

Construction of Water Reservoir Tank at Zongley Nangkuk Gangles Leh Ladakh



Leh, the largest settlement in Ladakh, is home to a (comparatively) dense mass of population that, despite advances in the region over the past few decades, is still critically dependent on agriculture for its subsistence. Water is therefore a vitally important resource for the people of Leh. This is especially true during the short growing season between the months of May and September.

Traditionally, Ladakh's water needs have been adequately met by glacial melt-off throughout the year. However, due to recent climate changes, the receding of the glaciers that surround Ladakh has disrupted this fragile equilibrium. Mountain streams that have for centuries supplied the local population's requirements for water, are today no longer able to do so. Acute water shortage has become commonplace for most Ladakhis. So desperate was the situation during this past agricultural season that fights between villages over water-sharing rights were common and farmers often had to stay up at nights watering their fields in freezing conditions.

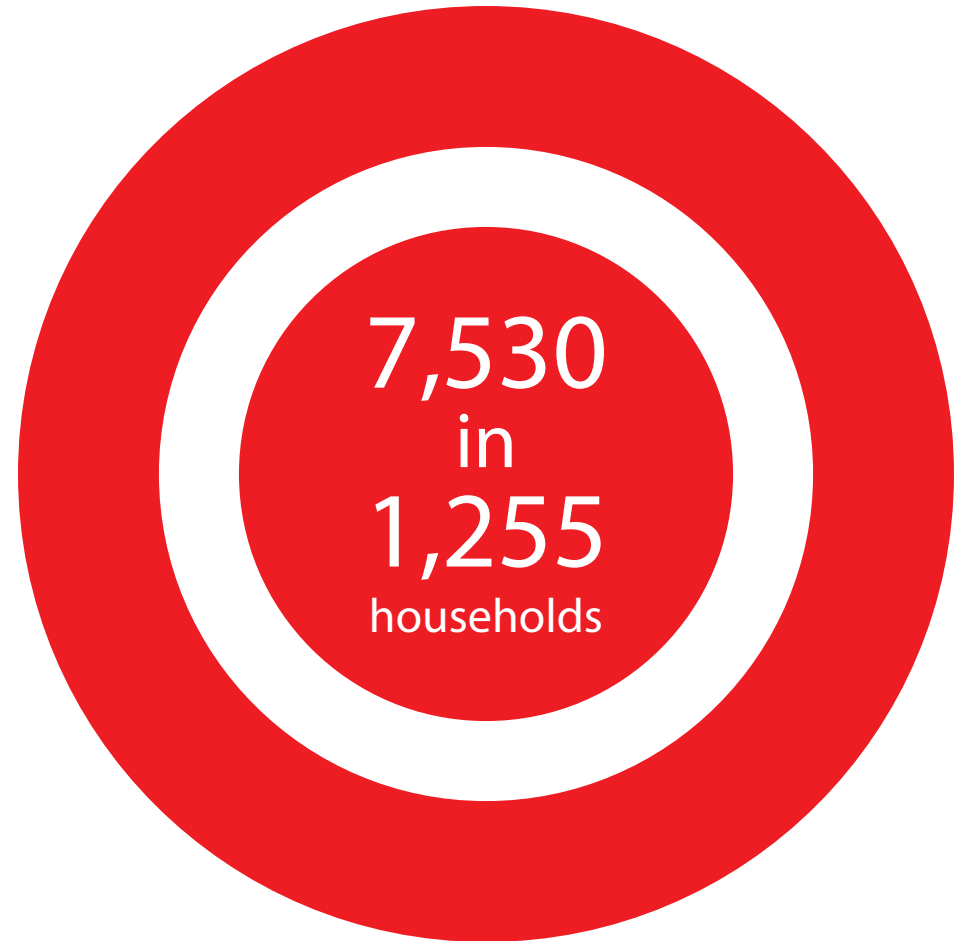
Young Drukpa Association (YDA) and Live to Love International have long been troubled by the dismal state of affairs described above. In an effort to alleviate the difficulties of the people in this context, we have been building several large reservoirs around Ladakh in its villages. These reservoirs typically tap water sources that were not harnessed earlier and therefore serve to augment villages' capacity to meet their water requirements. One of the large water reservoir tanks we are building at Leh upper most, by tapping the main Leh stream (that follows through the city and in to the Indus, otherwise unutilized and wasted) at Gangles. By building this winter water reservoir, we hope to improve upon the unsatisfactory irrigation facilities currently available to the residents of Leh and its surrounding areas.

Problem

The construction of this large winter water reservoir tank was initiated through a watershed development project in the year 2004, but due to funding delays and the closing of a non-performing project called Hariyali we have been unable to complete this important project. So far the main structure, inlet, outlet and overflow of the reservoir are complete. What remains is to build the channel from main stream inlet to the reservoir and excavate the main part of the reservoir.

Target Population

The intervention is targeted at a population of 7,530 in 1,255 households residing in Leh, Ladakh, in the state of Jammu and Kashmir. Their livelihoods are in jeopardy due to the water shortages. The reservoir project will solve the water scarcity issue for Leh's population.



Additional Social Impact

- Water scarcity conflicts between the families and Mohallas are becoming very common, normally unusual for the Ladakhi society. The reservoir project will mitigate these conflicts over water shortages.
- The reservoir project will improve the agrarian economy of Leh. Leh's agriculture is critical to the local population.
- In addition to environmental and agricultural impacts, the reservoir project will reduce the additional strain on the female population, who are the primary water gatherers in Leh.
- Due to scarcity of water many residents of Leh are extracting underground water by drilling home-made wells into the aquifers, with no plan to safeguard and maintain the local water table. The reservoir project will ensure the protection of the aquifers and reduce drilling of hand pumps and bore wells.

Details of the budget requirement to complete the project:

Fund receipt from watershed project:	\$92,690.00
Fund receipt from LNP Leh:	\$29,780.00
Fund needed to completed the project:	\$44,670.00
Grand total:	\$167,140.00

In addition to the project construction cost, the minimum administrative expenses are very low, estimated at \$2,500, which will be used for the transportation and consultation fee for engineers and miscellaneous expenses.

Figure 1:
Project site before
any construction



Figure 2:
Retaining wall of
the reservoir



Figure 3:
Most recent
progress



Figure 4:
Project Rendering

