Dear friends and supporters of the Ice Stupa Artificial Glacier Project,

Kindly accept our greetings for the Tibetan New Year,

As Ice Stupa project completes one year, we are happy to present before you a brief update on activities carried out till the end of 2015, comprising:

1. Ice Stupa making and plantation of 5,000 trees in winter and spring of 2015,
2. Preparatory work on starting the Alternative University for Himalayan solutions, summer 2015,
3. A financial update on how the Ice Stupa funds were spent.

Last year around this time our crowd funding campaign for the Ice Stupa Artificial glacier project had ended and the funds were transferred to the Phyang monastery account by Indiegogo. You all had generously helped the project not only to meet the target but to surpass it. During the campaign supporters had collectively raised USD 125,200 against a target of USD 119,500.

The fund raising itself was an experience full of suspense and excitement. Just a week before the closing date we were still only at less than 50% of the target. But then in the last week Mr. Ashok Goel of the Essel World Group (India) offered to double every contribution and thus we successfully met and surpassed the target on the final day. We are highly grateful to Essel World and of course each one of you who contributed between USD 20 to 5,000 and made this project a reality.

I hope you enjoy reading about our journey on this untrodden path. We will also keep updating you through our website www.icestupa.org and through social media.

Looking forward to your continuous support,

Sonam Wangchuk
Here I am presenting the update as a photo story…

The pilot phase of Ice Stupa Project was launched by His Excellency the Governor of J&K State at a climate change seminar in Badharwah campus of Jammu University in October 13, 2015.

Subsequently the crowd funding campaign was launched on the popular site Indiegogo.com. The fund raising was a great success and the target was met with the support of 330 contributors from 31 countries.
But then the challenge begins...

Once funds were raised our challenge was to fulfill the expectations of the supporters and our own dreams of running the first pilot project. Like all un-trodden paths our path was full of challenges. As you might know Ladakh remains cut off from the rest of the world for six months of the winter, therefore we had to stock all the materials before the roads closed in late December. For this the monastery had advanced some money.

However in the first part itself we faced huge challenges because of poor quality pipe supplies from Arotek Industries in Jammu. In order to promote industry in our own state and in order to avoid long distance transport and taxes we had ordered 20 cm dia PVC pipes from a manufacturer in neighbouring Jammu city. However, despite all glossy pictures and tall claims on their website the final product was substandard and the pipes arrived badly damaged in transport itself. Even the substitutes we bought in Leh town were of very poor quality despite all assurances and they broke in many places. We are currently in the process of suing these suppliers in consumer court. With so many pipes breaking and all roads closed at one point the project seemed doomed to fail.

Rescue from Heavens

Yet we were not going to give up so easily and approached two giants that had all the potential to help us out of the situation. We approached M/s Jain Irrigations, one of the biggest agro-tech companies in the world and requested them to donate us 2.3 Kms of their strong HDPE pipe, and parallelly we approached the Indian Air force and requested them to airlift the donated pipes. To our relief both of them agreed and within two weeks the pipes were here. One problem however was that due to air transport constraints we could only get 75 mm dia pipes which would freeze more easily compared to the 200 mm dia pipes in the original design.
Once the pipes came to Leh, the Ladakh Scouts regiment of the Indian Army came to our help to bury the long pipeline in the deep trenches. The student volunteers from SECMOL, villagers of Phyang and the monks of the monastery also helped with the enormous work.

**ICE STUPA INAUGURATION**

It was almost a miracle that finally actual making of the Pilot Ice Stupa started ... but rather late in the season in the last week of January 2015. Despite everything by the end of February the pilot Ice Stupa was ready for inauguration. It was not 100 feet (30 m) tall as was hoped but at 66 feet it was taller than the current Guinness world record of 63 feet for the tallest manmade ice structure.

For the inauguration His Holiness Drikung Skyabgon Chetsang Rinpoche specially came to Ladakh and on 5th of March which was the most auspicious day of Tanpoe Chonga the Ice Stupa was dedicated to the people of Ladakh.

**PEOPLE PLANT 5000 TREES**

And on this day roughly 1,000 villagers gathered and planted 5,300 sapplings of willow and poplar trees in the presence of the His Holiness the Rinpoche and Mr Rigzin Spalbar, Chairman of the Ladakh Autonomous Hill Development Council.
As spring and then summer arrived the ice stupa slowly melted giving its water to the trees and the greenery could be seen from the National Highway, six kilometers away. But that was not a problem for the trees, because by mid June the natural glacial stream of Phyang village had started flowing normally. And now the ice stupa pipes served as a canal to bring the stream water to the trees. There was not much for us to do except watch the growth of the trees and rejoice.

Of the 5,300 trees 5,000 had survived with an amazing 95% survival rate. Finally the last bit of ice lasted till 6th of July, which interestingly coincided with His Holiness the Dalai Lama’s birth anniversary celebrations.

**So what did we do during the summer then?**

You might remember that during the Ice Stupa crowd funding campaign we had promised that in the end if we are left with funds beyond the making of ice stupa glaciers themselves then we will use any extra money to start work on an alternative university for mountain development and climate change adaptation in order to help the youth of Ladakh and the Himalayas in finding similar indigenous solutions to other peculiar problems facing the mountain people across the Himalayas.

Thanks to companies like Jain Irrigation India who donated us plastic pipes worth more than USD 15,000... and thanks to villagers of Phyang, students of SECMOL and the Ladakh Scouts Regiment who supported us with 100s of man-days of voluntary labour, we seemed to be able to save some money and therefore were able to sow the seeds of the university project this summer itself.
Many internationally acclaimed experts volunteered their time free of cost and came to Ladakh for this cause. This included Mr. Sanjay Prakash a renowned Indian green architect, Mr. Robert Celaire renowned French passive solar expert, expert hydrologists Walter Klemm and Ian Cunningham, Prof. Geetam Tiwari from IIT Delhi internationally known for her expertise in sustainable urban transport systems, Ann Riquier from Auroville and Sourabh Phadke from Pune.

Apart from the above personalities many young architects and professionals from different parts of the world took up the University Campus design as a project during the SECMOL’s annual Earth Architecture and Passive Solar courses.

Together the experts and students studied various aspects of designing the University township and painted what looked like a traditional Thangka painting depicting the future of Phyang desert... as a smart green University town using earth as the building material and the sun as the source of heating/energy. We are now working on more advanced drawings to prepare a master plan for fund raising purposes and for starting a small scale version of the university in temporary constructions... already by summer 2016. We of course need your good wishes and blessings for that.
**WHY IS SUCH A UNIVERSITY NEEDED?**

Now let me tell you a little more about the university project. The whole of Ladakh region does not have any university so far and that causes two major problems...

a. There is no institution that studies and finds solutions to the unique problems that people in trans–Himalayas face. The Ice Stupa in some ways epitomizes the essence of such solutions hence a good place to start the initiative from.

b. Secondly, in the absence of good higher education facilities, young Ladakhis have to go to far away cities in mainland India. Currently it is estimated that roughly 15,000 Ladakhi students are living and studying outside Ladakh as... what I call ‘educational refugees’. Such students often become misfits when they come back into Ladakhi society. Moreover the cost of this whole exercise to Ladakhi parents is estimated to be roughly Rs. 150 crores, equal to the entire revenue from Ladakh’s famous tourism industry.

Now the good news is that the monastery and village of Phyang have agreed to donate roughly 62 Acres (25 H) of land on the desert of Phyang to establish the Alternative University. It was on this patch of desert we were very busy making plans for this project this past summer. The University Township would be greened using the Ice Stupa artificial glaciers and would eventually host up to 5,000 students from Ladakh, the Himalayas and the world.

**FINANCIAL UPDATE**

![Diagram showing proposed budget during crowd funding campaign](image)

**Proposed budget during crowd funding campaign**
<table>
<thead>
<tr>
<th>Income</th>
<th>FUND</th>
<th>EXPENSES</th>
<th>BALANCE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Crowdfunding collection through Indigogo.com</td>
<td>INR 7522732.3 (USD 125200)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Amount received in domestic Account</td>
<td>300000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support received in kind: See bottom of the page*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Material and equipment (4.6 km pipeline, sheets, rain guns etc.)</td>
<td>2557728.98</td>
<td>2315072</td>
<td>242656.98</td>
<td></td>
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<tr>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Remuneration (for expertise, staff and volunteers from SECMOL School)</td>
<td>1579773.78</td>
<td>1512000</td>
<td>67773.78</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund raising (perks rewards bank and platform fees)</td>
<td>1278864.49</td>
<td>369535.3</td>
<td></td>
<td>Indiegogo waived 5% as we met the target amount.</td>
</tr>
<tr>
<td>New action: Preliminary works/studies on Alternative University</td>
<td>285040</td>
<td>624289.19</td>
<td>624289.19</td>
<td>This was possible as we could saved money from the original budget.</td>
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<tr>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>miscellaneous and contingency</td>
<td>977955.19</td>
<td>622836</td>
<td>355119.19</td>
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<tr>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour/machine hire</td>
<td>902727.87</td>
<td>626855</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New action: Plantation of 5000 Ice Stupa trees</td>
<td>614250</td>
<td>-338377.12</td>
<td></td>
<td>preperation of trenches with JCB for the 5000 trees.</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
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<tr>
<td>Small Office set up</td>
<td>225681.96</td>
<td>138266</td>
<td>87415.96</td>
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<tr>
<td>TOTAL</td>
<td>₹ 75,22,732.30</td>
<td>₹ 64,83,854.30</td>
<td>₹ 10,38,878.00</td>
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</tbody>
</table>

* Contribution received in kind

- a. Donation of HDPE pipe by Jain Irrigation 5,00,000
- b. Donation of drip system by Jain Irrigation 5,00,000
- c. HDPE Pipes donated by SKUAST University 30,000
- d. Free air lifting of Pipe donated by Jain Irrigation by the 1,50,000
- e. Voluntary labour from Ladakh Scouts/Indian Army.
- f. Voluntary labour from villagers/monks of Phyang.
- g. Voluntary labour from SECMOL students.

**Actual expenditure up to 31st December 2015**