



ODFL Project Prospectus

School block for Mbuluyenji Primary School,
Mambwe, Zambia



PROJECT NAME: School Classroom Block for Mbuluyenji Primary School

PROJECT SUMMARY:

Construct a classroom block with two classrooms and a small teachers' office with storage room, starting in April 2018. Provide design, materials and supervision while working with the local community to build at Mbuluyenji Primary School in Mambwe District, Zambia.

PROJECT PARTNERS:

One Dollar For Life (ODFL) helps American students and individuals build classrooms and other infrastructure projects in the developing world from donations as small as one dollar (hence its name). Since its founding in 2007, ODFL has completed 79 such projects in nine countries in Asia, Central America, and Africa. ODFL is an IRS registered 501(c)3 non-profit.

Raise a Smile (RaS) empowers vulnerable children in Zambia through educational projects. Working closely with the Ministry of Education and local schools and communities Raise a Smile has completed a variety of projects ranging from literacy training for teachers to school fee sponsorship for vulnerable pupils. Raise a Smile is registered as a 'Verein' (a non-profit, tax exempt society) in Germany and as an NGO in Zambia.

Mbuluyenji Primary School (and local community) will be included in the building process and will contribute to the implementation of the project. They will provide unskilled labour for the digging of foundations and materials in the form of building sand. By making an investment into the project, the school and local community will feel ownership of the school block, which will ensure a successful outcome.

Mambwe District Ministry of Education (MDMoE) works with RaS to take over the maintenance and upkeep of the school block as well as continuing to provide qualified teachers after construction is complete. They will give additional assistance especially in the areas of community involvement and the building plans for a standard school block design.

PROJECT MANAGEMENT:

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PROJECT DATES:

Start date: April 2018

Completion date: September 2018

ABOUT THE COMMUNITY:

Mbuluyenji Primary School is located in the Jumbe Zone of Mambwe District in Eastern Province, Zambia. Mambwe District has a population of more than 80,000 people and approximately 80 schools. Due to weak infrastructure (the main road running through the district was only tarred in 2013) development has been slow. Over 90% of Mambwe's population are subsistence farmers and therefore have very little income that can be used to further their children's education. Many schools in the district lack resources and classes of over 100 pupils being taught by only one teacher are not unheard of.

ABOUT THE SCHOOL:

Mbuluyenji Primary School runs from grade 1 to 7 and is attended by 230 pupils. It was originally started by the late chief Jumbe, who saw that many of the children in the community were unable to receive an education as the nearest school was too far to reach without a vehicle. Ten years ago the community (with the help of the late chief Jumbe) contributed what they had to construct a school block with two classrooms. Unfortunately the block is already quite run down as the community was not able to raise enough funds and so had to cut corners on the amount of cement used and by using clay bricks instead of concrete blocks. As there are up to four grades attending at any one time and only two classrooms, the school has had to improvise to accommodate all pupils.

A very basic structure of wooden poles with a grass roof was added to the side of one classroom and the fourth class is taught either under a mango tree or in the kitchen. These last two grades are taught in an environment that is particularly challenging to learn in. During the dry season wind and the hot sun make things uncomfortable, while in the rainy season lessons are either canceled or two grades have to share one classroom, which makes it very difficult for pupils to concentrate. When teaching is done in the school kitchen, it interrupts the school feeding programme.

The school toilets are also in a poor state. There are only four toilets in total: one each for girls, boys, male staff and female staff. Pupils get their drinking water from a hand

dug well that recently collapsed and had to be re-dug. The water from this well is contaminated and not safe for drinking and it is unlikely that there will still be water at the end of the dry season.

Enrollment:

Grade	Boys	Girls	Total
Grade 1	38	29	65
Grade 2	16	14	30
Grade 3	20	15	35
Grade 4	13	24	37
Grade 5	11	18	29
Grade 6	11	08	19
Grade 7	09	06	15
Total	118	112	230

Total Number of Pupils: 230

Total Number of Teachers: 6 trained teachers (there are 2 additional student teachers at the moment)

ABOUT THE PROJECT:

We will construct a two classroom school block to raise the total number of classrooms to four. This will mean that pupils will no longer have to learn outside exposed to the elements.

The classroom block will be built using the plans for a Zambian Ministry of Education standard 1x2 school classroom block. This is a tried and tested design that is found at the vast majority of primary schools in the country and will save time in getting a new design approved (which can take a lot of time and paperwork!). The block consists of two large, light and airy classrooms with a much needed small office for teachers in the middle. This office can be used for storing teaching materials, exercise books and stationery and also can be used by teachers for lesson planning, meetings and to ensure the everyday management of the school runs smoothly.

By constructing with sturdy building materials such as concrete blocks (bricks may not last the lifetime of the building and are much worse for the local environment), steel window frames, door frames and roof trusses (wooden trusses and frames are often

eaten by termites) we can ensure the building will provide a great learning environment for many years to come.

The surrounding community is growing rapidly so these new large classrooms will not only provide a much better learning environment but will also enable the school to cope with the ever growing number of pupils enrolling each year.

Cost for 1x2 Classroom Block (for more details see Appendix 1)

	ZMW	USD
Materials	202,476.00	\$ 22,008.26
Transport	24,000.00	\$ 2,608.70
Labour	46,000.00	\$ 5,000.00
Total	272,476.00	\$ 29,616.96

Additional Info

The school is approximately 80km from Chipata (the nearest town), with all but the last ~5 km of that distance being tar road. All building materials will be purchased in Chipata and transported to the school.

The new block will be built on land that is already part of the official school plot.

Upon completion, the classroom block will be handed over to the MDMoE who will then be responsible for the running of the school and paying of teachers' salaries.

APPENDIX 1

Material Schedule for a 1x2 Classroom Block (exchange rate 9.2 ZMW = 1\$)

No	Item	Units	Quantity	Rate (ZMW)	Amount (ZMW)	Amount (\$)
SUB-STRUCTURE/SUPERSTRUCTURE						
1	Concrete blocks 8"	No.	1500	5.20	7800.00	\$ 847.83
2	Concrete blocks 6"	No.	4500	4.30	19350.00	\$ 2,103.26
3	Cement 50kg	Bag	500	78.00	39000.00	\$ 4,239.13
4	Crushed stones	Tonnes	70	200.00	14000.00	\$ 1,521.74
5	River sand - The community will provide this			0.00	0.00	\$ -
6	Building sand - The community will provide this			0.00	0.00	\$ -
7	Ant poison 1ltr	No.	4	140.00	560.00	\$ 60.87
8	Polythene sheet	No.	1	200.00	200.00	\$ 21.74
9	Y10 Deformed bars x12m (SA)	No.	70	70.00	4900.00	\$ 532.61
10	Y12 Deformed bars x12m (SA)	No.	16	100.00	1600.00	\$ 173.91
11	Y16 Deformed bars x12m (SA)	No.	36	135.00	4860.00	\$ 528.26
12	R6 bars x6m	No.	18	20.00	360.00	\$ 39.13
13	Conforce wire 86"	rolls	2	700.00	1400.00	\$ 152.17
14	Brick force wire 8"	rolls	22	19.00	418.00	\$ 45.43
15	Brick force wire 6"	rolls	32	16.00	512.00	\$ 55.65
16	Air vents	pair	28	12.00	336.00	\$ 36.52
17	Tie wire (2.5mm)	rolls	12	30.00	360.00	\$ 39.13
18	DPC 8"	rolls	4	100.00	400.00	\$ 43.48
19	DPC 6"	rolls	8	80.00	640.00	\$ 69.57
20	Wire nails 5"	kgs	9	15.00	135.00	\$ 14.67
21	wire nails 4"	kgs	12	15.00	180.00	\$ 19.57
22	Wire nails 3"	kgs	9	15.00	135.00	\$ 14.67
23	wire nails 2"	kgs	8	15.00	120.00	\$ 13.04
24	Steel nails 4"	kgs	9	28.00	252.00	\$ 27.39
25	Steel nails 3"	kgs	9	28.00	252.00	\$ 27.39
26	Steel nails 2"	kgs	7	28.00	196.00	\$ 21.30
27	Wheel barrow (lasher)	No.	2	550.00	1100.00	\$ 119.57
28	Spade (lasher)	No.	2	125.00	250.00	\$ 27.17
29	Shovel (lasher)	No.	2	125.00	250.00	\$ 27.17
30	Hoe	No.	2	80.00	160.00	\$ 17.39
31	Pick with handle (complete)	No.	2	65.00	130.00	\$ 14.13
32	Claw hammer	No.	2	60.00	120.00	\$ 13.04
33	Hacksaw handle (Germany)	No.	1	90.00	90.00	\$ 9.78
34	Hacksaw blades (Eclipse)	No.	4	40.00	160.00	\$ 17.39
35	Cutting disc PS40	No.	3	30.00	90.00	\$ 9.78

36	Drums 210 ltrs	No.	3	475.00	1425.00	\$ 154.89
37	Metal buckets	No.	4	85.00	340.00	\$ 36.96
ROOFING						
38	IT4 roofing sheets 7.0 X 71 X 0.5mm	No.	12	350.00	4200.00	\$ 456.52
39	IT4 roofing sheets 4.5 X 71 X 0.5mm	No.	56	150.00	8400.00	\$ 913.04
40	IT4 ridges 2m X 0.5mm	No.	14	95.00	1330.00	\$ 144.57
41	J hooks roofing nails 3"	No.	740	2.50	1850.00	\$ 201.09
42	Spider trusses ST250 8.4m Y 16- Y12	No.	12	1650.00	19800.00	\$ 2,152.17
43	Spider trusses ST250 4.0m Y 16- Y12	No.	7	850.00	5950.00	\$ 646.74
CARPENTRY WORKS AND TIMBER						
44	Timber 200 X 25 X 5m	No.	40	115.00	4600.00	\$ 500.00
45	Timber 150 X 50 X 5m	No.	25	100.00	2500.00	\$ 271.74
46	Timber 50 X 50 X 5m	No.	30	55.00	1650.00	\$ 179.35
47	Timber 100 X 50 X 5m	No.	10	95.00	950.00	\$ 103.26
48	10mm thick softboard	No.	3	80.00	240.00	\$ 26.09
49	Block board 18mm	No.	8	600.00	4800.00	\$ 521.74
50	Hard wood doors 1960 X 825	No.	3	750.00	2250.00	\$ 244.57
51	3 lever mortice locks (Union/Yale)	No.	3	110.00	330.00	\$ 35.87
52	Barrel bolts 75mm	set	3	40.00	120.00	\$ 13.04
53	Wood screws 4"	pkt	4	40.00	160.00	\$ 17.39
54	Wood screws 1.5"	pkt	4	30.00	120.00	\$ 13.04
55	Wood screws 2"	pkt	2	30.00	60.00	\$ 6.52
METAL WORKS						
56	Door frame & steel door (left)	No.	1	1950.00	1950.00	\$ 211.96
57	Heavy duty disc padlock (75mm)	No.	4	150.00	600.00	\$ 65.22
58	Metal door frame right opening	No.	2	380.00	760.00	\$ 82.61
59	Metal door frame left opening	No.	1	380.00	380.00	\$ 41.30
60	Double steel grill gates & frame	No.	1	2250.00	2250.00	\$ 244.57
61	Window frames 1800 X 900	No.	12	1400.00	16800.00	\$ 1,826.09
62	Window frames 1200 x 900	No.	1	1000.00	1000.00	\$ 108.70
63	Window handles half left half right	No.	26	14.00	364.00	\$ 39.57
64	Window peg stays 20cm	No.	26	16.00	416.00	\$ 45.22
PAINTING AND FINISHING						
65	Undercoat 5 litre Plascon	No.	10	250.00	2500.00	\$ 271.74
66	PVA cream 5 ltr Plascon	No.	8	200.00	1600.00	\$ 173.91
67	Cream gloss 5 ltr Plascon	No.	10	300.00	3000.00	\$ 326.09
68	Green chalkboard paint 5 ltr Plascon	No.	1	380.00	380.00	\$ 41.30

69	Green gloss 5 ltr Plascon	No.	3	300.00	900.00	\$ 97.83
70	Metal primer 5 ltr Plascon	No.	2	120.00	240.00	\$ 26.09
71	Black bituminous 5ltrs	No.	3	140.00	420.00	\$ 45.65
72	Thinners 5ltrs	No.	18	110.00	1980.00	\$ 215.22
73	Roller brushes with trays	set	4	55.00	220.00	\$ 23.91
74	Painting brushes 4"	No.	4	35.00	140.00	\$ 15.22
75	Painting brushes 2"	No.	3	30.00	90.00	\$ 9.78
76	Painting brushes 1"	No.	3	25.00	75.00	\$ 8.15
77	Mutton cloth	rolls	3	60.00	180.00	\$ 19.57
78	Masking tape	rolls	5	16.00	80.00	\$ 8.70
79	Wood primer 5 ltr Plascon	No.	2	180.00	360.00	\$ 39.13
80	Clear varnish 5 ltr	No.	1	120.00	120.00	\$ 13.04
81	Wood glue 5ltrs	No.	1	140.00	140.00	\$ 15.22
82	Window putty	kgs	40	17.00	680.00	\$ 73.91
83	Clear glass 4mm	sheets	6	470.00	2820.00	\$ 306.52
84	Glass cutter hq	No.	1	50.00	50.00	\$ 5.43
85	Sand paper	rolls	5	20.00	100.00	\$ 10.87
86	Scraper 2"	No.	3	10.00	30.00	\$ 3.26
87	Scraper 4"	No.	3	20.00	60.00	\$ 6.52
88	Rubber door stoppers	No.	6	20.00	120.00	\$ 13.04
89	Rough casting machine	No.	2	140.00	280.00	\$ 30.43

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Materials	202,476	\$ 22,008.26
Transport	24,000	\$ 2,608.70
Labour	46,000	\$ 5,000.00
Total	272,476	\$ 29,616.96