SWITCH ON ATAURO

IMPACT ASSESSMENT

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Executive Summary

Kopernik connected 200 d.light S250 solar lanterns with families in Biqueli village on Atauro Island, Timor Leste, in partnership with Move Forward (MF), a local NGO. Three out of four sub-villages in Biqueli have no access to electricity. These off-grid communities rely on kerosene lamps, flashlights, and candles at night. In the sub-village where electricity is available, access is limited to six hours per day and blackouts are frequent.

Kopernik first brought solar lights to Atauro in 2011, working with a local partner Roman Luan. The second solar light project on the island was in response to strong demand for more of this technology.

MF distributed 200 units of the d.light in July 2012. Demand exceeded supply, so the village leaders compiled a list of interested customers and prioritised families who had no access to electricity or solar lighting. The lights were sold at the same subsidised price as the first solar light project in 2011 and all customers paid in a single transaction.

Olga Permanyer Martínez, a Kopernik Fellow, worked with MF to conduct an impact assessment in August 2012. The survey team interviewed 61 solar light customers from the four sub-villages.

The d.light solar lights have made an immediate and tangible impact on people's lives. Almost all families have reduced their spending on lighting fuel after purchasing the d.light:

- **None of the people surveyed continue to use gasoline or candles** for lighting,
- Total **monthly spending on kerosene decreased by 40 percent,**
- Total **monthly spending on flashlight batteries decreased by 20 percent,** and
- Overall, **families saved 92 percent on lighting expenses**.

Two thirds of the people surveyed have completely stopped using kerosene lamps and other light sources at night, and now just use their solar light. More than 60

percent of households use their solar lights to pursue income-generating activities at night, or to allow children to study in the evening. In addition to enjoying the light from the lanterns, 90 percent of the survey respondents also use the d.light to charge mobile phones.

Project Background

Project Objective

Switch On Atauro is a three-month project consisting of the distribution of 200 d.light S250 solar lanterns in the village of Biqueli, Atauro Island (Timor-Leste). The distribution was in partnership with the local Non-Governmental Organization (NGO) Move Forward (MF). This report measures the impact of this technology distribution on the recipients within Biqueli. The impact assessment was conducted by Kopernik Fellow Olga Permanyer Martinez as part of Kopernik's Fellowship Program.[1]

The purpose of the impact assessment was to:

1. Develop a clear understanding of the ongoing needs of the customers,
2. Determine if the solar products are continuing to have a positive impact on the customers' lives.

This assessment was designed to test the following hypotheses. Solar lights will:

1. Save people money on lighting fuel (and charging mobile phones)
2. Be a safer, healthier and more convenient lighting source
3. Increase the range of activities people can pursue in the dark
4. Increase the length of time people can spend on nightly activities
5. Ease pressure on the environment
6. Increase the use of mobile phone

[1] A Kopernik fellowship provides an opportunity for entrepreneurial individuals to work with Kopernik's partner NGOs and assist with the implementation and monitoring of projects disseminating appropriate technology (http://kopernik.info/en-us/page/fellowship-volunteer-internship-opportunities)

Project Background

Project Objective

Switch On Atauro is the second solar light project that Kopernik has been involved in on Atauro Island and consisted of the distribution of d.light S250 solar lanterns. In November 2011, 204 units of d.light S250 solar lights were distributed to Maquili, Beloi and Macadade villages in collaboration with another local partner, NGO Roman Luan (RL).

The program was launched with an educational demonstration of the d.light S250 solar light conducted in front of the community members interested in purchasing the product. At the demonstration, those attendees interested in buying one, gave their names to the village chief. Since the demand exceeded supply, the village chief then pared down the list to the people who were seen as being most in need, removing higher-income households from the first distribution. A random lottery was then conducted in Vila (Atauro's main village and where RL is based) where the winning ticket-holders purchased the lanterns for US$12.50 per unit from Roman Luan's office. All customers who purchased the lights paid the full amount up front.

Snapshot of Location

Biqueli is a village on Atauro Island, Timor-Leste. It has a population of 2,364 people, 1,231 males and 1,133 females, which makes a total of 549 households. [2] The livelihoods of the majority of households consist of fishing and farming, providing families with daily food but not stable incomes. Unlike the rest of Timor-Leste, that is pre-dominantly Catholics, the majority of the population on Atauro Island (including Biqueli) is Protestant.

[2] 2011 census, Biqueli's Town Council

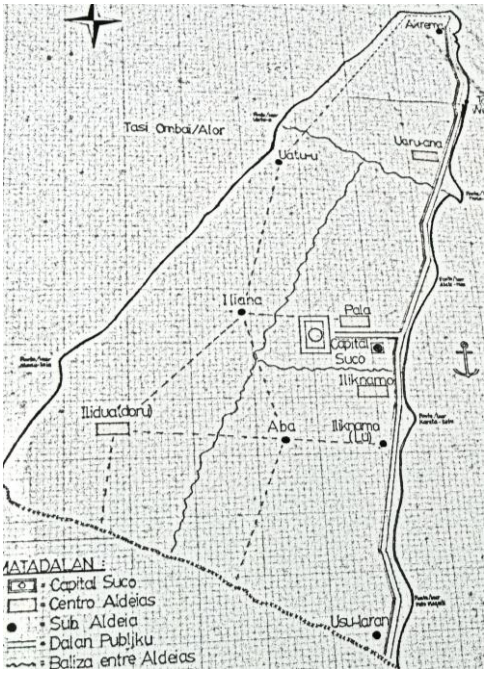

Image 2: *Map of Biqueli and its sub villages.*
Source: Biqueli's office

Common Practices Relating to Technologies

The village of Biqueli is divided into four sub villages, and only one of them has access to electricity. It is for that reason that people must rely on other sources of energy for lighting. The most common practices are using kerosene lamps and battery-operated flashlights. Many people use alternative sources of lighting, such as burning firewood or plastic flip-flops. These methods place a substantial burden on the family budget as well as pose negative health consequences, such as chronic coughs or eye irritations.

Our Local Partner: Move Forward

Move Forward is an NGO based in Biqueli, Atauro Island, Timor-Leste conducting projects with local communities in Atauro. Move Forward's mission is to:

- enhance the environment of the Bikeli area of Atauro by restoring its mangroves, and
- widen the potential for educational and economic advancement of its people by giving them a grounding in the English language.

Project Implementation

The Technology

The d.light S250 is a portable and durable solar lantern that can also charge mobile phones. Its bright white light illuminates a room as much as a 3-5 Watt CFL lamp, and it provides up to 10 times more light than a kerosene lantern. The S250 features four different brightness settings, providing up to 12 hours of bright light (and up to 100 hours on the bed light setting). In addition, the illuminated on/off button allows for easy location of the lantern even in the dark. The product description from the manufacturer indicates that the lantern has a lifetime of five years or more when handled properly.

Distribution Mechanism, Pricing & Payment

Through the Switch On Atauro project, Kopernik provided 200 units of d.light S250 solar lights to be distributed by MF to the four sub villages of Biqueli: Ilidua, Iliknamo, Pala and Uaruana. The d.lights were purchased from a local distributor in Dili, Startec Enterprises Lda, and then transported from Dili to Atauro with the Nakroma Ferry, the public transport between the island and mainland.

Prior to the arrival of the solar lights, MF had a meeting with the sub village chiefs to show them the d.light and provide the list of registered families interested in purchasing them. During this meeting, it was decided that the unit price would be US$12.50, the same unit price as the d.lights distributed by Roman Luan (RL). The sub village chiefs then provided information about the d.light workings to their respective communities (although many of the families had already heard about the d.lights from the previous project with RL). By the end of June all lists were collected from the 4 sub villages with a total of 473 families registered.

Since the demand greatly exceeded supply, MF arranged a meeting between MF staff, the 4 sub village chiefs and the chief of Biqueli. The initial idea was to follow the previous distribution system applied by Roman Luan that carried out a lottery system among all the families interested in buying the d.light. The chiefs however decided that

it was not fair to give them all the same opportunities, since some families already had access to electricity, and some others had solar panels on their houses. The sub village chiefs knew every family who had applied for the d.light so they decided to take back the list and had a meeting with all the potential beneficiaries. Together they selected the families who would have priority to purchase the d.light.

The distribution of the 200 units of the d.light S250 for all sub villages took place in Pala on 18th of July 2012, when they were celebrating the Biqueli Cup. There were two tables set up outside MF's office for the distribution. The d.lights were sold in four rounds, one per sub village, followed by a brief training on how to properly use and maintain the light.

Image 1: *Move Forward staff during the distribution of the d.lights S250*

MF kept six d.light units in stock in the office as spares in case some of the solar lights sold had any technical problems. In the end, 194 units of d.lights were distributed to the community according to the agreements made with the sub village chiefs.

Sub village (and communities)	No. of families	No. of families buying the d.light
Ilidua (Uatu'u & Iliana)	60	49
Iliknamu (Doru & Dotan)	55	44
Pala[3]	228	45
Uaruana (Uaruana & Accrema)	124	56
Total	**467**	**194**

***Table 1**: Population per sub village and number of d.lights distributed in every sub village*

A total of US$2,425 was collected as revenue from the sales. Of this, a total of US$1,718 was repaid to Kopernik, while $702 was used to cover awareness raising and distribution costs and $5 was used to cover the transfer fee. The repayment made to Kopernik will be used to purchase more d.lights for the next phase of the project.

Impact Assessment

Process & Methodology

To assess the socio-economic impacts of the d.light S250 solar lights on the user's life, an impact assessment was conducted from 20-24 August 2012. Olga Permanyer Martinez, Kopernik Fellow, and 4 MF staff carried out the assessment using semi-structured interviews. A total of 22 questions were prepared in English and translated into Tetum and a one-day meeting was held to discuss and pre-test the questions among the team.

In total 61 participants from 7 communities in 4 sub-villages were interviewed. 69 percent (42) of the interviewees were male and 31 percent (19) interviewees were female.

[3] Pala is the only area with access to electricity; some of the houses were connected to the electrical grid in May 2012 but not all of them, and the supply it is only from 6pm until 12am.

Day	Area	No. of participants
1st day	Uaruana and Akrema	15
2nd day	Uatu'u	15
3rd day	Iliana and Doru	15
4th day	Dotan and Pala	16
Total	**7 communities (in 4 sub-villages of Biqueli)**	**61**

***Table 2**: Planning on the impact assessment process*

Results of Impact Assessment

Basic household information

The average number of family members per household was 5.57. As shown in figure 1, household incomes come mainly from fishing and agricultural activities. Men tend to work in more than one area at the same time (fishing and agriculture being the most common combination), while women are in charge of the housework and the children. Women also dry fish, bake bread or doughnuts and take care of the farm animals for alternative sources of revenue. In most of the areas surveyed, the outcome of their agricultural work provides them with food but supplies only a minimal income. In turn, even if the heads of the households work both in agriculture and fishing, the only income is from the fish they sell.

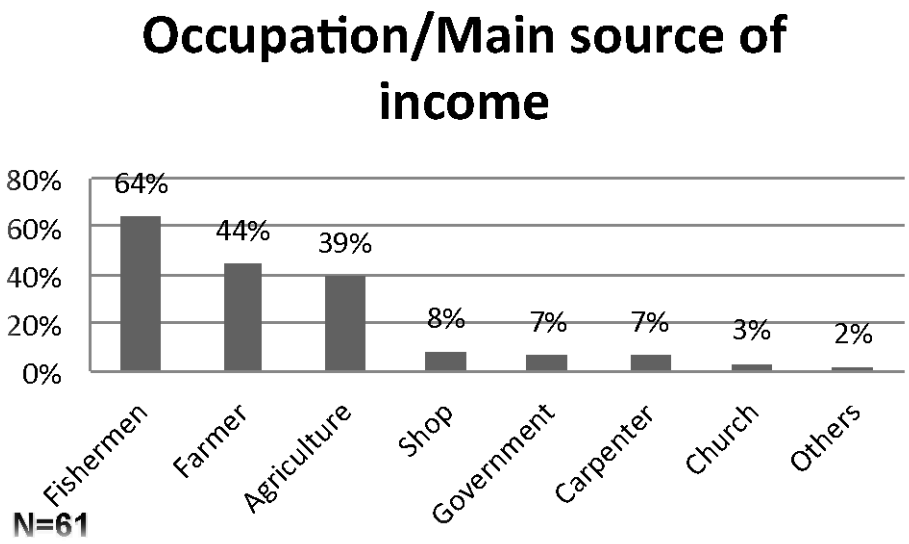

Figure 1: *Job distribution in Biqueli*

Income from fish sales is unstable because it fluctuates with the weather conditions and seasons. Families working for the government or church are the only ones with any economic stability; though, families that own a small kiosk also tend to obtain regular income every month. The average monthly household income is US$99, ranging from US$5 to US$350 with the exception of one family that owns a guesthouse in Dili and their monthly household income reaches US$1,000.

Sources of lighting

Most of the Biqueli community is not yet linked to the electricity grid, with the exception of Pala. Since Pala was recently connected to the electrical grid, at the time of the study, residents were not yet paying for these electrical services because the government was offering them for free for the first three months. During this phase in Pala, electricity was only available for six hours per day (6pm-12am) with frequent cuts due to lack of fuel in the plant in Vila. The rest of the sub villages interviewed had no access to electricity and there is no plan from the government to connect them any time soon.

The most common sources of light are kerosene (46 percent), Chinese-made flashlights (36 percent) and one specific kind of solar panel (15 percent). This panel

has an initial cost of US$70 and its lifetime span is approximately one year. They require little maintenance, since the users just need to buy special oil in order to maintain the panel. The oil costs US$6 per bottle and it lasts for three months. A significant percentage of the families (13 percent) burn flip-flops in order to get (low quality) light in any open-air rooms, usually the kitchen. They spend time in the morning searching for flip-flops on the seashore or they just burn their old or broken ones. A flip-flop provides them with about one-hour of light, and after the fire burns through they usually go to bed. Figure 2 shows the distribution of the different sources of light in Biqueli:

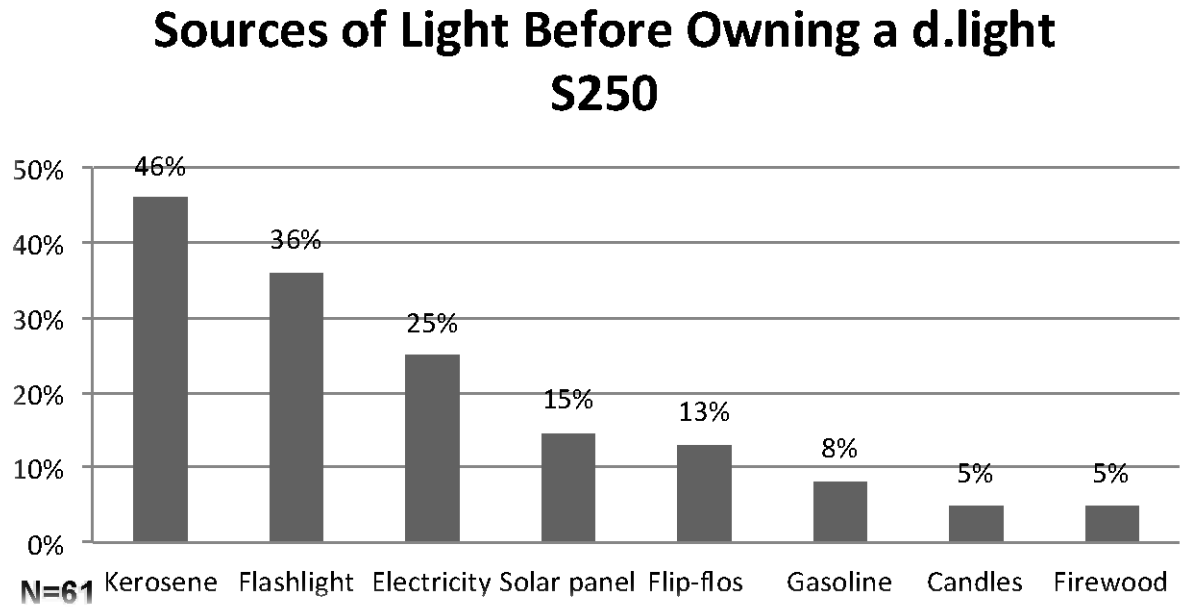

***Figure 2**: sources of lighting before owning a d.light*

***Image 3**: kerosene lamp*

Problems with current sources of lighting

Families buying the d.light S250 were able to identify a number of core issues with existing light sources. Many customers purchased the product because they were concerned that their health and their children's health could be negatively impacted by their current sources of light (figure 3). Only seven percent of the families however, considered their previous source of light (especially those burning kerosene or gasoline) as dangerous, and they were the families who had experienced fire related incidents in their houses. The other main concern was that they didn't have good quality light. Poor lighting restricted their ability to carry out tasks such as reading or doing homework properly. Some families (23 percent) claimed that the main problem they had before purchasing the d.light was that they were allocating too much of their budget to buy either kerosene, batteries for the flashlights, or gasoline. Also, in some remote areas it was hard to find those products even if they had the money to purchase them.

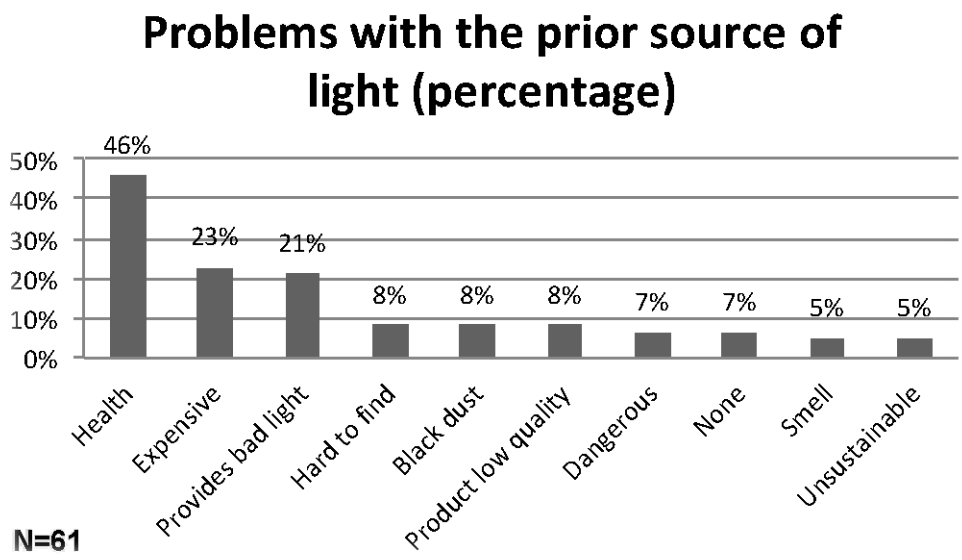

Figure 3: *Problems with the prior source of light*

d.light S250 impact on household expenditure

Families interested in buying the solar light did not just want to save money, they also wanted to use the light to develop income generating activities during the night.

The average amount spent each month per family on lighting before owning a d.light was US$11.54, depending on the source of light they were using. Figure 4 shows the relationship between the money families spent on lighting before and after having a d.light.

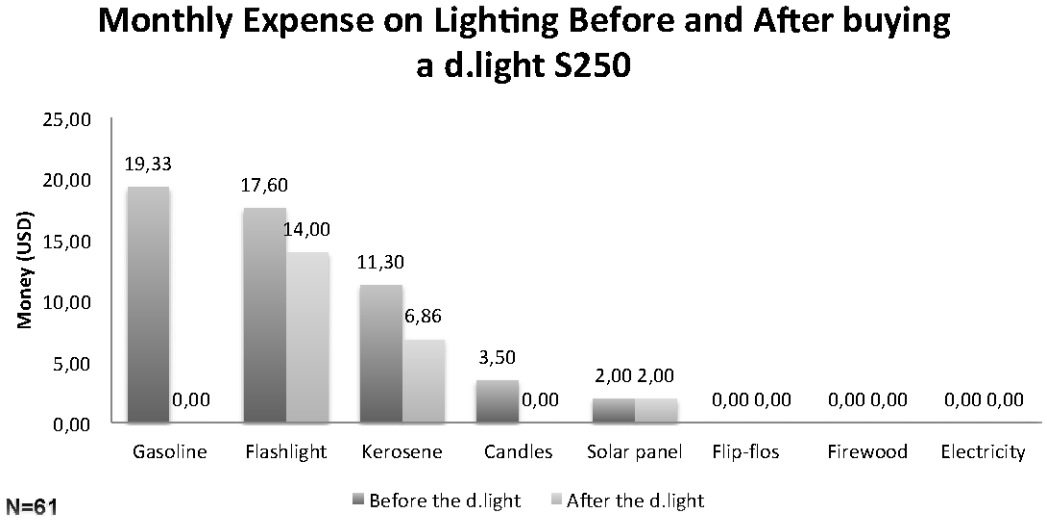

Figure 4: *Comparison between the money spent before and after buying the d.light in relation with every source of light*

Those families buying gasoline were the ones spending the highest amount of money per month (US$19.33 on average). After purchasing a d.light, they stopped using gasoline for lighting altogether. The same occurred with former users of candles. The total monthly expenditure on flashlights decreased from US$17.60 to US$14.00 and families once dependent on kerosene spent an average of US$6.86, a 40 percent reduction. Fifteen percent of families have solar panels. The solar panels supply electricity for one year and families are still using them; hence, their monthly expense has not changed. Finally, people that relied on flip-flops, firewood or electricity (in the sub village of Pala) have no direct economic impact because their prior source of lighting was free, but they gained extra time to develop other economic or social activities. The 11 families that were using flip-flops and firewood are no longer using those sources of lighting and are now only using the d.light.

All the families interviewed are using the light daily. Most families (66 percent shown infigure 5) are now using the d.light as their only source of light. The majority of the families who are using the d.light have reduced their expenses. Only two of the 61 families interviewed are still spending the same amount of money as before, and this is because the household size is so large that they claim one d.light is not enough. The rest are still using some flashlights or kerosene lamps but they have been able to reduce their usage of kerosene or batteries.

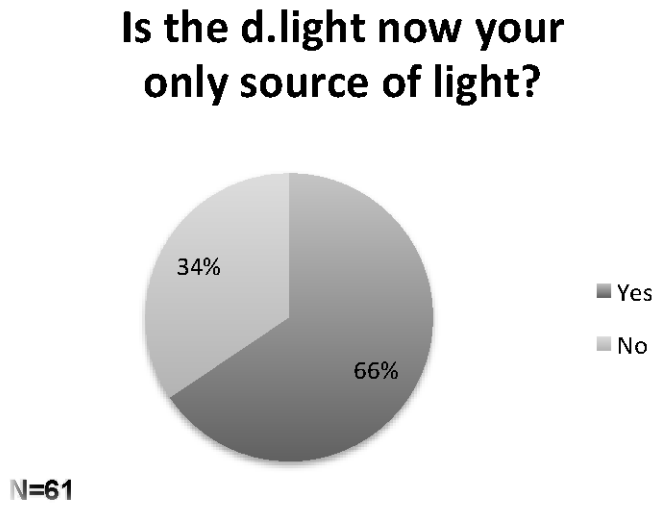

***Figure 5**: Percentage of interviewees that use the d.light as their only source of light*

d.light S250 uses in daily activities

The d.light was well incorporated into the daily activities of its customers, often extending the length of time they could do things at night as well as creating a more suitable environment. Sixty-six percent of the families use the d.light to prolong their tasks at night, while previously they had to stop what they were doing when night time settled until the next morning. Now they are able to fix their fishing nets, dry fish to sell, bake bread or doughnuts to sell at the school or the market, or take care of their animals. Sixty-one percent of families use the d.light to help their children study at night because the light provided is of better quality compared to before. Forty-four percent of families reported that the d.light helped them with cooking dinner or preparing breakfast very early in the morning for their kids (Figure 6).

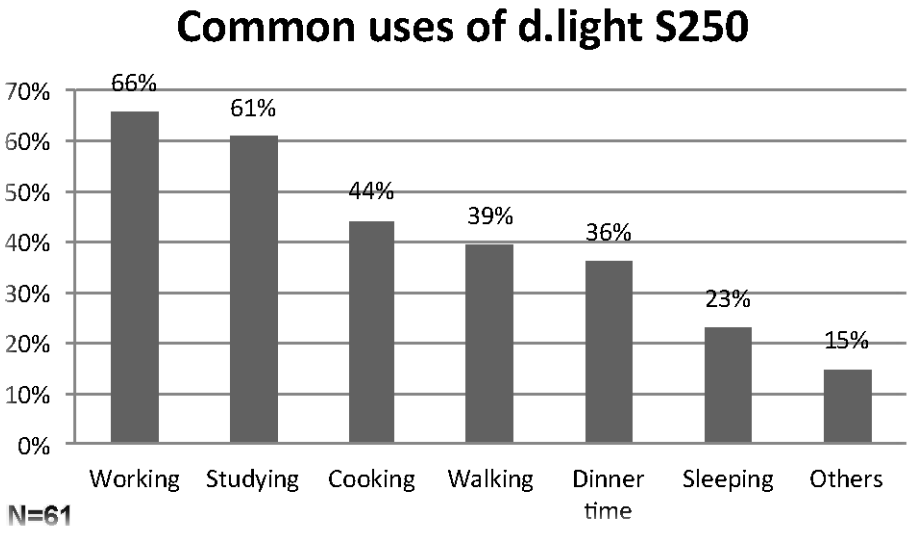

Figure 6: *Common uses of d.light S250*

Thirty-nine percent of families use d.light as a portable lantern to walk at night, while 36 percent use it as a lamp to light the living room while having dinner and 23 percent leave the light turned on at the lowest level all night long so they can see to go to the toilet or as a night-light for children. The remaining 15 percent refers to using the light for leisure activities, such as church, family meetings, etc.

When asked about the changes in their daily activities, 49 percent claim that they are currently doing the same activities as before but now without spending money, while 51 percent of the families report that they are able to do new activities at night.

The use of d.light S250 mobile charging capability

A significant portion of the customers (90 percent) use the cell-phone charging feature of d.light S250 (figure 7). Survey respondents reported charging the phones of their relatives and neighbors in addition to their own. The 10 percent not using this capability shared that it was because they did not own a mobile telephone or they were afraid of using it because it could deplete the lighting capacity. The other reason why some families weren't using the charging capacity was because the brand they used is not suitable for the adaptor. For example, *Alcatel* telephone owners could not charge their telephone with the current connectors provided.

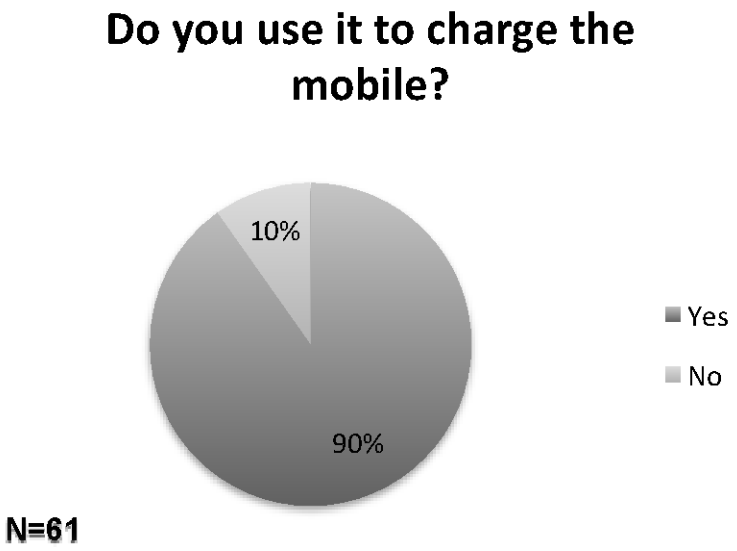

***Figure 7**: Use of the mobile phone charging capacity*

Payment system

The d.lights were sold at a subsidized price of US$12.50 per unit. Seventy-two percent of the families found the price appropriate (figure 8), especially if they knew in advance that the d.lights were available for them to buy and they could save money the months before. When asked if they would prefer to pay for the light in two installments, taking

into account that the final price would be slightly higher, most of the respondents did not favor this option (65 percent). They preferred to pay the whole cost all at once so that they no longer had to worry about the payment. However, 10 percent answered that it if they were given enough time to save the money they would prefer to have the opportunity to pay in two installments because this would be the only way they could afford to buy one solar light (figure 9).

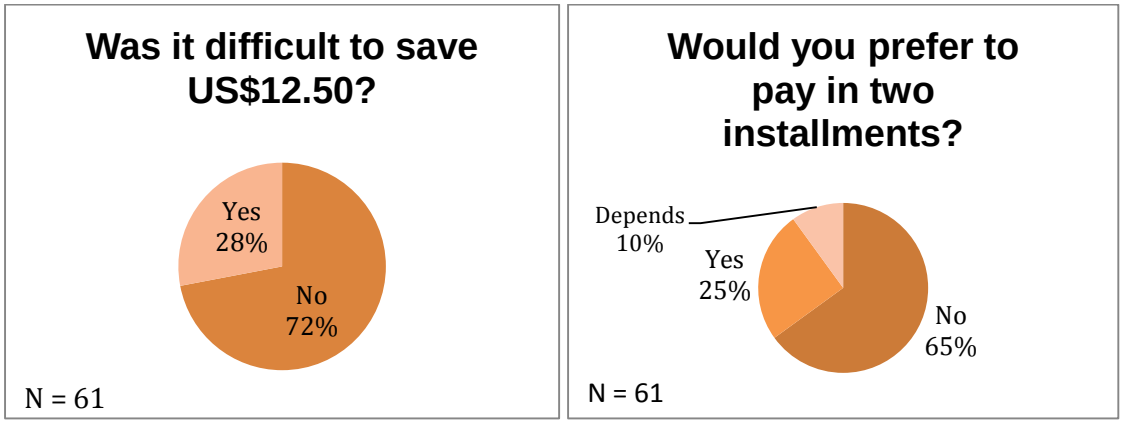

Figure 8 & 9: *Perception of the price and preferences in the payment system*

Selling the product at a subsidized price was important to make sure that the d.lights were seen as valuable technologies by the users. The money collected from the d.light sales will be used by Kopernik to purchase more technologies for families in this area or will be reinvested in a new project.

To test the free market possibility for d.lights, the participants in the survey were asked if they would be willing to buy the exact same product with a small mark-up on the current price from a local distributor. In this case, the lights would always be available, instead of being dependent on Kopernik for supply. Eighty-seven percent of the families answered that they would not buy the d.light (or any other product also available from an international organization) from a local distributor. The motives for this attitude were diverse: some families did not trust the local shops because they usually sold Chinese products that are low quality copies of the original product. Another reason was that they did not want to pay a higher price than the one offered

by the NGOs, either because they couldn't afford it or because they thought it wasn't fair. Only 13 percent would consider buying the d.light from a local distributor.

Conclusions

Customers have been very happy with their d.lights. Eighty-seven percent of users rated their experience with the technology as extremely satisfied (five out of five stars) and 11 percent as very satisfied (four out of five stars). Only one person awarded the light three out of five stars. More d.lights are necessary as there are many families that have expressed interest but were not able to purchase the product in this distribution. There are also many families that already have one d.light and are interested to buy more because they have big families and one d.light is not enough.

The impact assessment carried out by Kopernik together with their local partner, Move Forward, revealed that survey respondents experienced significant economic impact as a result of adopting the d.light. Families that received the d.light reduced their lighting expenses by up to 92 percent. In addition to saving money, households reported being able to conduct income-generating activities after dark. Sixty six percent of the families state that their incomes have increased. Some baked bread late in the afternoon and others dried fish the same day the fishermen caught it which allowed them to diversify their incomes. Ten percent of women in the families interviewed have started this kind of business since they purchased a d.light.

The d.light users also saw the time devoted to studies by their children increase. Families reported their children using the solar lights to study longer at night particularly during exam period.

The distribution of d.light S250 brought both economic and social impact to the residents of Atauro. Access to the d.light S250 facilitated an avenue to save money by reducing fuel expenses, or by making income-generating activities possible after dark. The lights also aided children in their homework by providing a better study environment and provided a safer, healthier lighting alternative.

Annex

Case Studies

Maria Marcal Lemos

Maria is a 38-year-old woman from Uaruana with seven children. Her husband works as a fisherman and she works collecting fruit such as bananas, papaya, cassava and coconuts. The land where she works is far away and she has to walk two hours every day to get there and back. In order to have time for all her daily chores, she must get up around 5am to prepare breakfast for the kids and then go to work when it is still cool enough to do so. She doesn't have access to electricity, so before purchasing the d.light she used to rely on kerosene lamps. She used to have the kerosene lamp on all night long for the youngest kids, and when they woke up in the morning all their faces were black from the smoke.

One night the family didn't secure the kerosene lamp properly and it fell on the table, starting a fire in the house. The family ran out to look for water, while the neighbors helped them to take care of the kids and put out the fire. Fortunately they didn't suffer any losses but ever since that day Maria has been worried about having the kids around the kerosene lantern.

Her eldest daughter is 18 years old and is currently studying in Dili. Her other children are attending school on the island and they use the d.light to study every night. Now they can study longer because their eyes don't get irritated by the smoke. She explained that it is very useful that the light has different levels of power; they use the highest one during dinnertime and for the children to study, and when it is time to go

to sleep, they reduce it to the lowest setting. She really wants to buy more d.lights because she has a very big family, and with so many people living in the same house, one light is not enough.

Hermeregildo Souza

Hermeregildo is a fisherman from Uatu'u. He is married to Aida Gomes, and they are both originally from Iliana. When they fell in love, their families didn't agree to their engagement and they had to move to Uatu'u. Besides fishing, Hermeregildo also owns some animals to sell, but their family income is very unstable and depends on the weather and how many animals they can sell each month. On average, the family income has been around US$35 per month.

Before having the d.light, they used to burn flip-flops to maintain some light during the night. Each day Hermeregildo walked along the seashore looking for old flip-flops brought in by the tide, and then at night he would set them on fire in the garden, between two houses, to provide some light for his house and that of his neighbors. The smoke and smell of burning the flip-flops, even in the open air, made them sick. They tried to alternate between other methods of lighting, one week they used kerosene (spending US$3 each week) and then the next week they burnt the plastic flip-flops. Even using kerosene two weeks per month, they spent more money than their small budget allowed.

Hermeregildo is happy to dedicate the time saved from searching for flip-flops to fishing or farming. He wants to buy more d.lights and is willing to save money to do so

since his family is using the light a lot. He explained that now his daughter “steals” the light every night to study in her room, so she leaves the rest of the house in darkness. She loves studying English and she was keen to practice it with the Kopenrik fellow. Hermeregildo is happy to see that she is studying hard, but he cannot fix his fishing net because he has no light and he doesn’t want to go back to using the flip-flops again. The only complaint he has is that he owns a Motorola phone, and the d.light has no adaptor to charge this brand of phone.

Odete Suares Pereira

Odete is 42 years old. She owns a small shop in Biqueli where she can sell beverages, soap and credit for the cell-phones amongst other things. She obtained a loan from a microfinance NGO based in Dili, Moris Rasik, to start her business, and currently is still paying it back once a week. She also bakes bread and doughnuts and sells them at Beloi’s market on Saturdays. Her husband is a fisherman and he has a big boat of his own. He normally goes fishing somewhere close to the Indonesian border.

They have five children. During the interview she was with her youngest boy, Oiris, who had a fever, and the oldest girl, Tabit, who was 24 years old and was also sick. She was diagnosed with a mental illness recently and now needs to receive treatment each month. They do have electricity in the house, but they only have two bulbs, one in the kitchen and one in the living room. Now Odete can use the d.light to cook at night and bake the bread and doughnuts, as well as prepare the small bags of sugar and flour that they sell every day in the shop. When all the work is done, she leaves the d.light as a night light, since her children don’t like being in total darkness.

When she was interviewed, she had been using the solar light for one month already. She says that when her husband takes the d.light with him to go fishing, she has to ask her neighbors if she can borrow theirs because now she is used to having it. She also explained that when they first heard about the d.lights coming to Biqueli, most of the community didn't trust the quality of the light. That's why only ten families in Dotan (Biqueli's sub village) applied to get one. Now that they have seen the quality of the product however, they are keen to get one. She also wants to buy more to suit her large family.

Sample Questionnaire

1. **For Staff**
   - Beneficiary Name:
     Ita naran saa?
   - Age:
     Ita tinan hira?
   - Village:
     Suco?

2. **Household Composition**
   - *How many people live in your household?*
     Ema na'in hira maka iha ita nia uma laran ?

3. **Livelihood/Incomes**
   - What is your household's main source of income?
     Aktividade saida maka sempre produs rendementu ba ita nia uma laran?
   - What is your household monthly income (on average)?
     Kada fulan rendimentu (actividade sustenta) familia nian saida?

4. **Fuel Use**
   - Do you have access to electricity?
     Karik ita hetan electrisidade?
   - Before owning the solar lantern, what energy sources was your family using?
     Antes ita iha lampu d.light, energia saida mak ita nia familia uza hodi fó naroman?
   - *What problems did you find in your prior sources of lighting?*
     Problema saida mak ita hetan ita tempo uluk relasaun ho naroman?
   - How much money per week did you spend on these fuels prior to owning the solar lantern?
     Osan hira maka imi gasta iha semana ida ba naroman antes imi hetan lantern solar?
   - Now that you own the solar lantern, do you still use (prior named fuel) for light?
     Agora imi iha ona lantern solar, imi sei uza ahi oan seluk hodi produz naroman?
   - Currently, how much money per week do you spend on fuels for lighting?
     Osan hira maka imi gasta kada semana ba a hi nebe imi uza?

5. Solar Lantern Usage

- *How many people in your household use the solar lamp?*
  Ema na'in hira maka uza solar lantern iha ita nia uma laran ?
- What sorts of things do you use the solar lantern for?
  Agora imi uza lantern solar hodi halo saida?
- How often (how many times/week)?
  Imi uza iha tempu hira kada semana?
- Could you do this activity at all prior to the d.light lantern?
  Imi bele halo aktividade sira ne'e hotu antes de imi hetan lantern solar?
- Do you use it to charge cell phones at all? If yes, how often?
  Karik ita uza lanterna hodi regarga ita nia mobile?Karik sim, loron ida dala hira?

6. Impacts

- How has the d.light affected your children's education/ability to study?
  Oinsa efeito husi lantern solar ba estudante sira?
- How has the d.light affected your income-generating possibilities?
  Oinsa lantern solar ninia efeito hodi hetan rendemento?
- Which has been the greatest change/impact?
  Ida ne'ebe maka sai ona mudansa ka impaktu boot liu?

7. Finance, Purchasing and Distribution

- Was it difficult to find $12.50 to buy the lantern?
  Ita boot sira sente dificil atu hetan osan $12.50 hodi sosa lantern ne'e?
- Would you prefer to pay in 2 or more installments, even if the total price was higher?
  Karik ita boot sira sente katak presu ne'e as liu ba ita no hakarak selu dala rua ou liu?
- If you could find the d.light S250 in the local market, would you buy it)
  Karik ita hetan lampu S250 iha merkado ka loja, ita hakarak sosa?

8. Other concerns

- Please provide the overall rating of the technology on a scale of 1-5 stars (select one):
  Favor fornese (marka) hela skor iha ne'ebe iha kraik relasaun ho skala teknolojia nian husi 1-5 (hili ida)
  - 1 star: Disappointed/La kontenti
  - 2 stars: Not Satisfied/La satisfeitu
  - 3 stars: Satisfied/ Satisfeitu
  - 4 stars: Very Satisfied/ Satisfeitu tebes
  - 5 stars: Extremely satisfied/ Satisfeitu loos
- In the future, which products would you be interested in the most? What products you think that the community is more interested in? Why?

Produtu ida ne'ebe mak ita gosta liu iha future? Produtu ida ne'ebe mak ita hanoin komunidade sira interese loos? Tamba sa?

Obrigado barak ba informasaun ne'ebe itaboot sira hato'o no ami nia esperansa boot katak produtu ne'e sei fo benefisiu barak ba itaboot nia familia no sei loke mos oportunidade ba familia sira seluk.