

# SOCIAL IMPACT ASSESSMENT REPORT





# INTRODUCTION



# Social Green Fuel Enterprise (SGFE)

*Promoting a sustainable alternative to traditional charcoal and giving new chances to wastepickers*

SGFE (Sustainable Green Fuel Enterprise) was **created in 2008 with the aim of alleviating poverty and reducing deforestation in Cambodia**, as well as improving waste management in urban areas, by developing a local economic activity: manufacturing charcoal using organic waste.

SGFE has two missions:

- Promoting its charbriquettes: an alternative to traditional charcoal using recycled biomass, therefore reducing deforestation in Cambodia
- Alleviating poverty by providing stable jobs to wastepickers to help them improve their situation and facilitating schooling for their children

SGFE was created by two French organizations, GERES and PSE, who decided to unite their different expertise in clean energy and poverty alleviation.



GERES sees its mission as helping to preserve the environment, limit climate change and its consequences, reduce fuel poverty and improve living conditions.

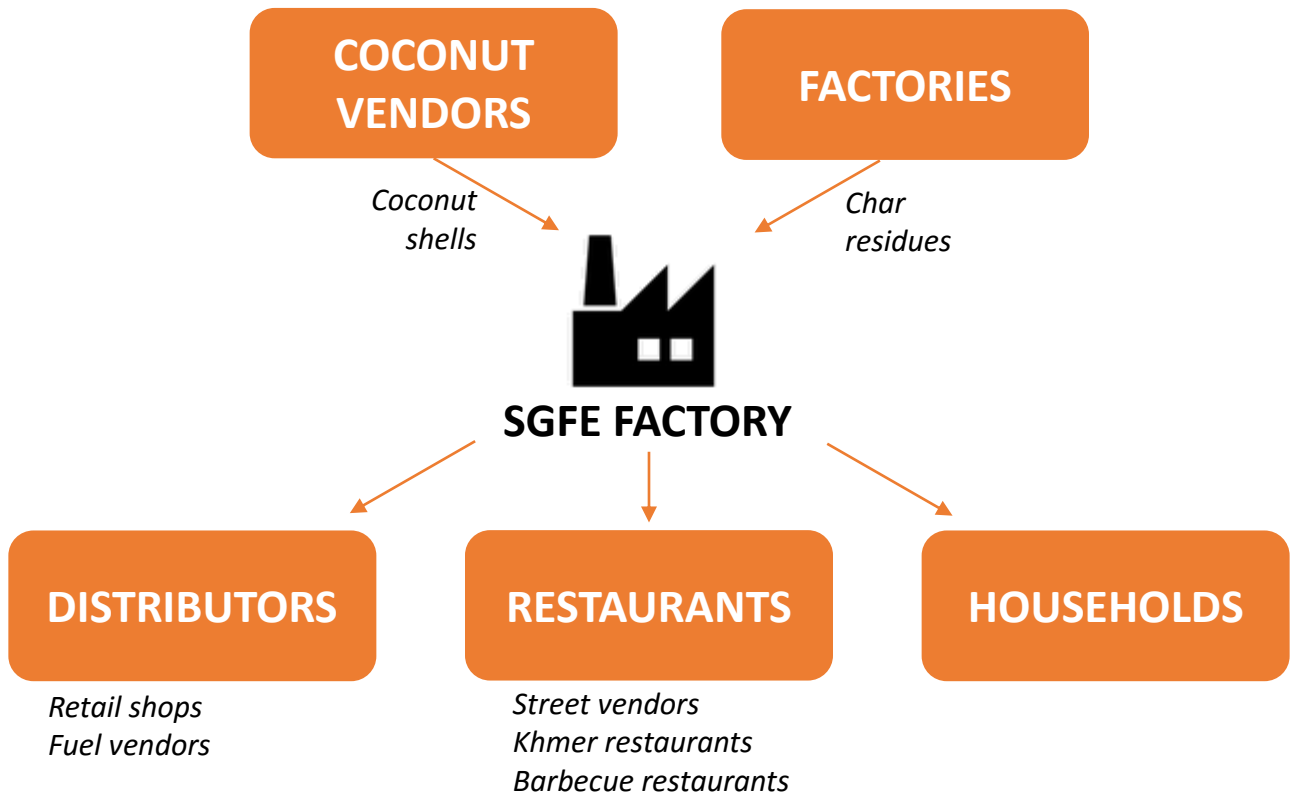


PSE looks to get children out of poverty for good by providing them with the best possible education to give them the tools to build a new future.



# Social Green Fuel Enterprise (SGFE)

*Promoting a sustainable alternative to charcoal and giving new chances to wastepickers*



SGFE sells two kind of charbriquettes, that customers can get delivered or collect directly at the factory

- Premium charbriquettes, made from biomass waste and charcoal residues
- Diamond charbriquettes, made from coconut shells, that last longer

If competitors exist on the market, they are organizations that don't use the same raw material and thus have lower quality products. SGFE is for now the only Cambodian producer of clean charcoal that uses such production processes.

*In this report, the terms charbriquette and clean charcoal are used to describe SGFE's products.*



# Planète d'Entrepreneurs

## *Assessing social impact and promoting innovative social business models*

Since 2009, Planète d'Entrepreneurs has been helping social entrepreneurs **assess their social impact** and promote their innovative model in France and developing countries by training and involving French students in the field.

We believe that **social impact assessment** is a crucial need for social entrepreneurs in order to:

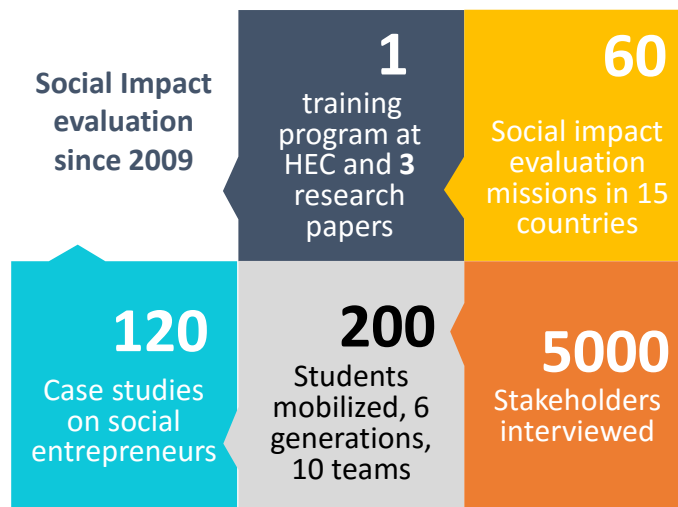
- Better monitor their activities and adjust their business planning
- Communicate with their stakeholders

Our activity is based on 3 complementary pillars :

**Field missions** : we help social entrepreneurs implement monitoring and evaluation tools, allowing them to maximize their impact

**Trainings** : we train our students to social entrepreneurship models and teach them how to measure social impacts, especially through field experiences

**Research and communication** : we want to contribute to the emergence of new tools for social business models as well as promoting these models to a wider public



The **Scale Up team**, who conducted this impact assessment mission, is one of the field team for the year 2015-2016



# Methodology

## Before the mission: In France

- Definition of the scope of the mission with the entrepreneurs (stakeholders, purpose...)
- Elaboration of the impact map. Association of each impact (or outcome) with an indicator, a stakeholder and a question.
- Elaboration of the questionnaires

## On the field

- Data collection in the field: interviews (quantitative and qualitative)
- Adaptable questionnaires in order to fit the population and the mission
- Qualitative interviews to focus on specific issues

## At the office

- Writing down the report. Presentation of the results and the recommendations to maximize the impact

## Deliverables for SGFE

1

### Impact Map

*Impact indicators*

2

### Questionnaires

*Built before the study*

3

### Databases

*Collected data and excel tool*

4

### Social impact report

*Data analysis*

5

### Communication material

*Key results of the study*

6

### Recommendations

*From observations on the field*



# Mission statement

This mission was carried out from October 19<sup>th</sup> to November 20<sup>th</sup> in Phnom Penh. The Planète d'Entrepreneurs team conducted interviews at the SGFE office for the workers and their children and in the customers place of work or home.

The mission focused on different objectives to understand the impact of SGFE on its stakeholders:

- **Assess the economic and social impact of working for SGFE for its employees**
- **Understand the impact of SGFE products for its clients and their reasons for purchasing and using the charbriquettes**
- **Qualify the impact of SGFE and PSE on the children of the workers, in terms of the economic situation of their parents or relating to their schooling**

## **Results of the study must be taken with caution**

All data is collected through the questionnaires or through SGFE's data, be it qualitative information or facts and figures. Because SGFE is a young structure with a small scope, the results must always be taken with caution, as they derive from a small sample. One must not assume causality links too easily.

For this mission, the results may be affected by several aspects:

- The interviews were conducted in the SGFE offices or by SGFE collaborators
- All interviewees' statements were originally expressed in local language and then translated into English



# Understanding the context

## *SGFE works to tackle several social and economic issues in Cambodia*

### Economic context

#### Key economic figures

Economic growth in 2013	7.1%
Share of the population living under the poverty line	17.7%
Share of the population living in rural areas of Cambodia	80%

Despite the economic dynamic that the country is enjoying today, a huge part of its population is kept out of it. Moreover, with such a huge part of the population living in rural area and depending on natural resources to survive, Cambodia is today considered the **12<sup>th</sup> most vulnerable country to climate change**, partly because of the growing deforestation process.

### Education

One of the best example of Cambodia's reconstructing society is its education. After being put to pieces by the Khmer Rouge regime, it is slowly rebuilding itself, and schooling rates have increased these last years. **Literacy rate has reached 78%, but only 49,6% of people over the age of 24 completed at least primary education.** One of the main reasons to this is that children stop going to school so they can work to help support the household.

### Wastepickers

Wastepickers are an example of the strength of the informal sector thriving in Cambodia. They collect recyclable waste in dumpsites to sell them to local recycling shops. They often live in small villages or slums by the dumpsite, where all members of the family – including children – are involved in this economic activity.

This activity is of course characterized by a very unstable revenue, but also involves problems of health as the families live near or on the dumpsites and are exposed to the waste on a daily basis.



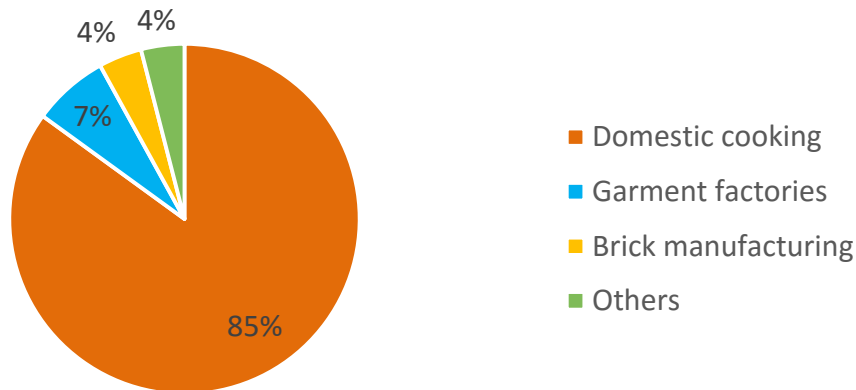


# Deforestation and charcoal in Cambodia

*Deforestation is, today, one of the main environmental issues of Cambodia*

Deforestation is a huge issue in Cambodia. Its forest cover has decreased from 73% in 1965 to 59% in 2006, and the problem is increasing as time goes by.

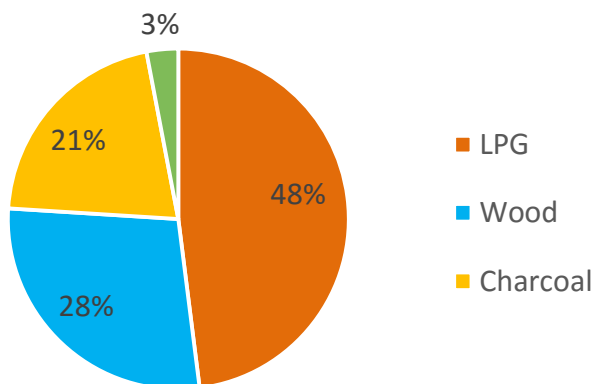
Distribution of wood-fuels consumption\*



Today still, **biomass represents 71% of the Cambodian energy mix**. This cannot only be explained by the large rural population, but also by the fact a number of traditional Cambodian dishes require being cooked on charcoal. More than 90% of Cambodian households therefore use biomass for cooking, often with very little awareness of the health or environmental issues related to using charcoal. It is estimated that **more than 2.4 million people are exposed to indoor air pollution** caused by biomass fuels.

With the growing deforestation, charcoal is getting more expensive in the country as it is harder and harder for charcoal producers to collect wood.

Main cooking fuel used by urban households \*\*



Wood is the main cooking fuel with 1,780,000 tons consumed each year. Charcoal may represent a lesser share of fuels used by households but to produce it requires 3,000,000 tons of wood.

(\*) : Biomass Energy Consumption Patterns in Cambodia, GERES, April 23rd, 2015

(\*\*) Cambodia Market Assessment, Sector Mapping. USAID. July 2013



# WORKERS



# Workers: Sample presentation

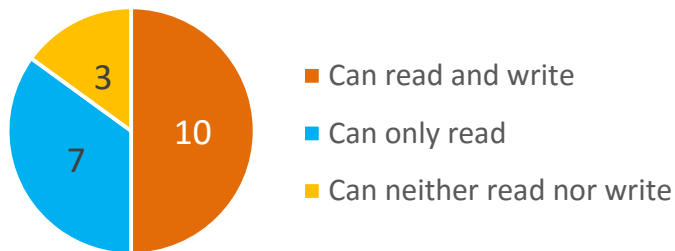
*20 workers were interviewed*

## General

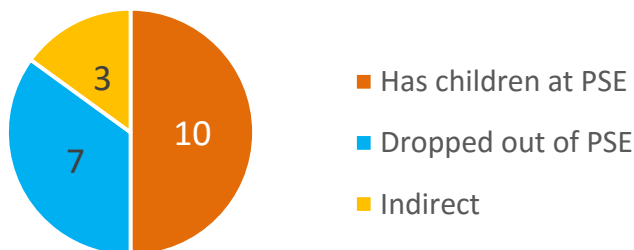
Of the 20 interviewees 12 are men and 8 are women. The employees are aged between 21 and 54 with an average at 33.5 years old. Duration of employment by SGFE ranges from 2 months to 6 years with an average of 1.6 years

## Education

Length of schooling for SGFE workers ranges from 0 to 8 years with an average of 4.4 years of education. This leads to various levels of literacy:



## Relation between SGFE workers and PSE:

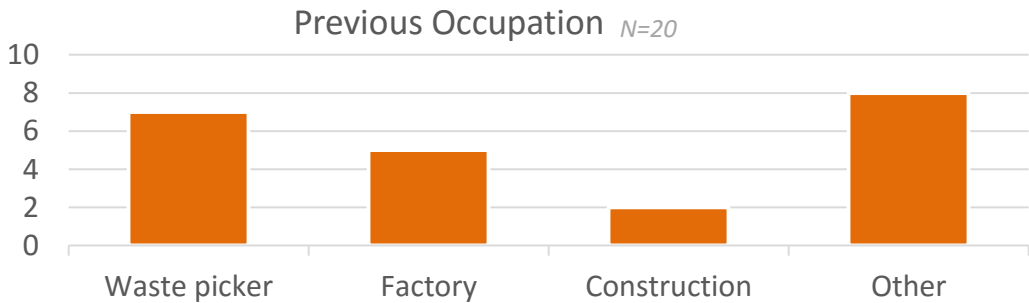


# Workers: Economic impact

*Employment by SGFE means more revenue and more stability for most workers*

## Previous occupation

Before joining SGFE, most workers were or had been waste pickers. However, many occupied several occupations and they didn't always mention waste picking when asked.



## Revenue

This diversity in situations before joining SGFE means very different impacts in terms of revenue. The average revenue of workers before joining SGFE was \$94.34. However this figure hides big gaps. The lowest revenue was \$33 per month for a female waste picker and the highest was \$150 for a paper factory worker. On average, working for SGFE has a strong beneficial impact in terms of revenue:



The average revenue has increased by \$47. The variation in revenue between before SGFE and now varies from a 5% decrease to a 355% increase.

## Stability

For 18 of the 20 interviewees, working at SGFE is their first job with an employment contract. Many among them did not work everyday or have a fixed income before.

Working at SGFE strengthens this stability by providing workers with a structured working environment:

- Strict HR policy sanctioning unjustified absence and tardiness. 100% of interviewees consider this policy is fair and helps the staff work together.
- Working as a team. All 20 interviewees claim they have a positive work relation with the other workers. 5 even mention being part of a team as what they like best about SGFE.



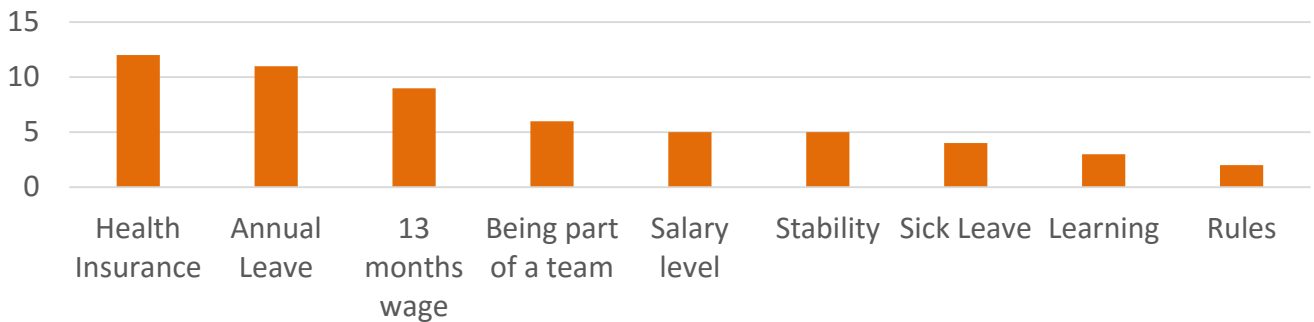
# Workers: Focus on stability

*SGFE generates a stable and structured livelihood for its workers*

## Direct benefits

As mentioned before, SGFE is generally the first formal employment for these workers. This also means it is the first time they receive employee benefits:

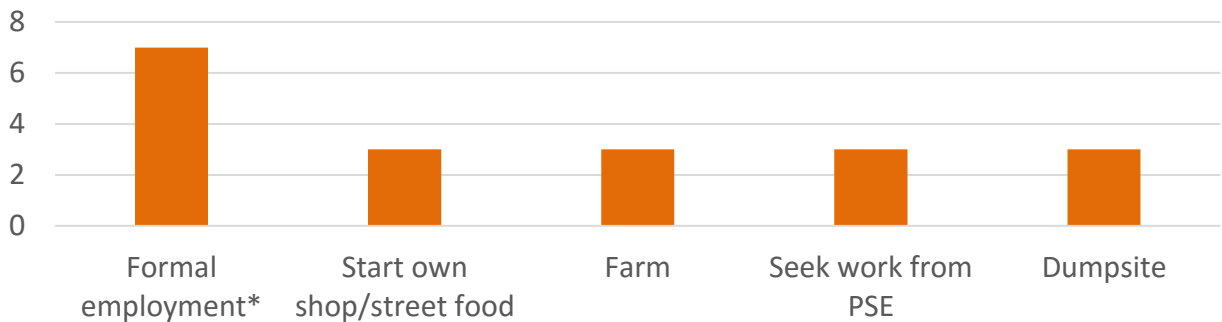
What are the 3 top advantages of working at SGFE? *N=20 (3 answers)*



These benefits generate financial stability (salary, health insurance) but also greatly improve the workers' quality of life. Health insurance and sick leave make for a better access to healthcare. Teamwork, which extends beyond the factory with the SGFE football team, creates social inclusion. Annual leave allows workers to spend the festivals with their families in the provinces.

Furthermore, the employees seem to have perceived the value of having a stable livelihood, very few would consider returning to the dumpsite:

What would you do if SGFE closed? *N=20*



These results show a broadening of perspectives from the SGFE staff. They perceive working at SGFE as being better than the dumpsite and they believe they have the ability to keep on building a sustainable livelihood for themselves without being dependent on SGFE and PSE.



(\* ) Employment within industry or services with a fixed income.

# Workers: Economic impact

*Debt is a major issue among SGFE workers*

## Debt

Debt is widespread in Cambodia. Figures regarding debt in Cambodia are unreliable as informal or semi-formal credit still compose the bulk of loans. Formal credit is growing fast. Micro-finance grew its loan portfolio nationwide by 127% between 2013 and 2014. However many borrowers have multiple loans including micro-finance, money lenders and relatives or neighbours.

### Terminology

- Informal credit: loans from members of the family, neighbours, etc.
- Semi-formal credit: loans from money lenders or pawnshops
- Formal credit: loans from recognized credit institutions such as banks or micro-finance

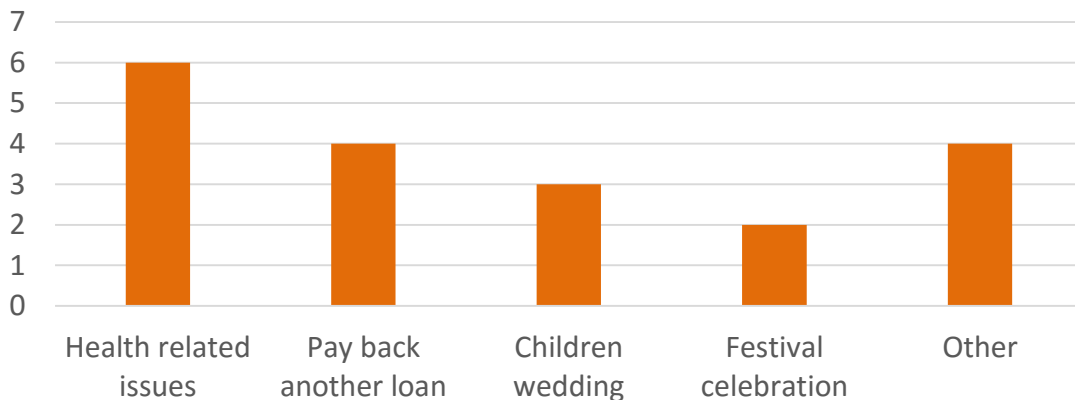
18 of the 20 interviewees at SGFE are in debt:

Debt range: min  
\$60

Average debt  
\$639

Debt range max.  
\$1500

Why did you borrow money? *N=18 (multiple answer)*



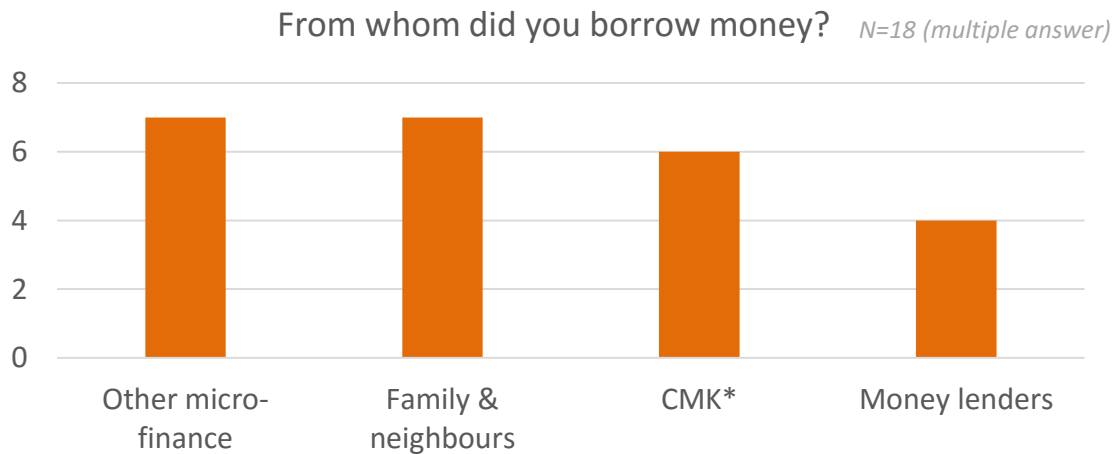
The main sources of debt are health expenses for themselves or relatives and pre-existing debt. A striking example came from one of the younger workers whose mother ran away from her creditors leaving him with the debt.



# Workers: Economic impact

*SGFE workers have access to formal credit*

## Access to credit



Loans among SGFE workers are dominated by micro-finance. Working for SGFE gives the workers access to formal credit. As waste pickers they would most likely have had to rely on money lenders or family members for a loan and, in both cases, pay a steep interest rate (approx. 20%). CMK is the IMF where the workers have their SGFE bank account and 4 of the loans granted to the workers are backed by SGFE in an attempt to help members of its staff in financial distress. Micro-finance institutions were mentioned by 13 of the workers including 6 at CMK and 4 at AMK.

However, many workers still have outstanding informal and semi-formal debt. 7 interviewees mention informal credit including loans from neighbours, friends, family in Phnom Penh and in their province. Just 4 workers have debt with local money lenders.

Unfortunately these loans often generate more debt as steep interest rates make it hard for low income families to reimburse them. This was the case of one of SGFE’s workers. She had to borrow money from a money lender when her husband was sent to jail. Unable to pay back the interest and the principal on her loan she turned to SGFE which backed her for a new loan at CMK.

(\*) CMK: *Crédit Mutuel Kampuchea, micro-finance and SGFE partner for the workers’ bank accounts.*

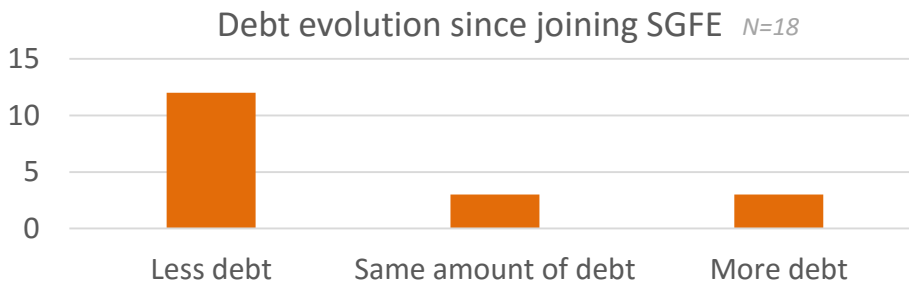


# Workers: Economic impact

*SGFE is working to reduce its workers' debt*

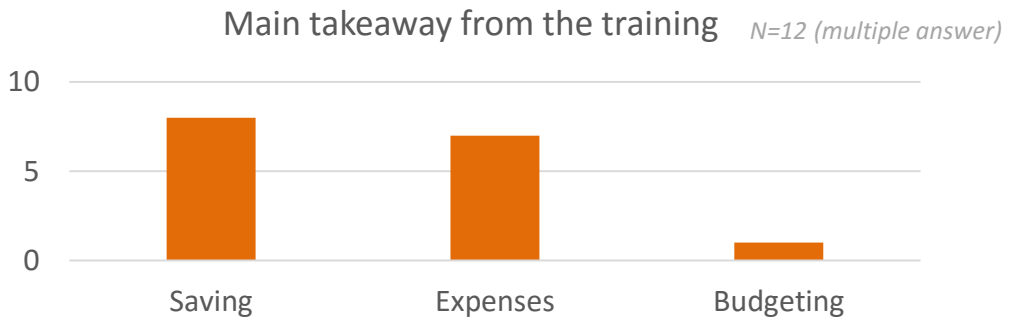
## Debt reduction

Through SGFE, workers access a regular and comparatively higher revenue. A better economic situation seems to help relieve the workers from debt.



## Financial Literacy

SGFE carried out a pilot financial literacy training for its workers in the summer of 2015. Out of the 20 interviewees, 12 claim they remember the session and learned something.



## Bank accounts

SGFE opens bank accounts at CMK for its workers. Only 5 workers had an account before.

Bank account usage:

- All workers receive their payroll on their account. 19 out of 20 withdraw it all at once
- 7 workers use their account for a loan
- 8 workers have a saving plan. On average they save \$6.25/month each, i.e. approximatively \$75 per year

However 16 out of the 20 workers would rather receive their salary in cash because retrieving it from CMK implies paying for transportation and spending time waiting in line. 2 workers mentioned they would change their minds if CMK had ATM cards.





# Workers: Economic impact

## *SGFE prevents further debt through employee benefits*

### Advances

On top of the financial literacy training, SGFE helps workers make ends meet each month by allowing them to receive a limited part of their salary in advance exclusively during the second half of each month. This aid, conditioned by the HR policy, ensures employees do not need to borrow money, take their children out of school to work or sacrifice essential expenditures at the end of a month because of bad money management.

### 13 months salary

An important source of reckless spending and debt in Cambodia is festivals, especially Cambodian New Year. The 13<sup>th</sup> month of salary, paid just before Khmer New Year, acts as a buffer for the extra expenses induced by these celebrations when the workers usually borrow money for the events.

### Health insurance

Health expenditure can easily become a financial burden in Cambodia. According to a Phnom Penh Post article from June 2015, Cambodians spend \$50 a year out-of-pocket in 2013 (57% increase in 3 years). According to WHO, 6% of the population is at risk of being pushed into poverty because of health costs. Faced with such costs, many poor Cambodians rely on local, uncertified “doctors” and “pharmacists” with all the risks this may induce.

SGFE provides its workers with standard health insurance. The cost of the health insurance is \$90/year for each worker. Although not all the workers fully understand the insurance, several have used it in the past and were able to receive treatment with no out-of-pocket expenditure.

# of workers aware they have health insurance	16
# of workers who understand how it works	11
Once explained, # of workers who prefer the insurance to receiving the fee in cash	18

Once it was explained to them, most workers understood the value of the health insurance and many claimed they preferred it to cash as they knew they would spend it and would not be covered in times of need.



# Workers: Social impact

*Most workers' living conditions have improved*

## Living conditions

Overall the workers living conditions have improved since joining SGFE. However some situations have evolved due to external factors: intervention of NGOs, events in family, etc.

Notable improvements:

	Before	Now
# of workers with running water at home	11	16
# of workers connected to electricity grid	16	19
Average rent paid by workers*	\$10.40	\$25.85



Pictures of NGO villages housing for poor communities including waste pickers to provide a safer environment with better equipment and access to amenities

(\*) Average for 10 workers who paid rent before and for 14 who pay rent now. Includes low rents paid to family members and NGOs.



# Workers: Awareness of SGFE's mission

*Understanding of SGFE's environmental role is limited*

## Understanding of SGFE's mission

SGFE workers each have a company polo shirt. On the back of the shirt it is written "We work for society and the environment" in Khmer. Only 10 of the workers knew what was written and understood at least to some extent what it means.

## Communicating about SGFE

Outside of work, 14 of the 20 interviewees talk about SGFE to people. Among them, 10 talk about the working conditions, mainly about the benefits (health insurance, help received from SGFE...) and 7 talk about the product quality.

## Product usage

Workers at SGFE are given the opportunity to buy the product at a reduced price.



12 workers purchase charbriquettes from SGFE



8 workers use the charbriquettes at home



5 workers give the charbriquettes to their families



## Workers: Children

*SGFE encourages education through its policies for the workers' children*

Because of the strong link between SGFE and PSE, it was important to understand the impact of SGFE not only on its workers but on their children as well. One of the central HR policies of SGFE is that **all workers must put their children at school** to work at SGFE. PSE accompanies their children, be it in its programs or in affiliated schools.

### Sample

Among the 26 workers, 9 have children. In total, they have 35 children. Thanks to the HR policy, this means that 21 children are going to school and will keep studying until they have finished their studies.

5 of them, between the age of 14 and 24, were interviewed. Two of them had recently finished their studies but the other 3 were still currently involved with PSE.

The first feature that appears is that all children have been to school much longer than their parents.

### Average number of years spent at school



Despite it being an obligation for their parent, all children feel their parents support them thoroughly in their education, encouraging them to study or trying to convince them not to drop out of school. They never express studying as being something difficult to do as they have a lot of support.



## Workers: Children

*Studying at PSE opens new opportunities at having a stable future*

### Future opportunities

When asked about their children's education, workers unanimously consider they will get more opportunities and a better future thanks to their education, something their children agree upon when asked. They all consider education allows for a stable job, and parents talk about their children becoming office staffs, accountants, mechanics or even doctors. The example of Visal and Phalla, two members of the SGFE staff, is often quoted as a model of what they want their children to become.

- **PSE is a huge factor in improving the life of the workers' children.** As explained by one of the children, "unlike my former school, teachers care about teaching us at PSE, they look after us". In their free time, the children from PSE often study all together.
- **Vocational training**, part of the PSE curriculum, is an essential part of their education program, as it allows them to gain experience and find a steady job in a variety of fields – for the children interviewed: tourism, air-con or marketing.
- Once in vocational training, none of the children continue going to the dumpsite, as they have a new income. This is also helped by the fact that, having classes from Monday to Sunday, they have less free time to go to the dumpsites and they are motivated by the students working together to study.



Source: PSE – Rapport d'activité 2013-2014





## Workers: Children

*SGFE offers the children a stable family environment by bringing stability to their parents*

### Awareness about SGFE

All children agree that SGFE is a great opportunity for their parents. It gives them a stable job with good working conditions, and provides a necessary added income to the family. As explained by one child, his parents had a hard time putting food on the table, but his family can now afford more things than before.

Working in a team is also often mentioned, as it provides the parent with a good work environment. *“Without SGFE, my mother would be alone at home, not doing anything”*

Regarding the social and environmental implications of SGFE, children are less aware of what is at stake. They understand that SGFE produces charbriquettes with recycled materials, but the younger ones don't understand the environmental impact of charcoal or why SGFE is social. The smoke and sparks are the main features children are aware about.

### Focus: Norn Pich Night guard at SGFE



Coming from a poor farmer family in another province, Pich moved to Phnom Penh looking for a job to help his family. That is when he started working as a night guard at SGFE.

It is there that he got a chance to start studying again, going into vocational training in sales and marketing with PSE. It opened huge opportunities for him: he is now interning in a car company, and he is leaving in a few weeks to do an internship in Malaysia.

He says PSE and SGFE gave him a chance to acquire new experiences and opportunities. After his studies, he wants to apply for an MBA to continue improving himself. And after that? He will start his own company and develop the sales and marketing programs that Cambodian universities lack today.

*“SGFE is a big family. It gives new opportunities to people and helps get them off the dumpsites”*





# CUSTOMERS

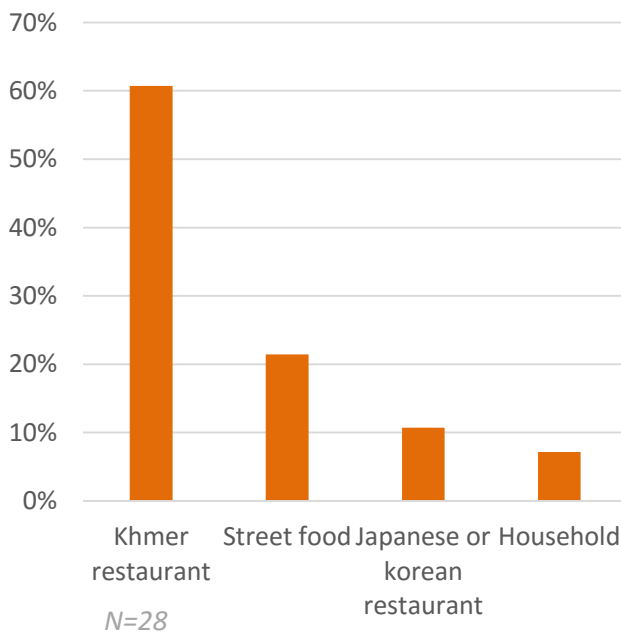


# Customers: Sample presentation

*The customers were divided in two categories: charcoal users and retailers*

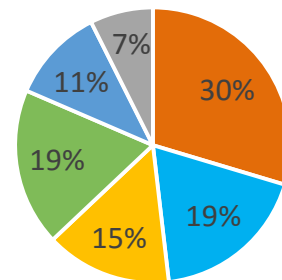
The users sample comprehends 28 users. They are divided in 4 different categories:

- Japanese and Korean restaurants are mostly up-scale restaurants which is why they need a better fuel than traditional charcoal which makes a lot of smoke and can alter the taste of meat.
- Khmer restaurants represent the majority of SGFE’s clients.
- Street food vendors often own a cart on which they put a barbecue or cook stoves and carry over the streets.
- Households: some people had been buying their charcoal directly from SGFE at the beginning of the project and SGFE exceptionally agreed to keep selling to them. They represent a minority.



Since when do you buy charbriquettes from SGFE?

N=28



- <1 years
- 1 to 2 years
- 2 to 3 years
- 3 to 4 years
- 4 to 5 years
- 5 to 6 years

- All of the interviews have been conducted at the users’ workplace (except for the households)
- 3 interviews were conducted on restaurant’s staff because the owner was not available



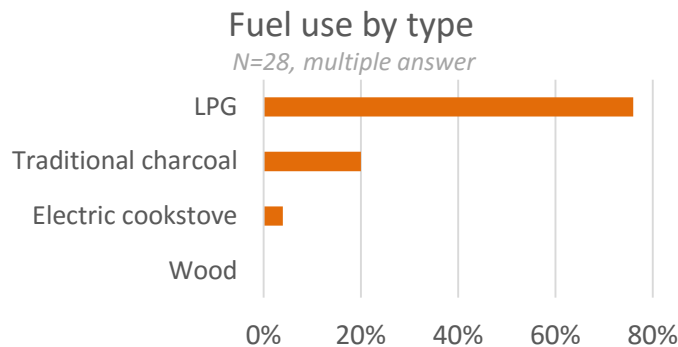


# Users: Sample presentation

*Most users also use LPG and sometimes traditional charcoal*

## Fuel use

Few users actually use only SGFE's charcoal. Customers claim charbriquettes are very adequate for certain tasks but cannot entirely replace traditional charcoal or other kinds of fuels. Therefore 78% of the users kept using LPG (Liquefied Petroleum Gas) and 20% traditional charcoal.



Indeed many customers mentioned that even though charbriquettes are very convenient for grilling it doesn't burn strong enough to cook rice (or to boil water in general). Traditional charcoal is also used sometimes to start charbriquettes, because they claim it is quite difficult to start compared to traditional charcoal.

Most customers use charbriquettes either on a barbecue or in a cookstove.



# Retailers: Sample presentation

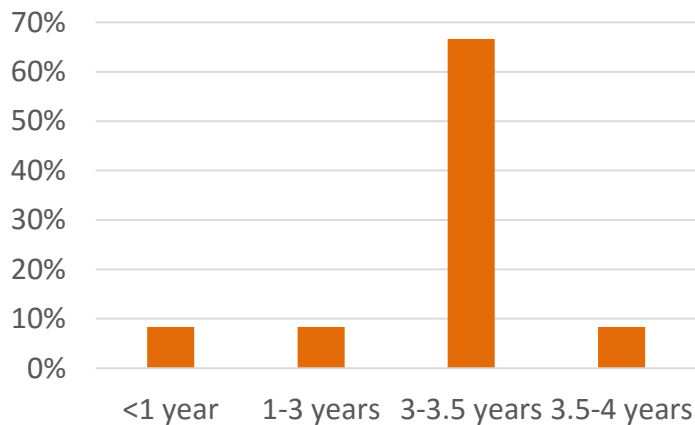
*12 retailers were interviewed*

During the study, 12 retailers were interviewed. They were separated in two categories:

- 8 Fuel stores: small shops that also sell traditional charcoal, gas and sometimes gasoline.
- 4 Convenience stores: sell a lot of different goods (food, hygiene products...), including charcoal

All of the retailers resided in Phnom Penh and were interviewed at their workplace. 2 interviews were conducted on one of the shop owner's children because he/she was not available.

Since when do you buy SGFE's charcoal? *N=12*



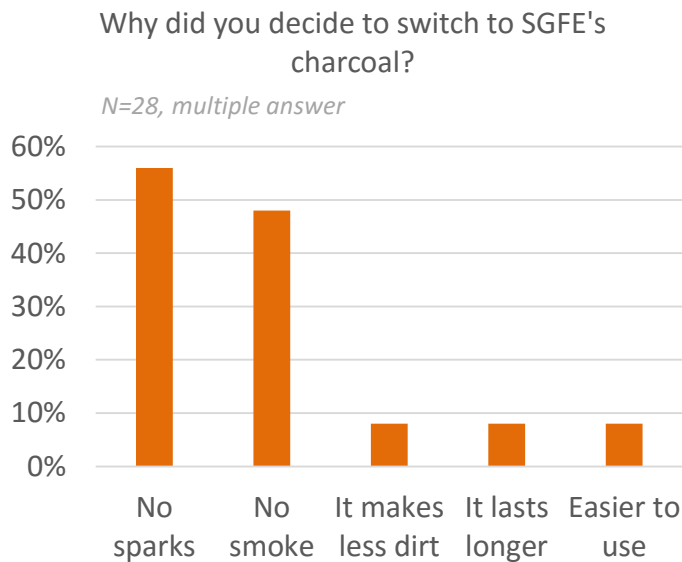
## Users – Impact on the activity

*The absence of smoke and sparks represents a substantial advantage for charbriquettes’ users*

### No smoke and no sparks

The main impact of SGFE on its users lies in the fact that its charcoal doesn’t produce any smoke or sparks. Sparks are usually a source of injuries for the cooks (sometimes even the clients). Many customers also mentioned the fact that SGFE’s charcoal makes less dirt than traditional charcoal, because unlike traditional charcoal it doesn’t cover everything with black dust and soot.

However many customers claimed that charbriquettes produce more ash than traditional charcoals while they burn and that sometimes they may scatter all over the kitchen.



### Impact on health:

Users use charbriquettes instead of traditional charcoal when they cook, which means that 1 hour spent cooking with charbriquettes represents 1 hour without exposure to charcoal smoke. SGFE’s impact on its customers’ health is all the more significant since acute respiratory infection is one of the 10 main causes of mortality in Cambodia.

Average # of hours spent cooking with charbriquettes per day

7



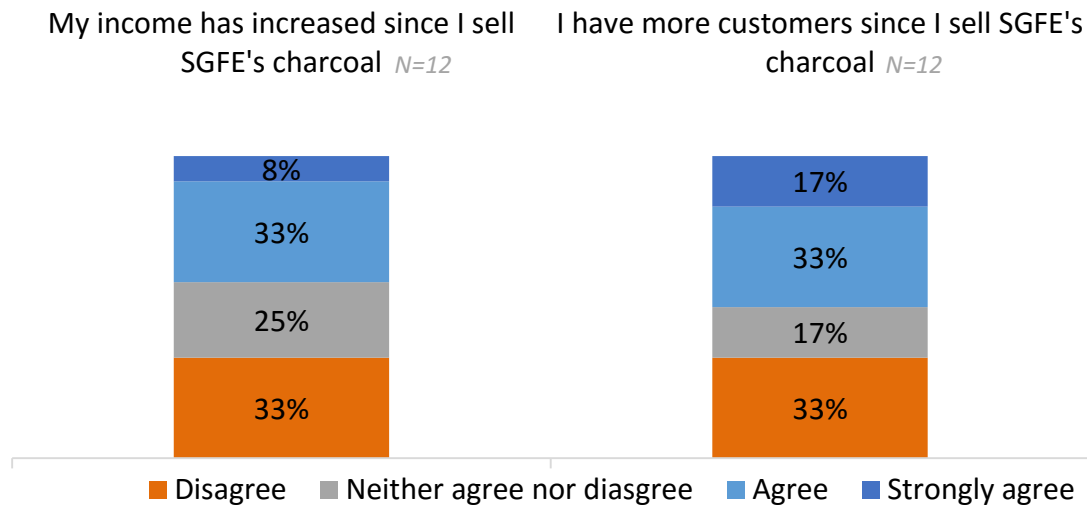
# Retailers: Mix marketing

*Demand for clean charcoal appears to be growing*

## Impact on retailers' income

Many retailers do not hold formal accounts and were unable to estimate their income. Qualitative questions were used to assess the impact of SGFE charcoal on their income.

However selling charbriquettes doesn't result in an increase of their income because the margin is more or less the same as traditional charcoal.



## Mix marketing:

For most retailers SGFE's charcoal is not more profitable than traditional charcoal but they sell it because their customers ask for clean charcoal. They don't ask for SGFE's charcoal in particular, but they seem to be aware that clean charcoal exists because they have heard of it. **6 out of 12 retailers said that they have started to buy SGFE's charcoal because some of their clients had asked for clean charcoal.**

One of the retailers (who was a real promoter of SGFE's charcoal) said that she had tried clean charcoal from SGFE's competitors before. But her clients had been complaining because it fell apart while burning and didn't last long enough and thus she had switched to SGFE charcoal.

It appeared that a demand for clean charcoal has emerged and that SGFE's charbriquette is perceived as a higher quality product by retailers.

However it is still quite difficult to assess the size and the structure of this growing market since SGFE's competitors are small and difficult to identify.



# Customers: Impact on the Supply chain

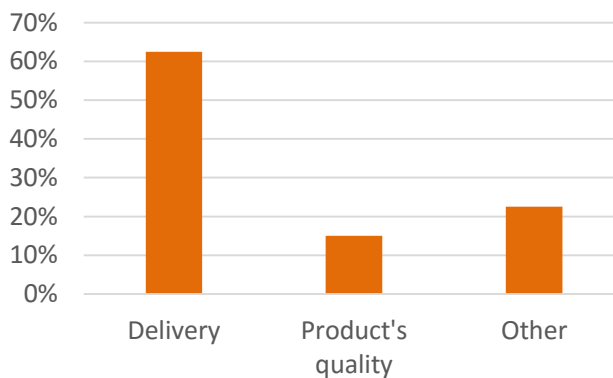
*SGFE's home delivery system is perceived as its best added value*

## Impact on the customers' supply chain

The supply chain management of SGFE's charcoal users is also impacted by SGFE. When they were buying traditional charcoal, the customers had to look for a fuel store or wait for street charcoal vendors to come by. It therefore used to cost them both time and money to find charcoal.

All users said that SGFE was professional and most of them had not experienced any delays. SGFE's home delivery system is a great asset for the customers, 63% of them said it was the thing they liked most about SGFE.

What do you like most about SGFE? *N=28, multiple answer*



# SGFE perception and environmental awareness

*People recognise SGFE’s charcoal as a good quality charcoal but few identify SGFE as a brand*

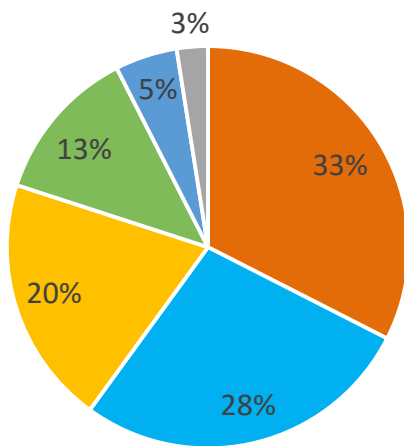
## SGFE’s perception

Most people in Cambodia buy charcoal from street sellers, not from big companies, and are therefore not used to associate charcoal with a brand. This is why final customers have a hard time understanding what SGFE is. Many interviewees have the same problem, they identify SGFE’s charcoal mainly through its recognisable bags with green writing.

However those who showed a real interest in clean charcoal clearly knew that SGFE is a brand and a company that sells clean charcoal.

Customers hear about SGFE mainly through SGFE’s sales person. Word-of-mouth also plays an important role through his sales prospecting.

How did you get to know SGFE? *N=28*



- Sales person
- Word-of-mouth
- I saw an ad/delivery
- I don't know
- I sought clean charcoal and found SGFE's website
- Other

## SGFE’S SALES PROSPECTING:

To find new clients SGFE sales person goes around a specific district of Phnom Penh to talk to each shop owner (who could potentially buy charcoal). To encourage them to try charbriquettes new customers are offered a free bag.

However retailers said that none of their customers are aware of what SGFE is. Despite the printed bags showing SGFE’s logo and the communication material provided by SGFE (signs to put in front of the shop) people do not know about it. However it appears that end customers recognised SGFE’s bags through their specific green writings. They do not identify it as SGFE’s charcoal but as good quality clean charcoal.



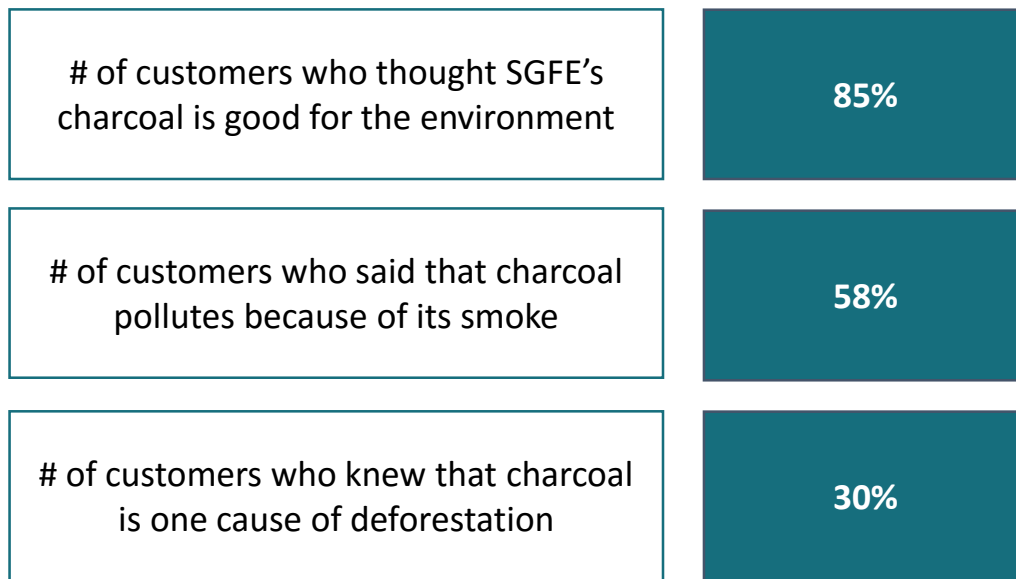
# SGFE perception and environmental awareness

*Customers are aware that charcoal consumption affects the environment but they know little of its real impact*

## Awareness about environmental issues

The customers were also asked about what they knew of charbriquettes' impact on the environment.

In most cases air pollution was considered as the main consequence of the use of traditional charcoal.



# CONCLUSION





# Conclusion

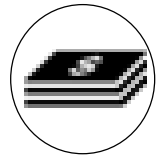


## Social impact

- By getting them off the dumpsite SGFE gives its workers and their family **more stability**
- This stability, combined with the obligation to have their children at school, creates **new opportunities for the future of their children**

## Economic impact

- Workers increase their income, but also have a **formal contract and a stable revenue** for the first time
- SGFE helps workers handle their existing debts better, but also helps **prevent further debts** with its employee benefits



## Environmental awareness

- Charbriquettes are perceived as a better product and as having a positive impact on society as they make **less smoke and spark** than traditional charcoal
- Charbriquettes directly contribute to **limiting deforestation**

## Health

- Workers are kept away from the health issues relating to the dumpsite, and are also covered by **health insurance**
- The product is **safer and healthier** for those who use it, as it strongly reduces indoor air pollution



With an average consumption of 30kg per household, sales of 60 tons per month would be equivalent to the consumption of

**2000 households**



# Recommendations

## Marketing

For now SGFE is one of the only companies that sell clean charcoal. Its competitors are smaller and the quality of their product seems lower (according to charbriquettes' users and retailers). The demand for clean charcoal is clear but in order to become a real competitor of traditional charcoal, SGFE must become a recognisable brand.

- Creating a visual identity for SGFE: some people recognise SGFE's charcoal as a quality product and associate it with the green writings on its bags. SGFE now needs to gain visibility to help customers identify its brand through the retailers that sell it and restaurants that use it: banners, stickers...
- Demonstrations: "no sparks, no smoke" is SGFE's best sales argument. One of the best ways to convey this argument would be through street demonstrations with food vendors and a sales person from SGFE. It could be particularly efficient to carry out demonstrations during special events like wedding ceremonies or festivals.
- Develop diamond charbriquette: Diamond charbriquette are an ideal product for up-scale restaurants which are willing to pay more for a better product. For now the diamond charbriquettes deliveries are not reliable. Moreover selling charcoal to these restaurants would be a great argument to convince more modest restaurants to buy SGFE's charcoal.

## Encourage Savings

Out of the 20 workers interviewed, only 8 mentioned having a saving plan. SGFE could further help its workers avoid debt by encouraging them to build savings through their bank account at CMK. This encouragement is especially necessary among men as only 1 out of 12 has a saving plan whereas 7 out of 8 women do.

## Trainings

12/20 workers claimed they learned more about household finance during the financial literacy training. Most workers expressed a favourable opinion to a second training. These trainings should be short and engaging. Other aspects than financial literacy could also be beneficial for the workers in the light of this study:

- How to use health insurance
- Employment contract
- SGFE's charbriquette impact on health and safety



# Bibliography

This report was made possible thanks to the help of all the SGFE team. A particular thanks to Carlo Figa Talamanca, Visal Sim and Phalla Seang. Thank you also to PSE and their translator.

Most information for the report was gathered directly from the field: interviews, focus groups.

Interviews of the workers – carried out from October 26<sup>th</sup> to October 30<sup>th</sup>

Interviews of the workers’ children – carried out on October 31<sup>st</sup>

Interviews of the customers – carried out from November 2<sup>nd</sup> to November 6<sup>th</sup>

In addition to this, the report includes data from the following:

SGFE database

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