

FILL THE GAP. BUILD A LAB

Goals

To spark greater interest in science among Armenian youth, specifically those living in the rural regions of Armavir and Aragatsots, by enabling students to learn not only through theory but also through practical, hands-on experience.

Objectives

- To build a physics and chemistry lab at Getashen Village School in Armavir Region
- To build a biology and chemistry lab at Shamiram Village School in Aragatsotn Region

Project Description & Background

Providing access to education is key for each Armenian household. Although public schools are free of charge, schools located outside of Armenia's capital city of Yerevan typically lack both teachers and well-equipped classrooms. This means that many schools are without the proper resources needed to provide a high educational standard and equal access to education for students.

Teach for Armenia, a member of the **Teach for All** global network, aims to combat this deeply engrained issue by providing equal educational opportunity to all children in Armenia through the recruitment and training of exceptional individuals to teach in schools located in underprivileged communities for a minimum of two years.

In the three years since Teach for Armenia was founded, many fellows - teachers of geography, biology, physics, chemistry, and English language - have filled these vacancies, and thus brought higher-quality education to these regions of Armenia, where they have helped children to grow and fulfill their curiosity toward these subjects.

Lusine Vardumyan teaches at Getashen Village School in the Armavir Region. The village is located 70 km away from Yerevan, close to Turkish border. Many families have migrated from the village, which has squeezed the current population down to 1,900 from its previous 2,704. However, for a small village, the school has a comparatively large number of students - 248 in total, 98 of whom have regular classes in physics and chemistry. Since the school does not have any actual science labs, only theory can be taught in class. This impacts the level of interest toward these subjects, and results in a very low number of students who actually want to pursue science education and eventual careers in science. Lusine had the idea of building a physics and chemistry lab at the Getashen school so that students could have the opportunity to study the subjects through hands-on experimentation.

Venera Abovyan is another Teach for Armenia fellow who teaches biology and chemistry at Shamiram Village School in Aragatsotn Province. The population of Shamiram Village is 2,144, out of which 91 are school-aged children (7-17 years old). For years, children in the school didn't have biology and chemistry classes because there was no one to teach them. Then Venera arrived. "It's very difficult for children to learn these two completely new courses in theory without having a lab where they can see everything in practice and do experiments" said Venera, who believes a science lab could be a significant investment for the betterment of the school's students.

Ayo! has decided to collaborate with Lusine and Venera to help them achieve their shared goal. By installing science labs in these two schools, Ayo! will be able to contribute to providing higher-quality education for kids. The labs will ultimately help to boost the resources of two schools, and also spark the curiosity of the children who are eager to learn. As a result, many might even be more likely to pursue science as a career, and ultimately join a field that is essential for innovation and Armenia's economic development.

Join us and say Ayo! to brighter educational prospects for Armenia's children!



Budget for Chemistry/Physics Lab in Getashen Village

Materials for the room renovation

ITEM	QUANTITY	PRICE AMD	TOTAL AMD	TOTAL USD
Cement	6 sacks	3,500	21,000	\$43.75
Gypsonyt	8 sacks	2,500	20,000	\$41.67
Windows	10sqm	28,000	280,000	\$583.33
Angular plaster for windows	18g/m	800	14,400	\$30.00
Caulking	4 sacks	4,500	38,000	\$79.17
Accessories	15 pieces	3,400	51,000	\$106.25
Windowsill	6g/m	1,800	10,800	\$22.50
Linoleum	54sqm	4,000	216,000	\$450.00
Primer dye	10L	1,000	10,000	\$20.83
Dye	10L	1,300	13,000	\$27.08
Dyeing	120sqm	150	18,000	\$37.50
Water pipe	15m	600	9,000	\$18.75
Drainage tube	15m	800	12,000	\$25.00
Laboratory table	2 pieces	25,000	50,000	\$104.17
Adjustable seat	4 pieces	16,000	64,000	\$133.33
Blackboard	1 piece	25,000	25,000	\$52.08
Adjustable blackboard	1piece	15,000	15,000	\$31.25
Bookshelf	6sqm	45,000	270,000	\$562.50
Jalousie	12sqm	5,500	66,000	\$137.50

Cirriculum Materials and Supplies

ITEM	QUANTITY	PRICE AMD	TOTAL AMD	TOTAL USD
Microscope	1 piece	68,000	68,000	\$141.67
Magnifying glass	5 pieces	800	4,000	\$8.33
Analyzers	2 pieces	32,000	64,000	\$133.33
Herbarium	2 sets	3,000	6,000	\$12.50
Glass container	5 pieces	8,000	40,000	\$83.33
Porcelain bowls	1 piece	19,000	19,000	\$39.58
Test tubes	100 pieces	350	35,000	\$72.92
Laboratory cups	1 piece	33,000	33,000	\$68.75
Crankshaft funnel	1 piece	43,000	43,000	\$89.58
Electronic scales	5 pieces	3,000	15,000	\$31.25
Weights	6 pieces	2,000	12,000	\$25.00
Trays	5 pieces	1,200	6,000	\$12.50
Gas receiving device	5 pieces	3,000	15,000	\$31.25
Spirit-lamp	3 pieces	1,500	4,500	\$9.38
Liquid thermometer	3 pieces	1,500	4,500	\$9.38
Spirit	5 pieces	800	4,000	\$8.33
Chromium compounds	1 piece	3,500	3,500	\$7.29
Indicator	2 pieces	6,000	12,000	\$25.00
Inorganic materials 1	1 box	7,500	7,500	\$15.63
Inorganic materials 2	1 box	3,000	3,000	\$6.25
Filter paper	3 pieces	1,000	3,000	\$6.25
Pipette	100 pieces	30	3,000	\$6.25
Flacon	50 pieces	200	10,000	\$20.83
Measuring cups set	1 box	7,300	7,300	\$15.21
Aluminum scoop	5 pieces	560	2,800	\$5.83
Gloves	50 pieces	100	5,000	\$10.42
Apron	29 pieces	1,500	43,500	\$90.63
Rubber stopper	20 pieces	100	2,000	\$4.17
HOLDERS	10 pieces	500	5,000	\$10.42
Glass rods	20 pieces	500	10,000	\$20.83
Laboratory holder	6 pieces	3,000	18,000	\$37.50
Rulers	1 set	9,000	9,000	\$18.75
Magnet holders	10 pieces	180	1,800	\$3.75
Arqimed's bucket	1 set	13,000	13,000	\$27.08
Transportation			44,000	\$91.67

TOTAL

\$3,707.50

Budget for Biology/Physics Lab in Shamiram village

Materials for the room renovation

ITEM	QUANTITY	PRICE AMD	TOTAL AMD	TOTAL USD
Wall cleaning & smoothing	7	3,070	3,3100	\$68.96
Wall dyeing	16L+2 rollers	1,500	27,000	\$56.25
Floor dyeing & materials	10L+1 brush, 8 frames & 1 grid	1,500	104,700	\$218.13

Cirriculum Materials and Supplies

ITEM	QUANTITY	PRICE AMD	TOTAL AMD	TOTAL USD
Microscope	3 piece	68,000	204,000	\$425.00
Magnifying glass	5 pieces	800	4,000	\$8.33
Analyzers	2 boxes	32,000	64,000	\$133.33
Herbarium	2 collections	3,000	6,000	\$12.50
Educational material	2 collections	4,000	8,000	\$16.67
Eye model	1 piece	23,000	23,000	\$47.92
Heart model	1 piece	15,000	15,000	\$31.25
Human skeleton	1 piece	40,000	40,000	\$83.33
Human skull model	1 piece	45,000	45,000	\$93.75
Electric scales	5 pieces	3,000	15,000	\$31.25
Tripod	5 pieces	3,000	15,000	\$31.25
Trays	5 pieces	1,200	6,000	\$12.50
Gas providing device	5 pieces	3,000	15,000	\$31.25
Spirit-lamp	3 pieces	1,500	4,500	\$9.38
Liquid thermometer	3 pieces	1,500	4,500	\$9.38
Spirit	2L	800	4,000	\$8.33
Chromium compounds	1 box	3,500	3,500	\$7.29
Indicators	1 box	6,000	6,000	\$12.50
Inorganic materials 1	1 box	7,500	7,500	\$15.63
Inorganic materials 2	1 box	3,000	3,000	\$6.25
Filter paper	3 boxes	1,000	3,000	\$6.25
Flacons	50 pieces	200	10,000	\$20.83
Apron	15 pieces	1,200	18,000	\$37.50
Measuring cups' collection	1 box	7,300	7,300	\$15.21
Aluminum scoop	5 pieces	560	2,800	\$5.83
Gloves	50 pieces	100	5,000	\$10.42
Table	9 pieces	25,000	225,000	\$468.75
Blackboard	1 piece	20,000	20,000	\$41.67
Chair	16 pieces	10,000	160,000	\$333.33
Bookshelf	1 piece	30,000	30,000	\$62.50
Bookshelf with doors	1 piece	40,000	40,000	\$83.33
Washtand	1 piece	35,000	35,000	\$72.92
Jalousie	11m	5500	60,500	\$126.04
Transportation			40,000	\$83.33

TOTAL

\$3,081.67

Exchange rate: 1 USD = 480 AMD

GRAND TOTAL OF THE PROJECT

\$6,050