a solar water heater and bathroom in their household courtyard. The project solved villagers' historic problems in accessing a well-equipped bathroom, and makes it easy for local villagers to bathe. Collecting fuel is no easy task in this village and is mainly girls and women's responsibility. Since solar water heaters provide hot drinking water, villagers now use less fuel. Female villagers now use the time not spent in collecting fuel on such other activities as working in the fields or much deserved free time.

The villagers have running water which was implemented by the local villagers and Caihua Dorji with financial support from the Canada Fund in 2006. The

solar water heaters are connected to the running water taps in each household. The heaters send a sound signal when the water tank is nearly empty. The tap is then opened and the tank refilled.

The villagers contributed labor, brick, sand, cement, and a total of 77,600 RMB in cash for the project. Each household recipient built their own bathroom and contributed 800 RMB for each solar water heater which cost 2,800 RMB. In total, the local contribution may be valued at 179,450 RMB. This wonderful project supported by Tibetan Development Assistance Trust has made a powerful positive difference in the lives of Zhengga villagers. We extend our sincere gratitude to you on behalf of all the beneficiaries.

In sincere appreciation,

A handwritten signature in Tibetan script, consisting of several characters in a cursive style.

Caihua Dorji (Luke),
Lotus Charity Association

Project Activity

Project title: Solar Water Heater and Sanitation Household Bathroom for an Impoverished Village.

Location of project: Zhengga Village, Xunxian Township, Hualong Hui Autonomous County, Haidong Region, Qinghai Province.

Implementation Organization: Lotus Charity Association

Responsible Person: Caihua Dorji (Luke)

Supervisor: Caihua Dorji (Luke)

Project period: 22 April 2011 - 15 November 2011

Tibetan Development Assistance Trust contribution: 194,000 RMB

General aims and target group of the project: To provide a solar water heater and bathroom for every household in Zhengga Village.

Activities planned in the framework of the project: The villagers chose a five-member project implementation committee. The community built their own sanitation bathrooms at an estimated value of 101,850 RMB and paid 77,600 RMB in cash.

Project Activities:

Zhengga villagers successfully completed the Solar Water Heater and Sanitation Household Bathroom project on 15 November 2011, thanks to the Tibetan Development Assistance Trust's contribution of 194,000 RMB. Zhengga villagers chose a Project Implementation Committee consisting of five reliable and capable people at a community meeting in April. The committee played a critical role in project implementation, selecting materials, planning, and encourage villagers to work on their own bathrooms.

Committee members were:

- Lunzhi ལུན་ལྷན་གྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་, general supervisor
- Zamlha རྩམ་ལྷན་གྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་ and Gasang Cuo གསལ་བཟང་འཕུལ་ཁུངས་ (female), labor

- Zhaxi Zhuma བླ་ཤེས་སྐོལ་མ། and Dorji ལོ་རྒྱུ། materials

Committee members often discussed problems with a water project design expert and made plans for the following day. To maintain high project quality level, the committee members strictly monitored local villagers' labor.

| 2011 | Activity Description |
|----------------|--|
| April | Received news of proposal approval |
| April 22 | Met with the local community, Project Implementation Committee set up |
| May 9 | Most adult villagers left to collect medicinal herbs outside the village |
| May 17 | Received project funds |
| June 17 | Villagers returned home |
| July 20 | Villagers started harvesting |
| August 10 | Villagers finished harvesting |
| August 12 | Villagers started building bathrooms |
| October 15 | Villagers finished building bathrooms |
| October 20 | Solar water heaters were transported to the village |
| October 25 | Five experts from the company began installing the solar water heaters |
| November 10 | Installation completed |
| November 11-14 | The experts visited every household for last check. |
| November 15 | Project was completed |

Project aims realized, compared with original aims of the project:

- Before the project, the most villagers rarely bathed due to a lack of hot water. Now, with a plentiful supply of hot water, villagers may bathe whenever they like..
- Before the project, villagers were unable to bathe, hygiene was poor, and illness due to poor hygiene was common. Bathrooms with new solar water heaters have improved hygiene and health.
- Before the project, collecting fuel was a time and energy consuming activity, which was traditionally seen as the responsibility of girls and women. This work prevented women and girls from having time to pursue other work and activities. Now the villagers have solar water heaters that boil water and keep water warm. Villagers collect less fuel and spend less money on coal.
- Before the project, organic materials were collected from mountains and forests, causing erosion. The solar water heaters mean less organic material is collected.
- Before the project, women and girls in local rural villages had serious respiratory problems from being in smoky kitchens. It was women and girls' responsibility to cook food and boil water. The implications of such on the health and safety of family members in rural households, particularly very young children and women and girls, is so serious that indoor air pollution is

rated by the World Health Organization as the second most dangerous environmental health risk in rural areas (after dirty water and poor sanitation). Now, thanks to the solar water heaters, women and girls spend less time in smoky kitchens.

- Before the project, villagers burnt much coal and fuel to boil water that increased CO₂ emissions. Villagers now burn less fuel and such emissions are reduced.

Project Effects on the target group:

- More gender equality
- Easier life
- More income
- Improving hygiene

Other remarks and suggestions: Solar water heaters make a huge positive difference in the lives of local villager. We sincerely appreciate Tibetan Development Assistance Trust's generous support.

Finances

Local Contribution: Each household recipient built their own bathrooms (1,050 RMB value) and contributed 800 RMB for each solar water heater. Total local contribution was 179,450 RMB.

Donor Contribution: The Tibetan Development Assistance Trust supported 2,000 RMB towards the total cost of 2,800 RMB per each solar water heater. In total, Tibetan Development Assistance Trust supported 194,000 RMB that allowed purchasing 97 solar water heaters (see the receipt).

Original Proposal

Project Title: Solar Water Heaters and Household Bathrooms for an Impoverished Village.

Location of Proposed Project: Zhengga Tibetan Village, Xunxian Township, Hualong County, Haidong Region, Qinghai province, China.

Implementing Organization

- **Organization Name:** Caihua Dorji (Luke)
- **Address:** Room 442, Building 9, Fenghuang Yuan Xiaoqu, Jianxin Xiang, Nanshan Road, Xining, 810000, Qinghai Province, PR China.
- **Telephone :** 13639710440
- **E-mail:** lukelucky8388@gmail.com

Brief Description of the Implementing Organization: *Brief history, mandate, legal status, membership, history of cooperation with the Donor, history of cooperation with other donors, etc.* Caihua Dorji began doing development projects in 2004 and has since that time successfully managed fourteen running water projects, twenty solar cooker projects, two school projects, one irrigation project, one village latrine project, two pigsty projects and two training projects with the financial assistance of the Canada Fund, the British Embassy, the Royal Netherlands Embassy, the Canadian Charity Ball, British Council in Shanghai, Council on International Educational Exchange, German Embassy and individual private donors. Approximately 9,000 people are directing benefiting from these projects. The total value of these projects is nearly 2.7 million RMB.

Project Budget:

- **Total Budget for the Project:** 393,230 RMB
- **Amount requested from the Donor:** 194,000 RMB
- **Amount to be provided locally:** 199,230 RMB

Date Submitted to the Donor: 2011 March

Brief Description of the Project

Objectives & Expected Results: *What is the purpose of the project? What will the project achieve?* The project will help local villagers buy a solar water heater for each household in Zhengga Village. Villagers will build bathrooms for themselves. The solar water heater will provide hot water for drinking and bathing. The project will

solve the following problems:

- Most villagers cannot bathe because of a lack of hot water. Solar water heaters and a bathroom will allow for bathing and hygiene will improve.
- Lack of access to bathing facilities results in local women suffering from reproductive tract infections.
- Respiratory and intestinal illnesses are reduced by regular bathing.
- Collecting fuel is a time and energy consuming activity, which is traditionally seen as the responsibility of girls and women. This work prevents women and girls from having time to pursue other work and activities.
- Impoverished households cannot afford expensive coal to boil water.
- Current organic materials are being collected from mountains and natural forests, causing erosion.
- Women and girls in local rural villages have serious respiratory problems from being in smoky kitchens. It is women and girls' responsibility to cook and boil water. The implications of such on the health and safety of family members in rural households, particularly very young children and women and girls, is so serious that indoor air pollution is rated by the World Health Organization as the second most dangerous environmental health risk in rural areas (after dirty water and poor sanitation).
- Straw burnt as fuel can be used to feed livestock.
- If the villagers have solar water heaters, they will burn less fuel, reducing CO₂ emissions.

Brief Implementation Plan: *Over what time period will the project be implemented?*
April – December 2011

What are the main activities of the project?

2011 April--funds are received.
2011 April--village meeting is held about project management.
2011 May--villagers prepare materials.
2011 June--materials for the bathroom are purchased.
2011 July-- villagers build the bathrooms.
2011 November-- project is finished.
2011 December--final report is sent.

How will the project be managed? The community will select a local project committee consisting of four or five villagers (men and women) at the village meeting in April 2011. This committee will be responsible for villagers' labor and the materials. The committee will also help me to buy the solar water heaters in Xining City.

IMPLICATIONS FOR WOMEN: Boiling water for drinking and washing are traditionally girls and women's labor. They must stay in a smoky kitchen to boil water, which is health-damaging. Solar water heaters would reduce the time of exposure to smoke. In addition, most female villagers have never had a chance to bathe in their lives, which gives encourages reproductive tract infections and other illness. Regular bathing will reduce such illness.

Risks and Potential Challenges: *What are potential risks that could affect the implementation of the project?* No appreciable risks are foreseen.

How will you monitor the project? I will regularly visit the village and meet with the local project committee. Also, I will speak with the committee via telephone while I work in Xining.

What indicators will be used to evaluate whether it has achieved its objectives?

I will visit the village after the project has been completed to research the following achievements, and my findings will be included in the final report.

- Villagers have functional bathrooms and solar water heaters in their homes.
- Villagers are able to bathe regularly.
- Villagers have a regular supply of hot water from solar water heater.
- The solar water heater is used and well maintained.

Describe the region and community where the project will be implemented.

Zhengga Tibetan Village is situated in the eastern part of Detsa Township, and west of Hualong County Town, Hualong Hui Autonomous County, Haidong Region, Qinghai Province. The village is 90 km from Hualong County Town, 3.5 km from Detsa Township, and 99 km from Xining City, the provincial capital. Detsa Township adjoins Garang Township, Guide County, Hainan Tibetan Autonomous Prefecture in the west, Quja Township, Huangzhong County in the north, and Nangra Township, Jatsa County, Huangnan Tibetan Autonomous Prefecture in the south.

All 430 Zhengga villagers (97 households) are Tibetan. Zhengga Village has 723 *mu* of irrigated land. The main crop is wheat, which people use for self-consumption (bread, noodles). Other crops include potatoes and rapeseed.

Who will benefit from the project and how will these benefits be realized? (Total number of recipients) What is the background of the beneficiaries? 430 people in 97 households will benefit immediately. All villagers are farmers.

Project Sustainability

Does this project meet the long-term needs of the beneficiaries? Will beneficiaries be able and willing to maintain and expand the results of this project without additional financial support? Supply of hot water from solar water heaters for drinking and bathing is a long-term need of the beneficiaries. Bathing regularly

reduces infectious disease by improving hygiene. A ready supply of hot water also means villagers will reduce expenditures on coal and reduce collection of organic fuels near the village.

Summary Project Budget

| Item/ Activity | Details | Requested Contribution from the Donor RMB | Committed Local Contribution RMB | Sub-total RMB |
|---------------------|----------------------------|---|----------------------------------|---------------|
| Solar Water Heaters | 97 sets × 2,800 RMB | 194,000 | 77,600 | 271,600 |
| Bricks for Bathroom | 97,000 sets × 0.4 RMB | | 38,800 | 38,800 |
| Cement | 25 tons × 400 RMB | | 10,000 | 10,000 |
| Wood for Roofs | | | 9,700 | 9,700 |
| Doors | 97 sets ×140 RMB | | 13,580 | 13,580 |
| Bathroom Equipment | 97 sets ×150 RMB | | 14,550 | 14,550 |
| Transportation Fee | | | 7,000 | 7,000 |
| Labor | 70 people ×10 days ×40 RMB | | 28,000 | 28,000 |
| 总计 TOTAL | | 194,000 | 199,230 | 393,230 |

Specify the exact nature of the assistance requested from the Donor. The nature of the assistance requested from the donor is monetary. As the budget shows, we request 194,000 RMB for solar water heaters.

Specify the resources that are available from the community itself, other donors, and the government which have been committed to help finance and implement the proposed project. The community will buy needed bricks, cement, doors, wood, and bathroom equipment at an estimated value of 86,630 RMB. The community will also contribute all labor at an estimated value of 28,000 RMB, 7,000 RMB in cash to transport the materials, and 77,600 RMB in cash to buy solar water heaters towards the donor contribution of 194,000 RMB.

Environment

If applicable, describe potential environmental effects, both positive and negative.

If villagers have solar water heaters, they will burn less coal, reducing CO₂ emissions.