

Extra Monitoring Report: D.Light April 2012

Executive summary

This report presents the findings from a follow-up telephone survey conducted on 17 and 18 of April, 2012 with teachers and pupils whose schools had benefited from the Twaweza and D.light partnership providing solar lights for secondary school students. The partnership objective was to achieve the following:

- Improve hours of student self-study and overall performance,
- Reduce incidence of fire accidents in secondary school,
- Reduce incidence of health related cases caused by kerosene fumes inhaled by students or teachers in areas where there is no safe source of light energy,
- Contribute to overall teacher morale which may consequently contribute to less absenteeism.

Key findings

The survey was designed and conducted to test some of the key assumptions behind this partnership, especially the assumption that solar light will increase hours of study. The survey also intended to verify some key outputs (particularly the distribution of education booklets) agreed between the two partners. Respondents were asked whether or not they have seen and read the booklets which were included in the solar lights packages.

The following are key findings from the survey:

- All 20 respondents (16 teachers and 4 students) remembered that D.Light distributed solar lights in their schools.
- 13 respondents (10 teachers and 3 students) said that students now read at night because they have access to solar light.
- 3 students said they have increased their study hour from 1 ½ hour to over 3 hours, while one respondent did not experience a difference in study hours.
- 3 out of 4 students remembered to see the booklet 'wanaenda shule lakini wanaelewa?' inserted in the lamps, one pupil had read the entire booklet.
- 8 teachers (out of 16) remembered information materials that were distributed with the solar light packages, but about how to use the solar light and not Twaweza booklets.

Survey design and sample

The survey was based on a sample drawn from 1232 contacts of schools head teachers provided by D.light to Twaweza. 30 respondents were randomly selected from the list of contacts. 16 respondents agreed and showed willingness to be interviewed over the phone; the other 14 numbers could not be reached.

The survey included questions on respondents' awareness of the solar light distribution, the effect to students, e.g. improved study hours and problems incurred since they received the lights. Regarding the reading materials the questions focused on whether respondents have read educational booklets included in the lights and if they could remember the message from the booklets they have read. By respondents, we mean the head teachers and students of schools from D.light database.

Conclusion

While the results of the telephone survey give a positive picture of the effects of the D.light project, some of the findings raise questions about the effectiveness of certain aspects of the program:

- 1) Why did only few respondents remember seeing Twaweza booklets with educational messages while almost all respondents could remember seeing and reading information materials with details on how to use the solar light. These could be possibilities:

- Booklets were delivered with lights, but respondents did not pay attention what the booklets were about. Their priority was on the solar lights.
 - Booklets were distributed in some areas and in other areas booklets were not delivered at all.
- 2) The other point is that the project intended to distribute 100,000 solar-chargeable lamps to students in Tanzanian secondary schools. However, the report shows that lights were distributed to secondary schools, primary schools and other educational institutions. While this is a positive move, we need to know what changed the original targets (secondary schools). Is it that the partner learned that they could not reach 100,000 secondary school students or was just to expand solar light benefit to other education institutions? It will be interesting to see how the program team shares this report with the partner and what the response will be.

Solar Aid (D.Light) telephone monitoring: Some interesting quotes and suggestions

1. Gasper Sempambo: Lerai Primary school, Arumeru district, Arusha

I did not like the booklet, its content is not right, it damages teachers reputation because the picture in the front cover of the booklet shows a teacher who cannot add the numbers. That is as saying that the government employs teachers who do not know how to teach, it is an embarrassing booklet to teachers and the Ministry of Education and all the people in the country.

2. Anase Moshia: Burger Primary school, Karatu, Arusha

In 2020 only 22 pupils managed to continue with secondary education from our school, but last year (2012) the pass level increased to 72 students. I can only say that to some extent this has been contributed to by the use of solar light bearing in mind two points

- Most of the pupils who purchased solar lights were of standard six and seven;
- That most households in our village do not have electricity, kerosene light was a main source of light before solar light.

3. Herieth Kaiche Muhadu: Msamala Secondary School, Ruvu, Kibaha district, Pwani

Students who are coming from pastoralists, such as Masai society still pass their exams, because of solar lights which allow them to study during the night. Parents will not allow their kids to spend money on fuel, hence solar light it's the cheapest option for most students.

4. Eunice Mangowi: Ngarenanyuki Primary School, Arumeru, Arusha

By that time parents did not have money to buy solar lamps because it was rainy season, but myself I bought 1 solar lamp for domestic use only, not for studies at night.

5. Mr. Msumba: Kwakalamu Secondary School, Kitirima ward, Rombo district, Kilimanjaro

Many neighborhoods do not have access to electricity, so solar lights are a good alternative. But many managed to buy small solar lights which have insufficient light during the night. Large lights have sufficient light but were very expensive

6. W.S. Mwashambwa : Mtimbwe Secondary School , Makambako, Iringa

In our village there is no electricity, so students use solar lights for their evening studies. However, the solar switch easily gets damaged in such a way that in some household they only used it for some few weeks and could not manage to use them anymore.

7. Emmanuel Singada: Mashingia Secondary school, Tarakea, Moshi district, Kilimanjaro

Most parents bought the solar lights for domestic use especially lighting their households during nights, kids can only use the solar lights when their parent domestic tasks of the day are over.

8. Frank Mwanyangala: Uluguru Sec School (Morogoro)

When set at high level light (to provide sufficient light) the lights are not good enough to sustain over four hours, it only when set at low level (insufficient light) that they go over 5 hours.

9. Elihuruma Msuya: Tloma Primary School, Karatu Arusha

The lights reduce the cost of kerosene to parents, and in other ways kids at home use the lights to conduct their evening studies.

10. Mauritius Kuchungula: Matema Secondary School, Mbeya

I have heard one case in my village where the solar light seemed to be not working. But all other lights sold to us were Ok.

11. Mwalimu Murusuri: Bukumbi College

Students at our college use the solar lights for their studies at night, teachers use them especially when Tanesco cuts power off.

12. Mketo Bilal (Head Master): Banja Primary School , Mafia, Pwani

Solar light has boosted the students' performance from 76% to 84%. But also the lights have little 'vision' therefore we suggest you bring us lights which have good vision, that is with much light.

13. Agapiti Peter: Bukanda Secondary School , Ukerewe, Mwanza

Since kerosene is expensive, solar light is very useful to students as well as the family and it's cheap. I would like if the project was continuous, since it is useful for students as well as villagers. The publications are also useful. There is more need of solar light since there is no electricity, distribution should be improved by not asking students to pay first before receiving the light.

14. Philbert Msafiri : Kafunzo Secondary School, Sengerema, Mwanza

There is a pressing need of solar light at the school. I would like if you make the lights big in size with good light vision as the current one has little light. The publications are also useful since they give more information on the usage of solar lights and ways to keep them last long.

15. Jafary Millanzi: Msamala Secondary School, Songea, Ruvuma region

There is a need of more D. light solar for students since in Ruvuma there is often a problem of electricity, hence it is useful to have solar light to help students study smoothly.

16. M. Ramadhani James: Mwenge Secondary School , Singida

When there is no electricity solar lights are very useful since (kerosene) lamps affect the eyes.