



Forix Foundation - Report

Project: Kusi Kawsay Andean School – Reroofing of Primary classrooms

Project Reporting Dates: From: July 15, 2016 To: August 1, 2016

Project Leader: Carlos Franco Salas (School Coordinator and Kusi Kawsay Teacher)



Summarize Project:

When the Kusi Kawsay Andean school was build, the material for the roof that was selected included thin tin plates and nails that were covered with straw. The harsh and unpredictable weather conditions of the Andes, specifically the heavy rains, caused damage to these materials resulting in leaks and an undesirable learning environment for the students. The highland community of Pisac rests at an altitude of almost 3000 meters (10,000 feet). When the sun is shining, the classrooms are so hot because the sun penetrates the weak tin and the straw rots in the intense sun and rain. We urgently needed funds to reroof the classrooms with proper, sustainable material that were initially more expensive but are a long-term investment well worth it. If we had reverted to repairing the roofs in the same manner we have previously done, the problem would have persisted. Our aim was to reroof all twelve of the school ground rooms by the end of 2016. The 2016 school year began the first week of March and ends mid-December. We have now reroofed five of the school ground rooms.

The Kusi Kawsay Educational Association, with the support of the grant from the Forix Foundation, was able to invest now, in sustainable and new material, to reroof the classrooms of the primary grades. Kusi Kawsay removed the straw and tin plates and replaced these with Onduline grooved panels made of organic fibers. This material is not a tile but rather a type of compressed green board. It is lightweight, reflects the heat and radiation of the sun for better protection, is durable and lasts a long time. This new type of roofing now creates an atmosphere more conducive for learning that is not too hot nor has leaks as was previously the case when water was seeping through. Also, this new roofing, though an investment now, will save us costs in the long run as we will not have to dedicate our resources toward reroofing using tin and straw again.

Before



After



Process:

The process of changing the roofs of the primary grades at the Kusi Kawsay Andean School lasted 11 days starting Thursday, the 21st of July until Monday, August 1st, 2016.

The process unfolded as follows:

1. Purchasing Material
2. Untie the thatched roof
3. Taking off the nails holding down the tin roofs
4. Taking off nails supporting wooden beams
5. Leveling of beams in place
6. Cut wall for each new supporting wooden roof beam
7. Placement of supporting wooden beams
8. Placement of individual oduline plates and roof ridge
9. Transfer of all waste materials
10. General clean up of the classrooms and school grounds after roof replacement completion

The unforeseen difficulty that arose throughout the process was that because of the to complete this project during the winter break vacation of the Kusi Kawsay school our two hired workers could not complete this project on their own and so came with two additional workers each. They encountered the oduline panels for a better price than predicted and thus funds were dedicated to paying workers. Workers even worked from 5am until sunset two out of the eleven days. Because of this, we exceeded the budget by s./56.20 and the Kusi Kawsay Association covered this cost.

Workers: 2 lead workers with a staff of 2 more workers for each lead.

	Daily Pay	Thu 21	Friy 22	Sato 23	Mons 25	Tue 26	Wed 27	Thu 28	Fri 29	Sat 30	Total in S/.
Coco	70.00										600.00
Carlos	70.00										670.00
Valentín	50.00										470.00
Abel	50.00										450.00
Jerónimo	50.00										320.00
Antonio	50.00										170.00
Total Cost: S/. 2,700.00											

	Worked from 8:00am until 5:30pm
	Worked starting at dawn (trabajo de 5:00am A 8am) S/. 20.00 per worker

Impact:

The Primary teachers have been greatly affected by this project. They have spent some time in their newly roofed classrooms and really enjoy the atmosphere and lightness too. Especially when it rains, the rain has a passage to follow rather than get stuck in the thick straw that made the roof extremely heavy. The Association and school staff is very happy with how beautifully the new roofs blend in with the natural environment and the comfortable space that is now provided in the primary classrooms.

Kusi Kawsay Andean school is a very environmentally conscious school that is dedicated to at-risk, vulnerable and economically challenged indigenous children and youth. Funding and financial stability is a consistent battle for our school. We are very grateful for the support of the Forix Foundation and the great impact the realization of implementing the new roofs have. Thank you so much.

**Budget:**

A detailed budget with description of material purchased, quantify and cost as well as payment of workers is attached with all receipts in an additional Pdf document.

Opinion:

The Project Leader was Carlos Franoc Salas. He is the school coordinator and music teacher as well as a founding parent of the Kusi Kawsay Andean School. Earlier this year, Carlos facilitated a budget for the re-roofing hopes. Initially we had applied for a higher amount that would have enable the re-roofing of not only primary classrooms but secondary classrooms as well. For this reason, Carlos estimated that we would need a minimum of four workers. When the budget was divided into two so that only the primary classrooms would be re-roofed, we also limited the workers to two persons and soon realized that this would not be possible. Thankfully, Carlos was able to encounter the oduline panels at an excellent rate and was able to allow the two lead workers to work with their assistants. This made the re-roofing possible during the ten days of winter break at school. Carlos is very content about the new roofs and expresses his sincere appreciation to the Forix Foundation for their kindness and help.



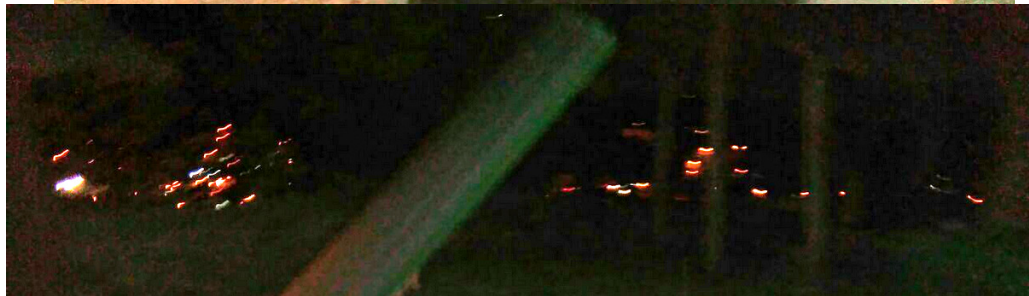
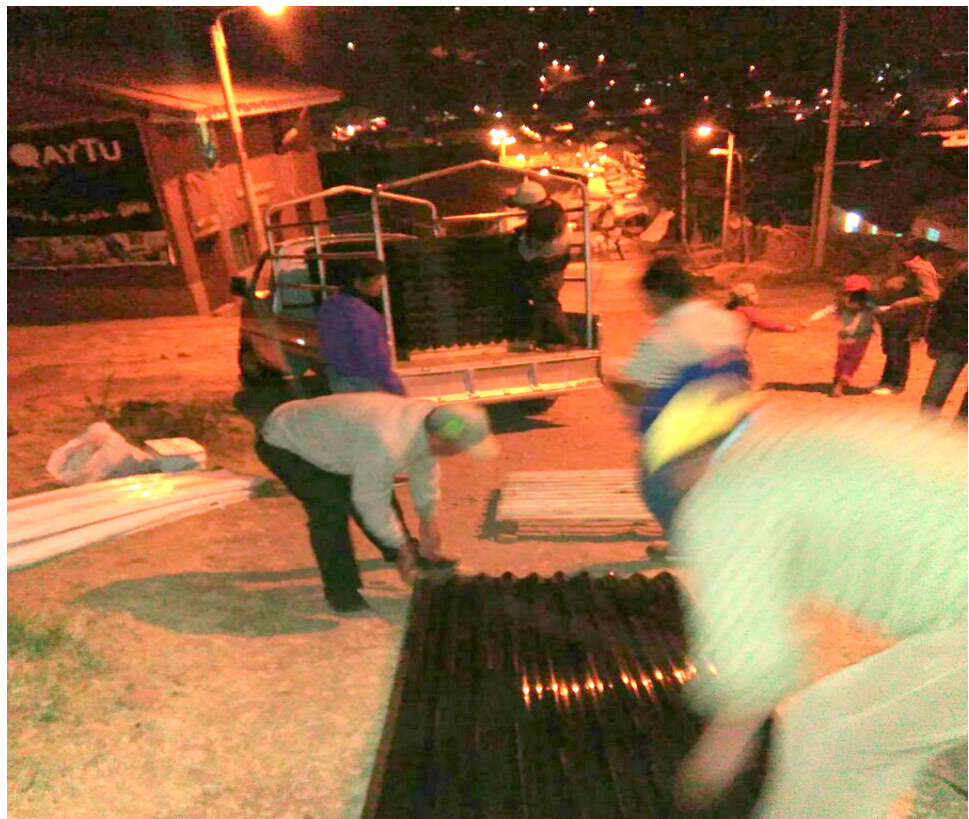
Our hope is to secure funding for the re-roofing of the secondary classrooms as well based on the great outcome of this project.

Photos



The oduline panels arrive in Pisac.









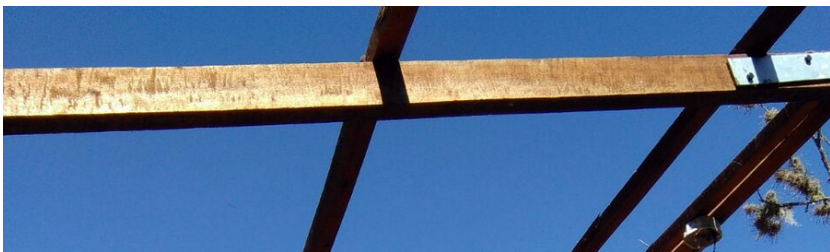
The first primary classroom – taking off the straw and nails (upper left hand corner).





Removing the tin plates from the roofs.

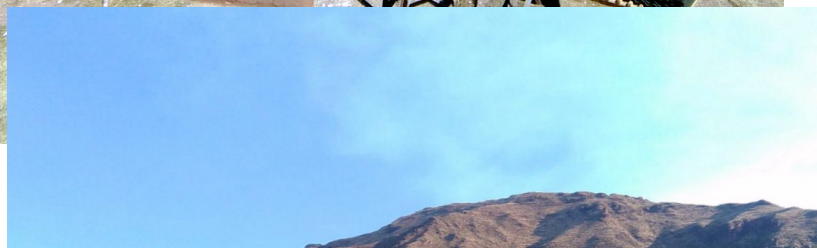




The wooden beamers for long-term strength and support.



Putting up the first oduline panels.







Our finished new roofs!