



MOTIVATORS AND BARRIERS FOR SANITATION ENTERPRISES IN VIETNAM

JULY 2015

ENTERPRISE IN WASH

'Enterprise in WASH' is a joint research project led by the Institute for Sustainable Futures (ISF) at the University of Technology Sydney, which investigates the role of private and social enterprises in the delivery of water, sanitation and hygiene (WASH) services for the poor. For other Enterprise in WASH publications, see www.enterpriseinwash.info

ABOUT THE AUTHORS

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The Centre for Natural Resources and Environmental Studies (CRES) was established in 1995 at the Vietnam National University. CRES conducts multi- and inter-disciplinary research on biodiversity and environmental issues for decision making and sustainable development.

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EXECUTIVE SUMMARY

Introduction

Small-scale enterprises play an emerging and important role in supporting increased access to water and sanitation products and services in Vietnam and elsewhere. While studies have been undertaken to examine the results of enterprise roles, little is known about what motivates enterprises' involvement in service provision for the poor, and what enterprises see as the key factors that support and hinder their viability and business success.

This study was undertaken by Institute for Sustainable Futures, University of Technology Sydney with Centre for Natural Resources and Environmental Studies (CRES) at the Vietnam National University and SNV Netherlands Development Organisation. It drew on literature in the fields of small-scale enterprises, entrepreneurship and social entrepreneurship to investigate the motivations, drivers and barriers for sanitation enterprises in Muong Ang District in the province Dien Bien, north west Vietnam.

Study purpose and methods

The purpose of this study was to explore enterprise motivators and drivers and consider how these may be best harnessed and supported by development agencies and governments, within the context of an evidence base on the key real and perceived 'barriers to entry' and business risks within Vietnam's culture and regulatory environment.

This study involved structured interviews with female and male masons involved in mason businesses. In addition, an oral history approach was drawn upon with three female masons to enable deeper insight into the opportunities for, and constraints on, women's participation in enterprise development.

Research tools were developed based on the literature concerning entrepreneurship and social entrepreneurship as well as previous research on the political economy of enterprise engagement in water and sanitation services in Vietnam. An analytical framework guided the analysis process to identify entrepreneurial traits and the most important factors influencing enterprise success. Qualitative responses were categorised into relevant themes (allowing quantitative analysis of their recurrence) and illustrative quotes used to highlight common and atypical perspectives.

Enterprise characteristics

Sanitation enterprises (masons) interviewed (n = 20) were 60% male, in the range of 20–55 years old, with relatively low levels of education, and with limited or no previous work experience. Most (90%) also devoted at least part of their time to other jobs in parallel to their mason business and of the time they spent on their mason business, many constructed schemes other than toilets. The businesses were predominantly informal and micro-sized with no more than ten years of operation. Some mason businesses sold toilet pans (40%) and most offered a range of services including installation of the full toilet package with or without superstructure, as well as offering construction of toilets with labour only (i.e. household provides materials). The main customers of most businesses were households and word-of-mouth was the most commonly used marketing method. An overview of the profiles of the enterprise owners and businesses is shown in Table 1.

Table 1: Summary of sanitation businesses

Characteristics	Sanitation entrepreneurs
Gender	40% female, 60% male.
Age	75% were under 36 years old.
Education level	25% had completed primary school, 40% completed secondary school, 25% had completed high school and 10% had technical or intermediate qualifications (all stated as highest education level attained).
Previous work experience	80% had no previous professional experience.
Other concurrent job (side-job)	90% had a side-job, of which many worked in animal husbandry and agriculture.
Time spent building toilets	Two masons that spent 100% of their time on the mason business, but did not spend all their time on building toilets. Of the time spent on their mason business, three masons spent 100% of their time building toilets.
Time spent as a mason	60% had joined or established the mason team over the last 10 years.
Size (number of staff)	2 businesses had 40 or more employees, 2 had 19-20 and the remaining 11 businesses had between 2-10 staff (5 were unknown).
Legal status	70% were informal and not registered.
Business initiation	30% of businesses were initiated by a family member, 40% initiated by the mason themselves and 40% by another mason.
Source of capital	66% drew on personal savings, 25% had accessed loans, and 21% had accessed grants and society funds.
Service offered	40% sold toilet pans, 40% offered installation without superstructure, and 45% offered installation with superstructure. 75% offered construction/installation only (labour only).
Customer base	40% exclusively served households and 10% served exclusively institutions. The remainder served a mix of households and institutions, with households constituting a greater proportion.
Marketing methods	60% used previous customer's recommendations, 10% practiced direct selling techniques and one relied on government staff (Women's Union).

Key findings about sanitation enterprises

Entrepreneurial traits: Five entrepreneurial traits (from literature) were considered: 1) proactiveness, 2) need for independence, 3) need for achievement, 4) innovativeness, and 5) risk taking (Ernst, 2012). A sub-set of quantitative and qualitative questions were relied upon to test for the presence of these traits. In general, low levels of entrepreneurial traits were found amongst respondents. The “need for achievement” was the most common entrepreneurial trait, present amongst half the masons. The “need for independence” was absent for all masons. This can be explained by the team based (and often family based) nature of the businesses. Presence of other entrepreneurial traits (risk taking, innovativeness, proactiveness) was generally weak. Most masons did not consider themselves entrepreneurs, rather their vocation was one of necessity and lack of other choices for income generation.

Pro-social traits: The term ‘pro-social’ is sometimes used to explain the tendency of a person to voluntarily behave (or intent to behave) in a way that benefits others. Pro-social behavior is usually carried out to promote well-being in the society (Brief & Motowidlo, 1986). Ernst (2012) defines two core traits that define a pro-social personality: sense of social responsibility and empathy with the poor.

Pro-social traits acted as a motivator for some (11 out of 20) but not all masons. More males exhibited no / weak pro-social traits compared to females. More females exhibited medium or strong pro-social traits compared to males. Of the nine masons without pro-social traits, many noted the sole purpose was to earn money. Pro-social traits are disaggregated by gender in

Motivations beyond profit and pro-social aspects were also evident amongst the respondents, with the most commonly being the respect masons received from the community due to their increased skillset.

There was indicative evidence that businesses with higher revenue and profit were linked to a greater demonstration of entrepreneurial traits. There was also emerging evidence that a higher number of entrepreneurial traits corresponded to a greater propensity for medium or strong pro-social traits.

Factors affecting success: Respondents’ perceptions of what characterises a leader of a successful sanitation enterprise emphasised personality traits such as dedication, determination, honesty, self-confidence and leadership. Skills were also emphasised, with technical skills raised by more than half of the masons. Other characteristics included solidarity within their mason team, support from relatives and health.

In addition, respondents were asked an open ended question “*What type of person do you think makes a successful sanitation entrepreneur?*” Results are provided in Table 4. ‘Avoidance of risk’ was raised by some masons, which is interesting given that risk taking is an attribute noted in the literature to be associated with entrepreneurial behaviour. Attributes that are absent from the list are access to capital and personality traits related to problem solving – which are also linked to entrepreneurship. It is also interesting to note that ‘marketing’ is on the list, yet was not practiced to any great length by any of the masons.

Table 2: Traits of a successful entrepreneur*

What type of personality do they have?	What skills do they have?	What experience do they have?
<p>Willing to learn Dedication to work Hard working Good tempered Calm and patient Honest Intelligent Kind hearted</p>	<p>Skilled in construction Meets customer’s needs Skilled in planning and provision of estimates Good listening Marketing Design skills Team management Strength Fast worker Professional</p>	<p>Work with other masons Avoidance of risk Experience in building quality construction</p>

* bolded responses represent most commonly reported traits across open-ended and prompted questions

Respondents were also asked about the risks they face as a mason. Financial risks were mentioned, including not being paid by customers (most commonly cited as the biggest risk), lack of capital for daily tasks, and loss of profit due to poor management. Inadequate workload was identified by one mason as the biggest internal business risk, while accidents were highlighted by

four masons as the biggest external risk. Difficulty in finding the right staff and limited business knowledge was also raised as a challenge for some business owners.

Gender dimensions: In Vietnam, female masons are the exception rather than the rule, and this study sought to understand the dynamics that result in this situation, since it impacts on the opportunity for women to play roles in businesses that support improved sanitation. There were several key gender issues that emerged from the analysis. Firstly, there were differences between female and male interviewees' views on how easy it was for women to be masons. A large proportion of male masons thought it was *not easy* for women to play these roles, and yet a large proportion of the female masons interviewed thought it was *very easy* for women to play these roles.

There was also a gendered dimension to perceptions of the roles of men and women more generally. Male interviewees believed women should be at home attending to housework and family commitments, thus believed it was (or would be) difficult for women to be masons. Female masons interviewed were more open to playing a variety of roles, including the role of mason.

Another challenge for women to be masons (or entrepreneurs more generally), identified by both male and female interviewees, was that women often lacked their own capital, and were in more stressed economic conditions than men which provided an obstacle to entrepreneurship as noted by a male mason: "*Not so many women are business owners; there is a lack of money to invest*" and also a female mason: "*It is difficult for women to be business women, due to the economic conditions of women*". Finally, one female mason noted how she was initially ridiculed when first working as a mason and it took time for her to build her own confidence to overcome these public perceptions.

The life stories of female masons (collected through oral history analysis) also raised relevant gender issues. For example, gender roles in the family were raised, where one mason noted how her parents supported her education: "*It was unusual that my parents were so supportive of [my] education*". Cultural and social expectations of men and women was discussed in terms of responsibilities of looking after parents ("*that was their responsibility as elder sisters*"); and shame associated with stepping out of traditional roles was noted to have diminished as confidence grew and a change in mindset emerged (one mason noted that "*men can be mason, women can be mason. My thinking has changed*"). These issues also demonstrate changes in the way women are viewed in Vietnamese society over time, e.g. how market reforms in the mid-to-late 1980s led to changes in women's roles, as women were forced to retreat to unpaid household labour (Beresford, 2008). The latter situation and corresponding status of women appears to dominate in the male interviewee's perspectives towards women's roles; i.e. that they need to fulfil these household responsibilities rather than participate in income generation outside the home.

Perceptions of gender, and the roles men and women play in society, are therefore not static, rather they are shaped by a number of factors either explicitly or implicitly. Drawing on these findings can help to understand how to support female masons play stronger roles in sanitation businesses. Such support may involve providing opportunities for experienced female masons to share their stories as a means to build confidence in others, ongoing mentoring from experienced female masons or targeted training and support that is aimed at potential female masons, addressing the broad range of challenges they face in this field.

Table 3 summarises the overarching motivations (or enablers) and barriers (or constraints) to sanitation enterprises in Muong Ang. They are grouped according to the component of the analysis from which they are drawn.

Table 3: Summary of motivators and barriers for existing sanitation enterprises

Motivators / enablers	Barriers / constraints
Characteristics of success and challenges	
<ul style="list-style-type: none"> • Dedication • Determination • Ability and willingness to learn • Technical skills (e.g. in design / drawing) • Solidarity with team 	<ul style="list-style-type: none"> • Not being paid by customers / paid late • Inadequate workload / not enough sales • Accidents • Disagreement with customer • Lack of / limited business knowledge • Difficulty in finding staff with right skills • High level of competition • Remote location of customers (transportation and cost challenges) • Inadequate income from mason business
Entrepreneurial and pro-social traits	
<ul style="list-style-type: none"> • Willing to learn • Skilled in construction • Experience in working with other masons • The presence of pro-social traits provided an additional driver for some masons to continue in their role 	<ul style="list-style-type: none"> • Limited presence of entrepreneurial traits, particularly risk-taking, proactiveness and innovativeness.
Gender differences affecting women’s role in sanitation businesses	
<ul style="list-style-type: none"> • The belief instilled from childhood that females and males are essentially the same and can perform in the same job • Education encouraged for girls • Financial status allowing for education for both girls and boys • Confidence gained through experience, allowing female masons to overcome feelings of shame or inadequacy • Having a role within the Women’s Union provided a means of introduction to potential customers 	<ul style="list-style-type: none"> • Preconceived idea that masonry work is not for women due to physical nature of the work (may be true for some women, not for others) • Preconceived idea that women are slower learners and have less skills than men generally • Some women lack investment capital required for mason business • Belief in cultural gender roles amongst some masons led them to see women’s role was at home • Sense of shame some women felt in stepping out of these gender roles • Limited / lack of female mason role models to encourage them to persist with the job should they want to • The perception (predominantly amongst men) that it is difficult for women to be entrepreneurs can act as a barrier to entry. Some males may discourage women to play mason roles, or be reluctant to take them on as mason assistants.

Conclusion

The report has presented the findings from the study which investigated the motivators and barriers faced by sanitation enterprises in Muong Ang District, north west Vietnam. Results highlight that beyond the “need for achievement”, masons generally lacked traits identified in the

literature that are associated with being an entrepreneur. Some were motivated by pro-social goals, such as keeping the environment clean and helping others with access to hygienic sanitation options.

Barriers to entering sanitation enterprises, or playing more prominent roles in mason business included the inability for some customers to pay, high competition amongst mason teams and limited available work. Difficulty in finding the right staff and limited business knowledge was also raised as a challenge for some mason business owners. These challenges may be overcome through measures such as targeted training, and government support for poor customers. More nuanced policy relating to supporting the private sector in rural and remote locations may also be needed, with CSOs and research institutions able to play roles in providing an evidence base for such policies.

By taking a gender lens to analysis, results revealed differences in male and female interviewee's perceptions of female masons, which often stemmed from how females were viewed more generally, and the roles they played in the home and providing for their families. Women were able to perform in the role of mason – some becoming chief masons with their own teams, and gaining confidence as they did so. As more examples of females in these roles emerge, it is anticipated that perceptions of women's roles may begin to change and more females can have active roles in sanitation businesses. It is also important to note that gender roles in Vietnam are dynamic, and these have shifted over time due to political and economic influences. Shifts in political ideology from socialism to capitalism have meant women's roles have changed from being politically and economically active in society, to being more constricted to household occupations.

This research has shown that more could be done to attract and retain women in small business roles that relate to sanitation – an area closely related to women's roles in a traditional sense. For example, the government could provide vocational education for girls as a way to specifically address the barriers women and girls face to working as masons, providing them with practical experience and confidence to take on roles in sanitation. CSOs, through their relationships with communities, government and other organisations working in sanitation, may be able to assist in enabling the sharing of such stories. Establishing mason associations, which have provided a supportive environment for businesses in other locations, may also be an area CSOs can provide support. Associations may also be formed for female masons to specifically address the barriers they face. Doing so may help to overcome perceptions of gender stereotypes that have in the past provided barriers to women playing certain roles, for example as masons and entrepreneurs. By building on and increasing the motivating factors and addressing the barriers and challenges, and understanding that gender roles in sanitation can be flexible, opportunities can be maximised to enhance the environment for sanitation enterprises to become successful.

1. INTRODUCTION

This document presents research on the motivators, drivers and barriers influencing small-scale enterprise roles in sanitation services in Vietnam, specifically in Dien Bien, a province in the north west of Vietnam. Masons were selected to represent sanitation service providers, given their role in constructing household toilets. The study sought to better understand what influenced mason's motivations to work in the sanitation sub-sector, and what barriers they faced in doing so.

BACKGROUND AND OBJECTIVES

Background

The basis for Civil Society Organisations (CSOs) to work with private and social enterprise is a shared interest in the value of water, sanitation and hygiene (WASH) services for the poor. CSOs have an interest in understanding what motivates enterprises involvement in WASH service provision for the poor and perspectives from enterprises about their businesses. For instance, is the core motivation simply to make a profit, or are there more complex, extensive motivations? This study draws on literature in the fields of small-scale enterprise, entrepreneurship and social entrepreneurship to form the theoretical basis.

Research objectives

The purpose of this study is to explore the motivators and drivers of small-scale enterprise involved in sanitation service provision. In doing so, the study considers how these motivations may be harnessed, and provides evidence base on the key real and perceived 'barriers to entry' and business risks within Vietnam's culture and regulatory environment.

Research questions

The research questions were as follows:

1. To what extent do enterprises and entrepreneurs engaging in sanitation services exhibit the typical characteristics of entrepreneurs or social entrepreneurs documented in the literature?
2. How have traditional 'barriers to entry' affected the success of enterprise and entrepreneurs engaging in sanitation services?
3. What are the implications for effective forms of support to such enterprise(s), such that they may further develop and play a role in serving the poor?

Research framework

This research drew on theories on entrepreneurship and social entrepreneurship, including key characteristics of entrepreneurs described in the literature (Ernst 2012; Freytag and Thurik 2007; Cromie 2000; Light 2011; Nyssens and Defourney 2010; Rauchand and Frese 2007; Robson 2010; Terjesen et al 2011). The study also considered literature on traditional 'barriers to entry' for enterprises (e.g. access to credit, market uncertainty, skill requirements and policy environment) to categorise barriers faced by enterprises (Kelley 2013; Porter 1998; Porter 2008; Reynolds 2000; Robson 2010; Sinha 1996).

This qualitative study involved interviews with female and male existing enterprises or entrepreneurs (masons). Opportunities and constraints to women's participation in enterprise development was given particular attention.

In-depth interviews also formed part of this study. These in-depth interviews were conducted through an oral history, or 'life stories' approach (see Berger and Quinney, 2004; Roberts, 2006), with subsequent narrative analysis undertaken to understand how broad social and cultural dynamics, and the corresponding influence on gender equality, shaped the lives of selected women and led to their roles in sanitation service provision. This approach provides insight into how gender equality affects women's role in sanitation service provision, since in many countries it is assumed that women cannot, or will not, be interested in playing active roles in building toilets as a livelihood activity.

METHODOLOGICAL DESIGN

Research location and sample

Research was conducted in Muong Ang District in Dien Bien Province, which is located in north west Vietnam as seen in

Figure 1. Muong Ang is a mountainous district, 50 km from Dien Bien Phu city, the provincial capital of Dien Bien. Muong Ang's population is 40,506 includes a high proportion of diverse ethnic groups including Hmong, Thai and Kinh. The district also has a high poverty rate (44%) and a low coverage of hygienic latrines (17%) (Dien Bien Centre for Preventive Medicine, 2013).

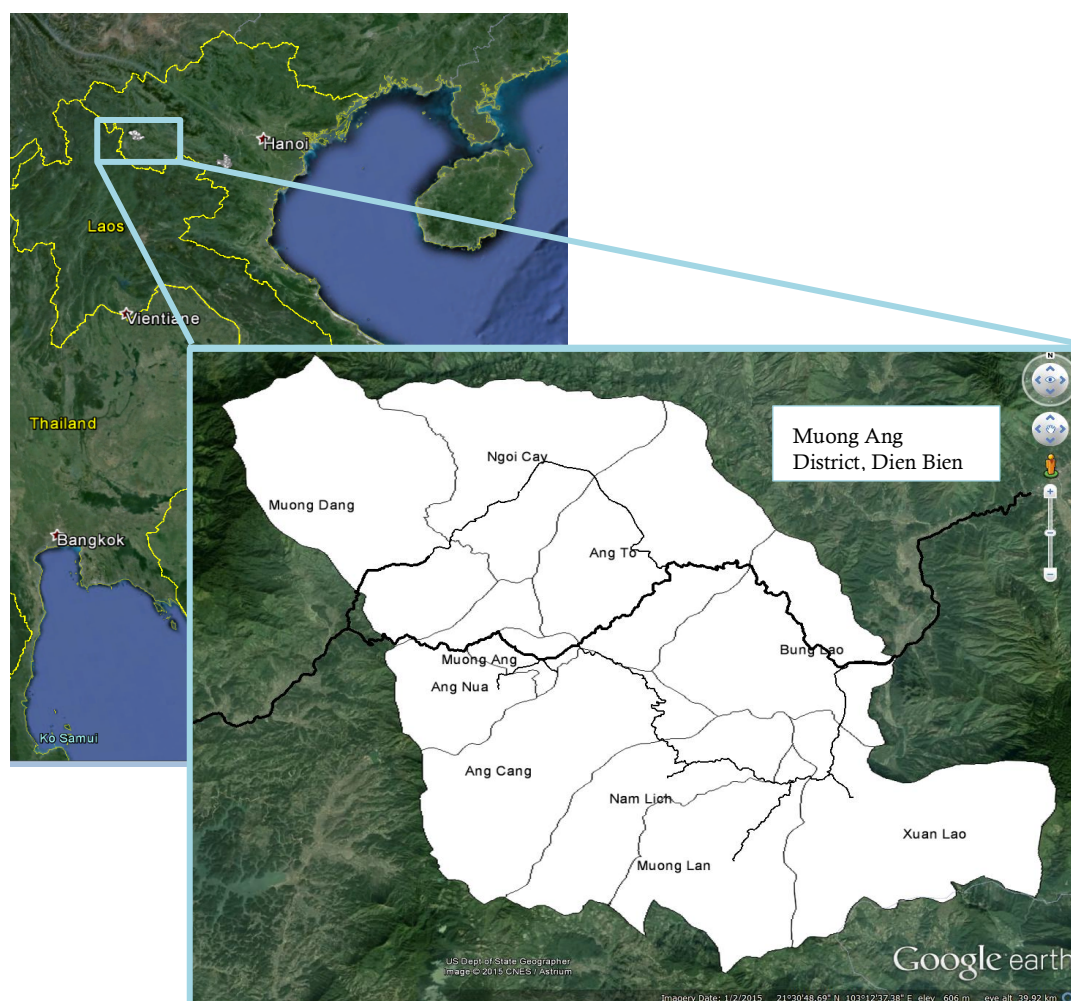


Figure 1: Location of research

The research sample was comprised of masons (for the purpose of this study are considered small-scale enterprises) who resided in Muong Ang District. The sample was comprised of 20 masons (12 male and 8 female) who were currently active (or were until recently active) in providing household mason services.

Sampling method

The sample was purposively selected by SNV in partnership with local government and the provincial and district Women's Union. Amongst the sample, effort was made to include the following types of enterprise:

- successful
- less successful or failed (tried this business and then decided to abandon)

Effort was made to include female respondents in the sample, as female masons, whilst less prevalent than male masons, were trained by SNV and were an important focus within this study.

Data collection method and tools

Data collection was undertaken in September 2014, in Muong Ang District. UTS-ISF, SNV and CRES (with the assistance of a translator) undertook the interviews. A structured questionnaire was administered through face-to-face interviews for all 20 masons. For a smaller sample (three female masons), an additional in-depth interview was conducted to obtain greater depth of insight to the issues relating to motivators and barriers, taking a gendered lens to analysis. Both approaches adhered to UTS-ISF's ethical research process, with informed consent obtained prior to interviews undertaken and findings checked with research participants as needed.

Two instruments were used to collect data for this report. The first instrument was a structured questionnaire that included the following key areas:

- Demographics related to the owner/manager (e.g. age, education), and to the enterprise itself (size, profit, assets, employees etc.)
- Motivations, entrepreneurship traits and pro-social traits
- Contextual factors (finance, marketing, human resources, operations, government and regulation)

A combination of open-ended questions and closed questions were used, to allow for triangulation of findings as well as in-depth responses in certain areas.

The second approach involved in-depth interviews as described above, which were undertaken with three female masons as noted above. Questions were designed to explore broad themes emerging from the participants' stories, and in keeping with the broad research questions.

Data collection tools are available in Appendices 1 and 2.

Data Analysis

An analytical framework was developed to guide the analysis process for the structured interviews. This framework supported the testing of hypotheses developed from the literature, and included the following areas:

1. Evidence of entrepreneurial traits

2. Evidence of pro-social traits
3. Level of success of different enterprises
4. Factors influencing success (including demographic variables; cultural context; entrepreneurial traits, personality and skills; contextual factors; and gender)

The first three analytical areas described above involved scoring of each enterprise based on responses to relevant questions. A scoring protocol was developed and inter-rater reliability was tested and confirmed between the two researchers undertaking analysis. Qualitative responses were both categorised into relevant themes (allowing quantitative analysis of their recurrence) as well as use of illustrative quotes across both common and exceptional perspectives.

The analytical process for the oral histories component followed a narrative analysis approach as described by Polkinghorne (1995). While the broader research project provided an overarching framework for analysis, we also were open to inductively derived concepts to emerge (as noted by Polkinghorne, 1995). This approach allowed for similar instances in the data to emerge, and to then link to broader themes in the research.

Limitations

This study included a variety of limitations in its methodology. As a mixed method study, the approach included both quantitative and qualitative design. The sample size of 20 masons allowed for some recognition of trends and comparisons, particularly when complemented by the qualitative data, however such findings can only be considered indicative without expanding the study to a larger sample size. Secondly, the interview data was varied in quality, with some data demonstrating depth of interrogation in participant responses, and other data brief and insubstantial. Finally, the life stories component would have benefitted from being further expanded to a larger number of female masons and through strengthened interviewing skills.

2. PROFILE OF RESPONDENTS AND BUSINESS ACTIVITY

This section describes characterises the types of enterprise targeted in this study. Given the enterprises in this study were individuals (i.e. masons), characteristics included gender, age, education, work experience and time commitment. Some masons worked in teams, so characteristics also included years of operation and geographic location of the team, size and staff composition, legal status, source of capital, products and services offered, customer composition and marketing strategies. Family involvement in the business is also characterised for sanitation and enterprises.

PROFILE OF RESPONDENTS

Gender, age, education and ethnicity

20 masons were interviewed for this study. Their gender and age is shown in Figure 2, showing slightly over half were male (60%) and all were between the ages of 20 - 55.

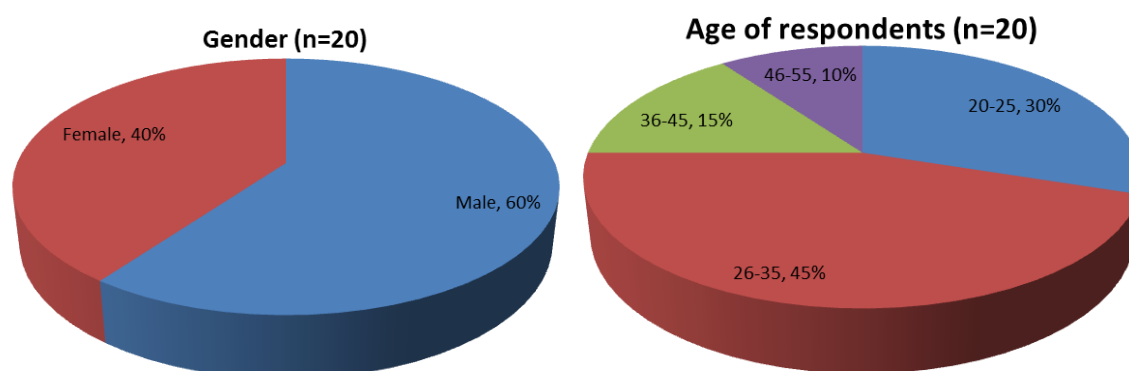


Figure 2: Gender and age of masons

Of the 20 masons interviewed, 15 were of Thai ethnicity and 5 were Kinh. Education levels are provided below (Figure 3), showing that for a quarter of participants, primary school was the highest education level attained, for 40% secondary school was the highest education, a quarter had completed high school and the remainder had a technical or intermediate qualification.

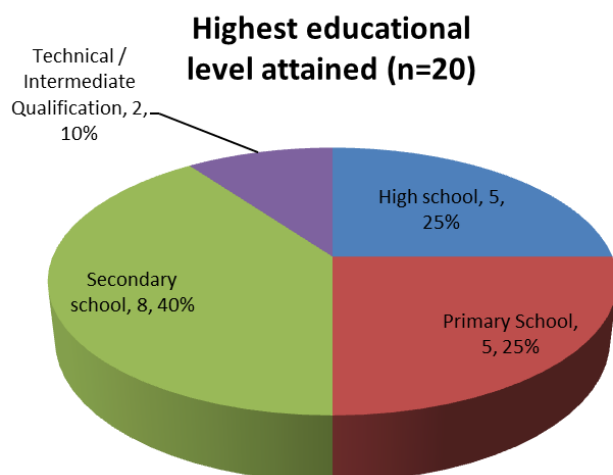


Figure 3: Highest educational level attained by respondents

Respondents were asked what (if any) training in sanitation they had undertaken, and were provided with a number of options (multiple responses permitted). Results are provided in Figure 4. Results show the majority were self-taught, learning on the job. Over half had attended a short course, one of which was SNV’s sanitation training which was conducted in 2011. Many of the respondents mentioned their beginnings as mason assistants, learning from the more skilled master masons.

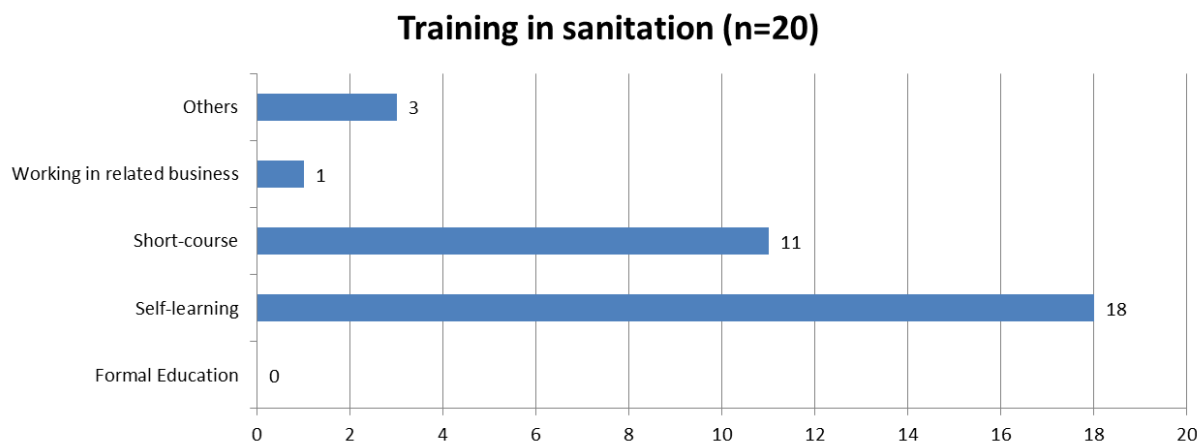


Figure 4: Training in sanitation

Work experience and time commitment to mason business

Of the 20 masons, most (n=16) had not worked in a professional paid job before working as a mason. Of the four that had, one had worked for three years (profession unknown), one had worked for five years as a teacher and one had worked for 30 years in a private company until it dissolved, forcing the mason to look for alternate work. The fourth mason worked for an unknown period of time in a range of work environments from career guidance at schools to agricultural work.

An important finding is that 18 of the 20 masons were also involved in other work apart from the mason business. Predominantly, this work was described as animal husbandry, rice or coffee growing, or general agricultural work. Work with Vietnam’s Mass Organisations (e.g. Women’s Union and Farmer’s Union) was also raised by some respondents as a time commitment for them. The estimated time spent on the mason business is provided in Figure 5. Of the two masons that spent 100% of their time on the mason business, both were males (a skilled and a chief mason).

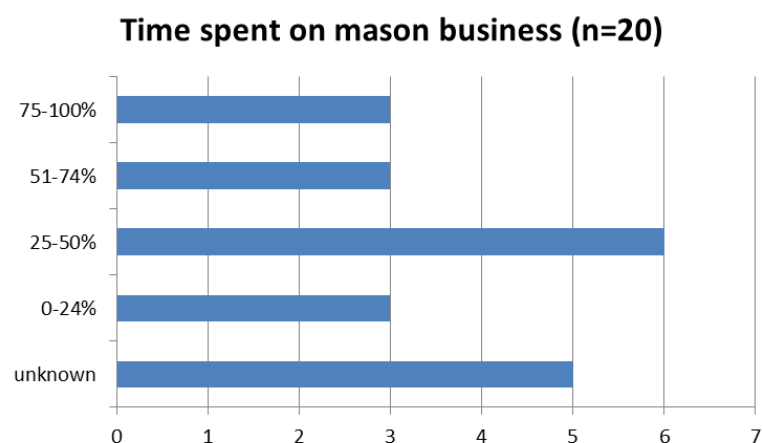


Figure 5: Estimated time spent on mason business

Work type and team role

Within their work as a mason, not all masons spent the bulk of their time building toilets, and this can be seen in Figure 6. Only 15% of respondents (n=3) dedicated their whole time as a mason building toilets, and eight out of 20 spent 50% or more on building toilets. The rest spent time constructing other schemes including houses, pig pens, roads and fences. Six respondents (30% of total) did not build toilets at all, spending all their time on houses and other construction.

Of the two respondents that noted they spent 100% of their time as masons (noted above and in Figure 5), neither of these masons spent any of their time building toilets – their work was in other construction types (e.g. houses, roads, fences etc.).

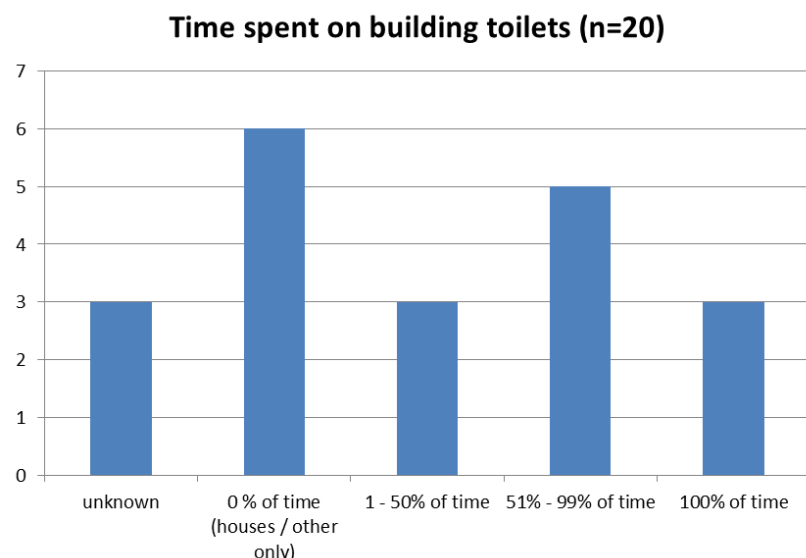


Figure 6: Time spent building toilets

Figure 7 provides a graph showing the combined result of time spent on both the mason business and the time spent building toilets (providing data for the 13 masons where responses were provided). It shows that no masons spend 100% of their time on the mason business and building toilets. Of all the masons, mason 16 spends the most time building toilets (60%), which is the combined result of spending 60% of their time on the mason business, and of this, dedicating the whole of this time to building toilets. Mason 3 spent the least time building toilets (3%), and this was the result of spending 10% of their total time on the mason business, and of this, 30% of their time building toilets.

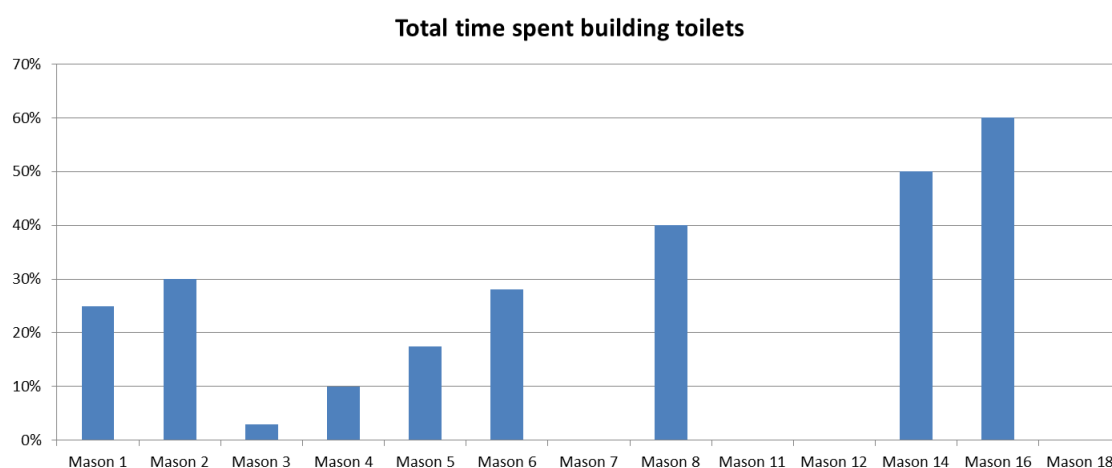


Figure 7: Total time spent building toilets

Masons identified themselves as either assistant masons, skilled masons or master/chief masons. The breakdown of respondents is seen in Figure 8. There was a fairly even spread across the three mason types amongst the respondents. The split by gender is also included in Figure 9.

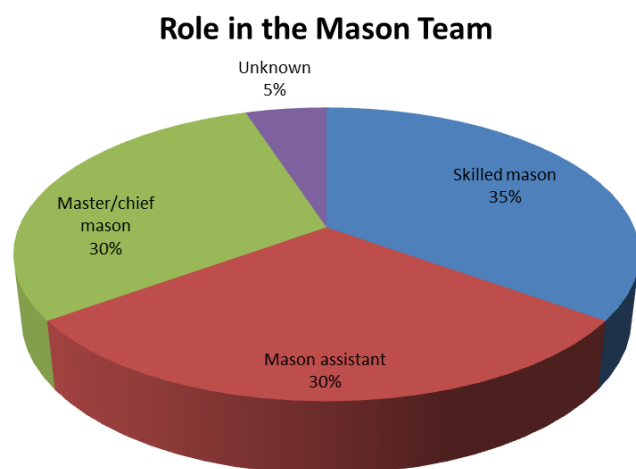


Figure 8: Mason types

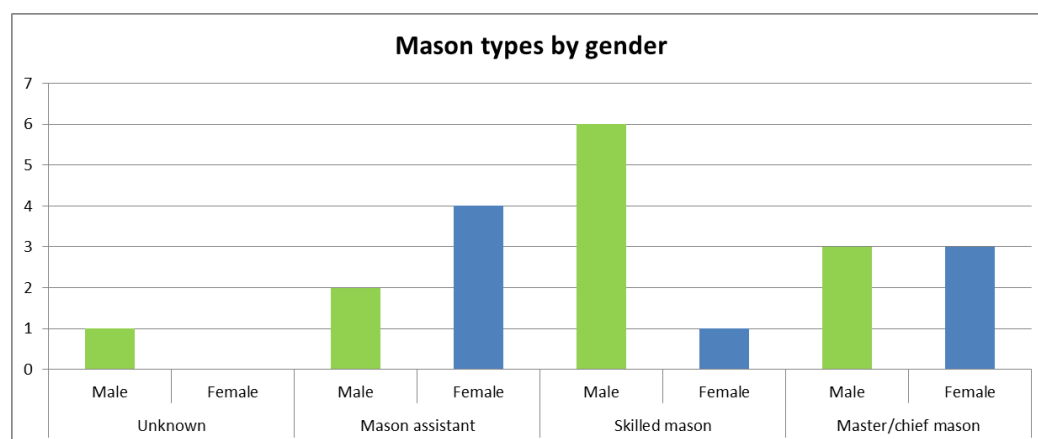


Figure 9: Mason types by gender

As a result of many masons spending much of their time building schemes other than toilets, the source of profits were also split between those from building toilets and those from houses and “other” construction types – as seen in Figure 10.

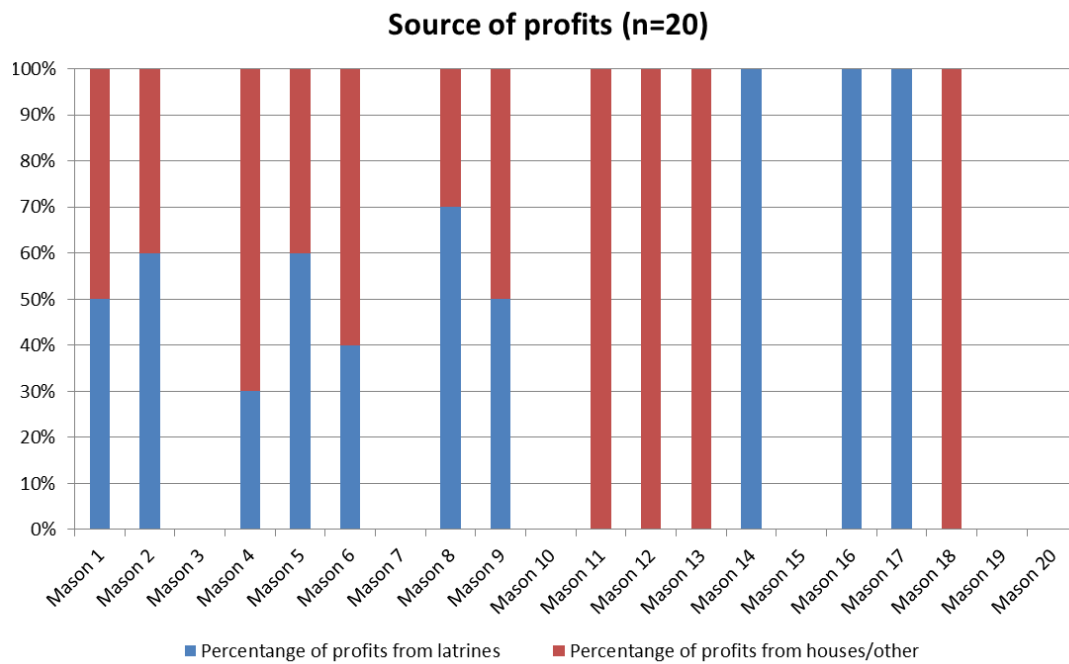


Figure 10: Source of profits

Figure 11 shows the number of years each mason’s team had been operating, with most having been established after 2005. All masons working in teams noted the business was still operating.

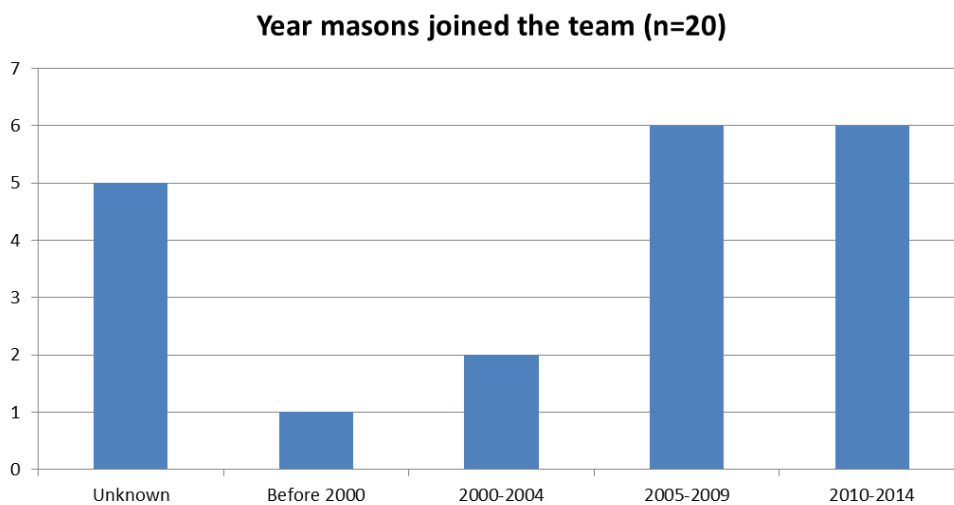


Figure 11: Year that masons joined their team

CHARACTERISTICS OF BUSINESS ACTIVITY

Status of business

14 out of the 20 masons noted their business was informal, not registered with the government. One had legal status, and this mason was part of a business with social goals that assisted former drug addicts overcome their addiction. The mason component was part of this business (i.e. not separate). This social business had two teams with approximately 40 members. The rest (n=5, where two were assistant masons, two were skilled masons and one was a chief mason) were unsure of the status of their team, as shown in Figure 12. Of these businesses which responded with 'unknown,' it may be they were also informal, and that their lack of certainty about their status reflects a lack of familiarity with formal business registration processes. However for some, it may also be that their role in the business meant they were not involved in the formalities of running the business.

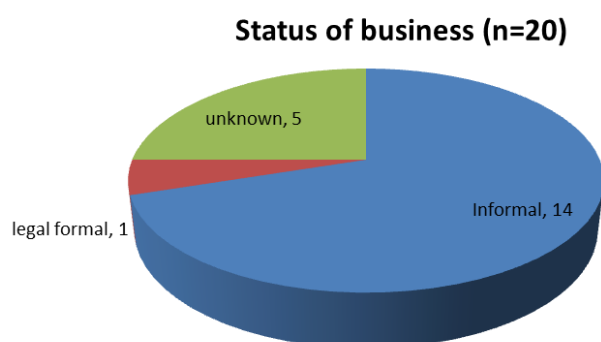


Figure 12: Status of the business

Size of business

Masons were asked how many employees worked in the team at the start-up of the business and at present (see Figure 13). Most teams had less than 20 staff (with three exceptions). Seven had grown since start-up, five had remained the same and eight were not sure of the size either now or at start-up. Four businesses showed a significant growth in the number of employees in the team since their start up, with six showing a stable size.

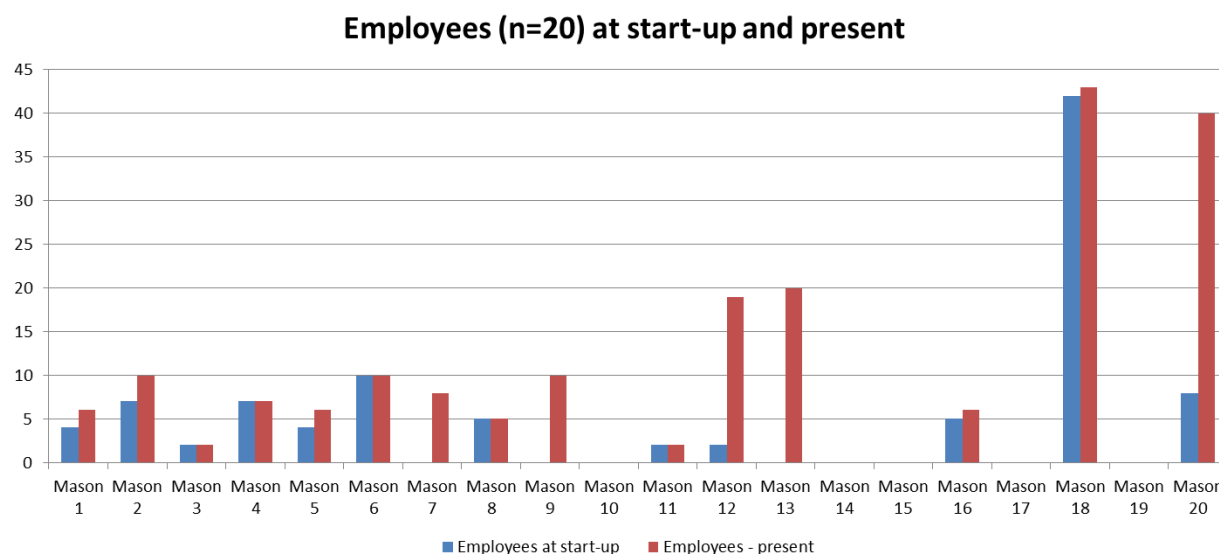


Figure 13: Number of employees

Products and services offered

Masons described a range of sanitation services offered, with some products also described (Figure 14). Most masons offered customers the option of construction / installation of toilets in terms of labour only, meaning the household would purchase materials themselves. They also offered options of construction with or without the superstructure, and ‘labour only’ could be with or without the superstructure. The most common product offered was the toilet pan, with 40% of masons providing this as an option to customers.

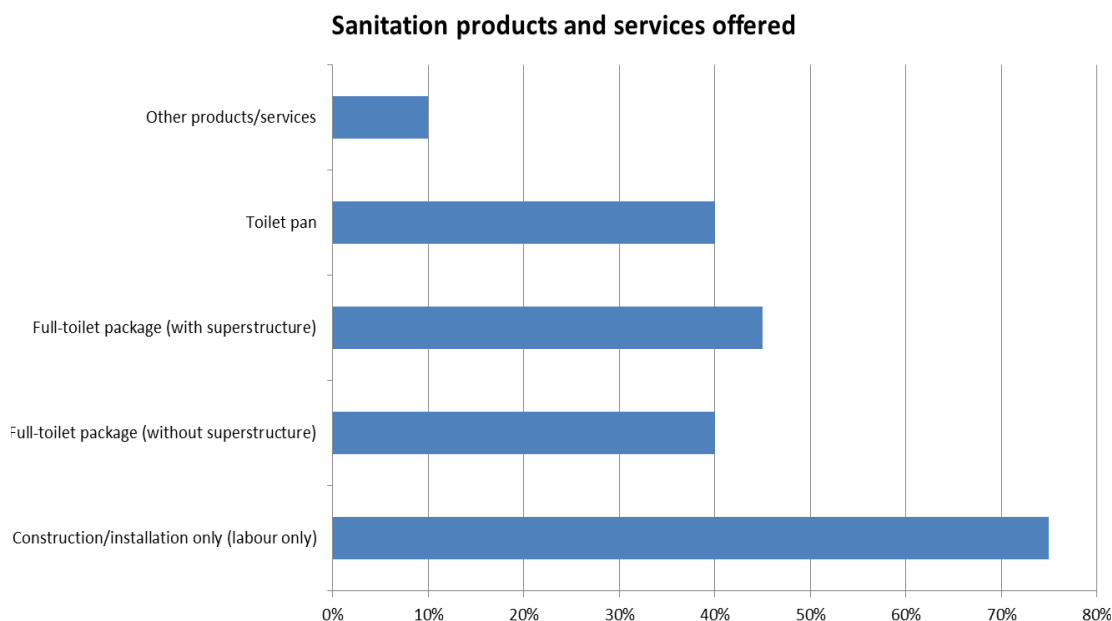


Figure 14: Types of sanitation products and services offered by masons

Composition of customers

Masons and their teams served both households and institutions. Eight out of 20 masons noted their customers were exclusively households (an additional one said “99%” households) and two out of 20 exclusively served institutions. This is seen in Figure 15.

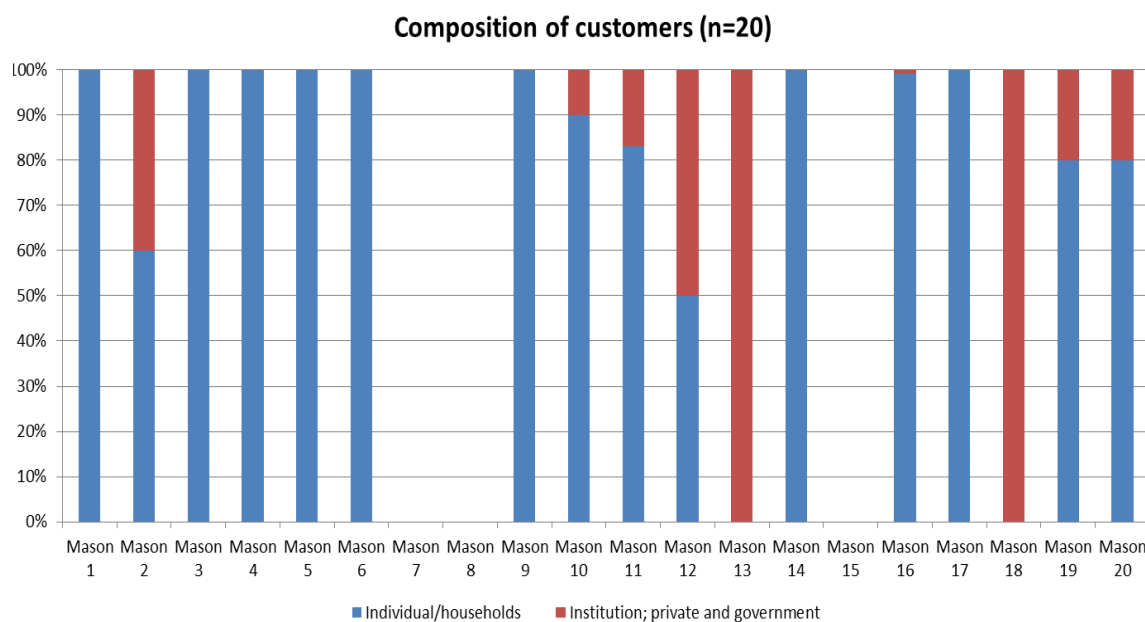


Figure 15: Composition of customers

Profitability and financial sustainability

Masons were asked about profitability and growth since establishment. Half noted the business had grown, one noted a decline, one noted stable business operations while the remaining eight were unsure, as seen in Figure 16.

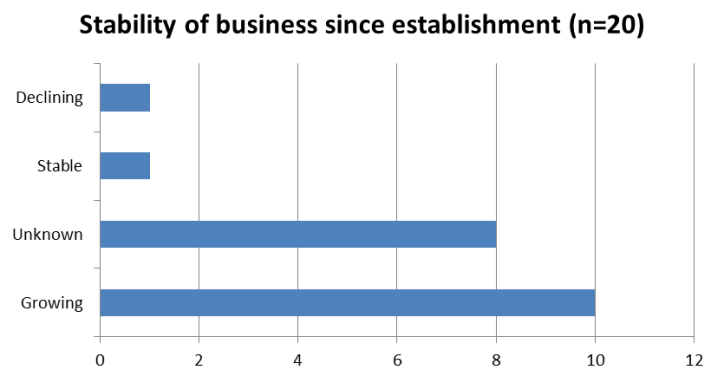


Figure 16: Stability of business since establishment

Mason noted a range of products and services they spent the profits from their mason earnings on, as seen in Figure 17.

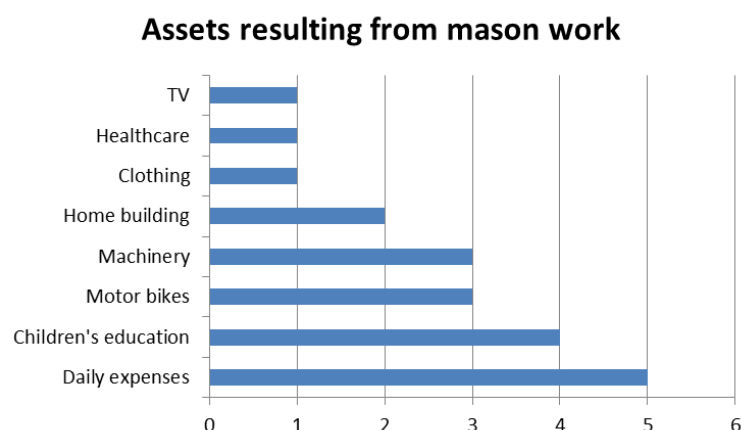


Figure 17: Assets resulting from mason work

Only nine of the 20 masons could provide responses regarding monthly revenue, with even fewer responding to questions about monthly profits. Of the nine who could respond on monthly revenue, a wide range of values were reported, from 480,000 VND (US\$22.22) to 30 million VND (US\$1,388.76). The few figures on profits are also shown in Figure 18. Profits ranged from 31% of revenue (for Mason 12) to 83% (for Mason 18).

The masons providing these figures were mostly chief masons (n=4), with some assistant masons (n=3) and skilled masons (n=2) also providing figures. While it was unsurprising that chief masons could most commonly provide figures for profit and revenue given their leadership role in the business, the skilled and assistant mason’s knowledge of this side of the business may be explained in the way mason teams are often comprised of spouses and combinations of family members who share this information freely. It was surprising that three chief masons were not able to provide this information at all.

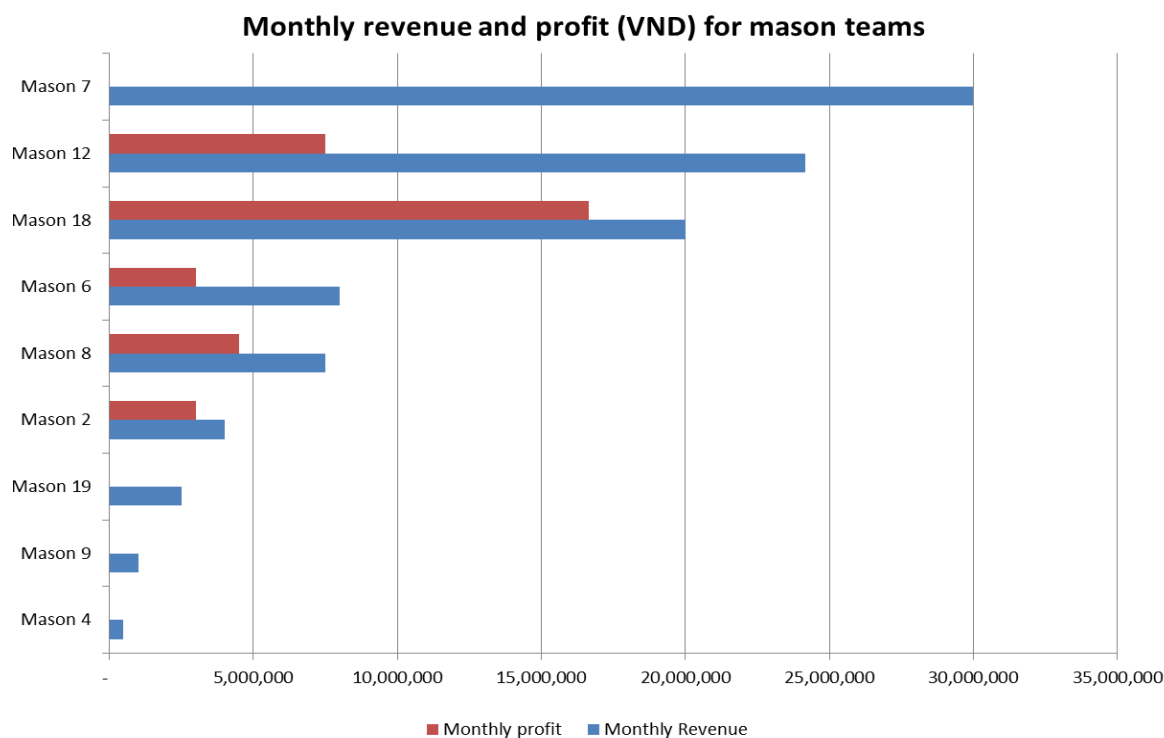


Figure 18: Monthly revenue and profit received by mason teams (in VND)

Marketing methods

Direct or explicit marketing approaches were not commonly practiced by any of the masons. 60% of respondents (n=12) noted a reliance on previous customer’s recommendations. Two noted a direct selling approach, while one also relied on government staff (from the Women’s Union) to assist with the marketing of the business by customer introductions and recommendations. This respondent focused solely on building toilets.

Customer payment methods

Of the 20 respondents, nine masons noted they allowed customers to pay late or in instalments. The proportion of customers paying this way ranged, with two masons noting they allowed all their customers to pay this way, while the rest provided figures between 20-40% of customers. The time to pay off the costs also varied considerably with one mason noting payment was required within 4-5 days, another noting 10-20 days, another 2-3 months and another one year.

Business initiation

The mason businesses were initiated either by the chief mason, his or her wife/husband, another family member or another chief mason. Some respondents noted the business was co-initiated by him/herself and their spouse or family member. This is seen in Figure 19.



Figure 19: Business initiator

3. ENTREPRENEURSHIP AND MOTIVATIONS

ENTREPRENEURIAL TRAITS

Respondents were asked an open ended question “*What type of person do you think makes a successful sanitation entrepreneur?*” After providing their unprompted response, they were then asked this question in terms of personality traits, skills and experience. Results are provided in Table 4. Other traits mentioned by respondents included good health and the desire to earn money. ‘Avoidance of risk’ was raised by some masons, which is interesting given that risk taking is an attribute noted in the literature to be associated with entrepreneurial behaviour. Attributes that are absent from the list are access to capital and personality traits related to problem solving – which are also linked to entrepreneurship. It is also interesting to note that ‘marketing’ is on the list, yet was not practiced to any great length by any of the masons.

Table 4: Traits of a successful entrepreneur*

What type of personality do they have?	What skills do they have?	What experience do they have?
Willing to learn Dedication to work Hard working Good tempered Calm and patient Honest Intelligent Kind hearted	Skilled in construction Meets customer’s needs Skilled in planning and provision of estimates Good listening Marketing Design skills Team management Strength Fast worker Professional	Work with other masons Avoidance of risk Experience in building quality construction

* bolded responses represent most commonly reported traits across open-ended and prompted questions

Five entrepreneurial traits (taken from literature) were considered: 1) proactiveness, 2) need for independence, 3) need for achievement, 4) innovativeness, and 5) risk taking (Ernst, 2012). To test the presence of these traits, a sub-set of quantitative and qualitative questions were relied upon. Table 5 provides the types of questions used to assess the presence of entrepreneurial traits across qualitative and quantitative questions.

Table 5: Entrepreneurial traits and questions used for analysis

Entrepreneurial trait	Types of questions asked	Number of questions relating to this trait	
		Qualitative	Quantitative
Proactiveness	<ul style="list-style-type: none"> Main reason for becoming a mason How past problems have been faced Whether they feel they are running a business or social enterprise Where they see themselves in 2 years Ease of finding new business opportunities How committed they are to the business 	5	2
Need for independence	<ul style="list-style-type: none"> Who started the business Involvement of family members Benefits / challenges of family business 	3	2

Entrepreneurial trait	Types of questions asked	Number of questions relating to this trait	
		Qualitative	Quantitative
	<ul style="list-style-type: none"> Whether they feel they are running a business or social enterprise Where they see themselves in 2 years 		
Need for achievement	<ul style="list-style-type: none"> Main reason for becoming a mason Any other benefits of being involved in the business other than profit Whether they feel they are running a business or social enterprise Where they see themselves in 2 years Why is this future they described for the business important 	5	0
Innovativeness	<ul style="list-style-type: none"> Main reason for becoming a mason Whether they feel they are running a business or social enterprise How much they see themselves as innovators Where they see themselves in 2 years How often they tried new ideas for services and products How easy it is to discover new business opportunities 	3	4
Risk taking	<ul style="list-style-type: none"> Main reason for becoming a mason Whether they feel they are running a business or social enterprise Where they see themselves in 2 years How important it is to take risks in a business How confident they feel to get a loan from a bank How confident they feel when taking risks in the mason business 	3	3

In general, quite low levels of entrepreneurial traits were found amongst respondents. The entrepreneurial trait most commonly present amongst the respondents was the need for achievement (present amongst half, or 10 of the 20 respondents). One mason noted achieving success in his business was “*Very important because my family is leaning on it*” while another noted “*[It is] important as a source of accumulation for the future since there is no pensions like other people in private sector. It's important to have work every day - I don't get a salary so that's why I need to work.*” Proactiveness and innovativeness were evident in six of the 20 masons, and risk taking present in four (see Figure 20).

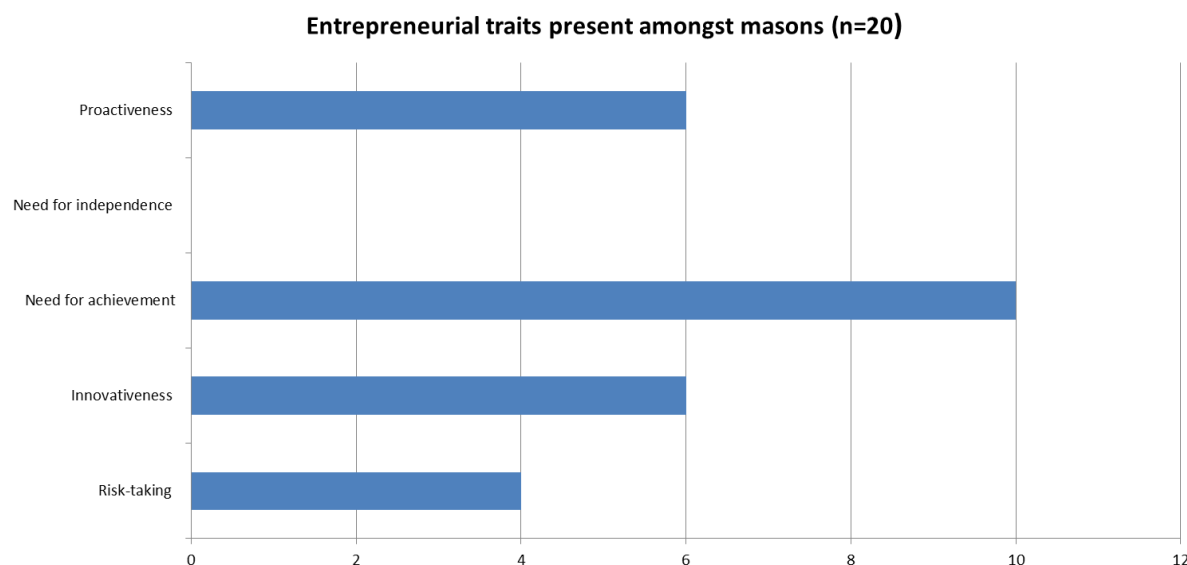


Figure 20: Presence of entrepreneurial traits

The “need for independence” was not present in any of the masons. This is unsurprising, given that most masons worked in teams, many in partnership with their spouse or family members. As an entrepreneurial trait, the “need for independence” is therefore not relevant in the cultural context of these sanitation entrepreneurs.

MOTIVATIONS

Pro-social motivations

The term ‘pro-social’ is sometimes used to explain the tendency of a person to voluntarily behave (or intent to behave) in a way that benefits others. Pro-social behavior is usually carried out to promote well-being in the society (Brief & Motowidlo, 1996). Ernst (2012) defines two core traits that define a pro-social personality: sense of social responsibility and empathy with the poor.

The presence of these pro-social traits was assessed through six questions that examined the mason’s drivers and motivations to start or become involved in the business, their business goals and future business prospects, perceived benefits from engaging in this type of business, and whether they perceived the business as providing a social service. Respondents that revealed any of these traits across 0 to 2 questions were considered as having zero or weak pro-social traits. Respondents that revealed these in 3 to 4 questions were considered as having medium pro-social traits, and respondents that revealed 5 or 6 were considered as having strong pro-social traits (see Table 6) including the spread of respondents in each category).

It is expected that respondents with strong pro-social traits have a strong focus in promoting social well-being, however profit may also be a driver (i.e. pro-social traits and profit can coexist as motivators).

Table 6: Levels of pro-social traits

Category	Score	Respondents in each category
No pro-social traits	0	9 (45%)
Weak pro-social traits	1-2	6 (30%)
Medium pro-social traits	3-4	3 (15%)
Strong pro-social traits	5-6	2 (10%)

Of the 20 respondents, 45% (n=9) were found to have no evidence of pro-social traits, with several noting their involvement was solely to earn money. For example, one mason noted their business goal was *“Money, for increased household income.”*

10% of respondents (n=2) exhibited strong pro-social traits, with one female mason noting her primary business goal was: *“To do communication to households to have a hygienic latrine”*. She further noted: *“My main purpose is not to make money but to talk to households about having a hygienic latrine...The main reason for building latrines is to help people.”* The other strongly pro-social respondent’s mason team (or ‘club’ as he referred to it) acted more like a social enterprise, whereby it provided drug addicts a supportive environment in which to overcome their addictions and make money through the provision of sanitation and construction services. This mason had dual goals of earning money and social goals for his fellow team members: *“The reason why I organised the club is because I understand the life of addicts... so this is a way to create a source of income for them and avoid criminal activity... I think that supporting others is also supporting myself”*.

Pro-social traits are disaggregated by gender in Figure 21. This shows a higher proportion of males with no / weak pro-social traits, and a higher proportion of women with medium / strong pro-social traits (although caution must be taken with interpretation of this data due to the small sample size).

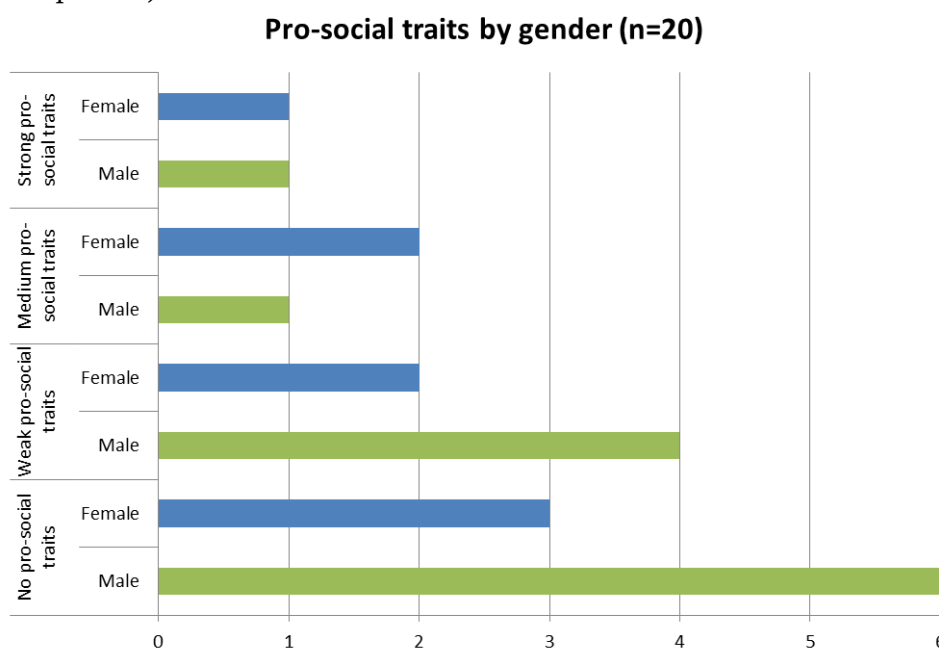


Figure 21: Pro-social traits by gender

Offering customers the option to pay by instalments may also be considered a pro-social trait, as it acknowledges a customer’s financial situation which may not allow for full payment upfront. Of the 15 respondents exhibiting no or weak pro-social traits:

- 6 **did not offer** instalment payments
- 7 **did offer** instalment payments
- 2 were unknown

Of the 5 respondents exhibiting medium to strong pro-social traits, two offered instalment payments and three did not. Surprisingly, the results do not suggest that offering payment by instalments corresponds to a higher propensity for pro-social traits (although once again the small

sample size may disguise the existence of such a correlation). The total group’s response to this question is provided in Figure 22.

Masons offering customers payment by instalments (n=20)

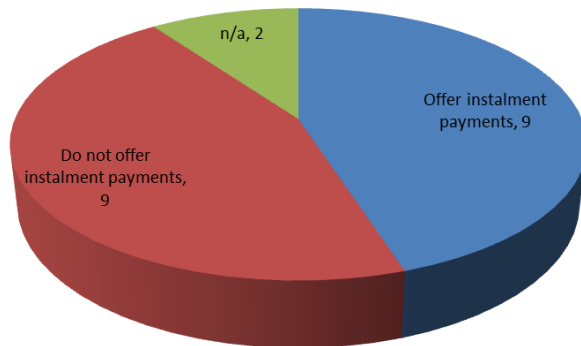


Figure 22: Masons offering customers payment by instalments

The actual proportion of customers paying by instalments is provided in Figure 23, corresponding to the nine masons who noted this was acceptable to them as per Figure 22. Figure 23 shows four masons noted the proportion was less than 50%, two masons noted the proportion was more than 50% and the remainder (n=3) were unsure.

Proportion of customers paying with instalments (n=20)

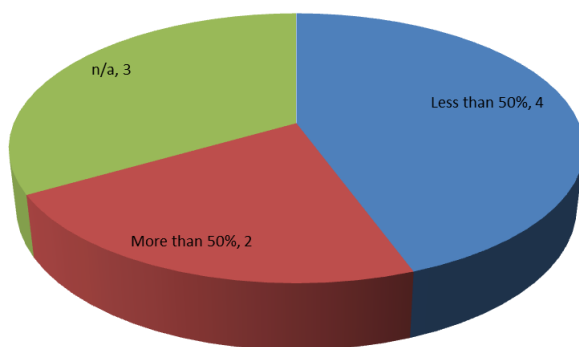


Figure 23: Proportion of customers paying by instalments

Pro-social motivations and links to profitability and entrepreneurial traits

By looking across measures of profitability and business success (interpreted by monthly revenue and profit), there were no clear links to degrees of pro-social traits (Figure 24). However, there was emerging evidence that it was more common for businesses with higher revenue and profit to exhibit entrepreneurial traits. The small sample size and inability of many masons to provide this information, hampered definitive responses to this question.

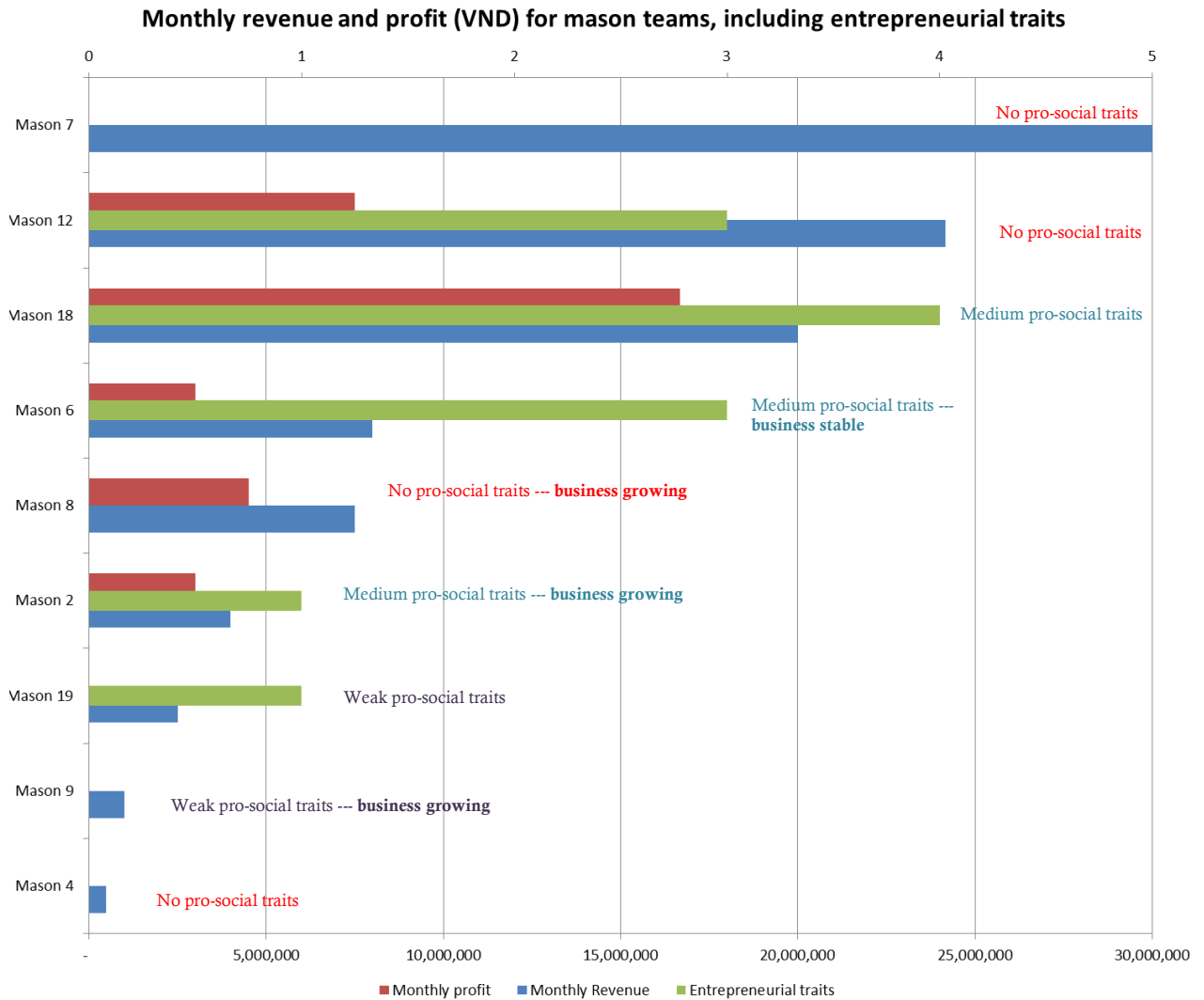


Figure 24: Monthly revenue and profit (red and blue bars, refer to bottom x axis) with entrepreneurial traits (green bars, refer to top x axis) and pro-social traits and business stability (added text)

Figure 25 shows that 14 respondents exhibited zero or one entrepreneurial traits, and all but one of these respondents also exhibited no or weak pro-social traits. Of the five respondents with medium to strong pro-social traits, one medium/strong entrepreneurial traits, two had 2-3 entrepreneurial traits and two had 4-5 entrepreneurial traits. Despite such small numbers, this pattern may begin to suggest that it is more likely for a higher number of entrepreneurial traits to be related to medium to strong pro-social traits.

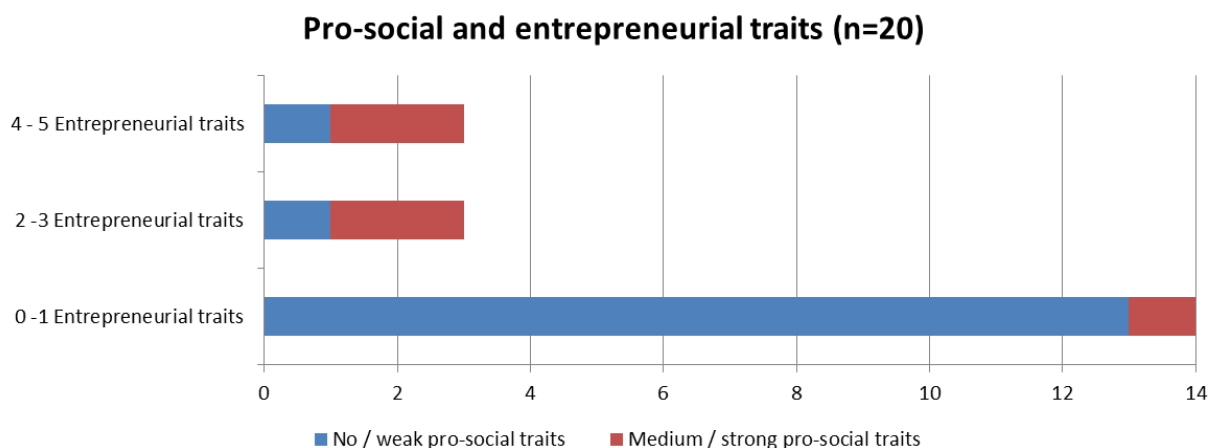


Figure 25: Pro-social and entrepreneurial traits

Other Motivations

Motivations beyond profit and pro-social aspects were also evident within the respondents. The most commonly cited “other” motivation was the respect masons received from the community due to their increased skillset (n=5). One male mason noted “*I am now receiving the respect from the community*”. Others noted the benefits of learning more about construction motivated them (n=2) and similarly, the new skills they learned relating to design and reading blueprints (n=2). Another two masons noted their new relationships with the community, e.g. “*There are many more relationships... I have a wider relationship with customers*” (female mason). Additional cited motivations included an increased range of experience they could mention when applying for other work to support the family; one female mason felt more people cared about her; one noted they received greater trust from the community while another believed that his vocation provided life with greater meaning: “*I feel that life is more meaningful to me when I support others*” (male mason).

4. SUCCESS FACTORS AND CHALLENGES

SUCCESS FACTORS

Based on an open-ended question as to what characterises a successful business, respondents’ perceptions included personality traits, skills, and other type of characteristics as seen in Table 7. Dedication and determination were both mentioned by three masons, with the other personality traits mentioned a single time by various masons. Technical skills as a factor in success was mentioned by 11 masons, and solidarity with the team was raised twice.

Table 7: Perceived characteristics of a successful entrepreneur*

Personality traits		Skills	Other characteristics
Dedication (3) Determination (3) Honesty Trustworthy Agreeable to work with Self-confidence Strength of character	Leadership Ability and willingness to learn Passion Ethical Inquisitive Innovative Persistent Good tempered	Technical skills (11) Mutual learning Intelligence Good teacher Communication Management skills	Solidarity with team (2) Support from relatives Health

* bolded characteristics represent those that were most commonly reported while numbers in brackets reflect the number of times this success factor was mentioned

CHALLENGES

Respondents were asked an open-ended question about the risks they face as a mason. Masons were asked to identify of the risks they mentioned, which was the biggest risk they faced. The results are provided in Table 8 below. Of the financial risks, not being paid by customers was most commonly cited as the biggest risk. Inadequate workload was identified by one mason as the biggest internal business risk, while accidents were highlighted by four masons as the biggest external risk.

Table 8: Perceived risks faced as a mason*

Financial risks	Internal business risks	External & other risks
Not being paid by customers / paid late (3) Lack of capital for daily expenses Limited investment capital Loss of profit due to poor management	Inadequate workload (1) Inadequate skills leading to mistakes Poor business management	Accidents (4) Poor weather holding up work (1) Disagreement with customer (1)

* bolded risks represent those most commonly reported while numbers in brackets reflect the number of times this risk was highlighted as the “biggest” risk they face

Another question provided respondents with a list of common challenges faced by businesses and they were asked to confirm or deny whether or not these were challenges for them. Results are presented in Figure 26.

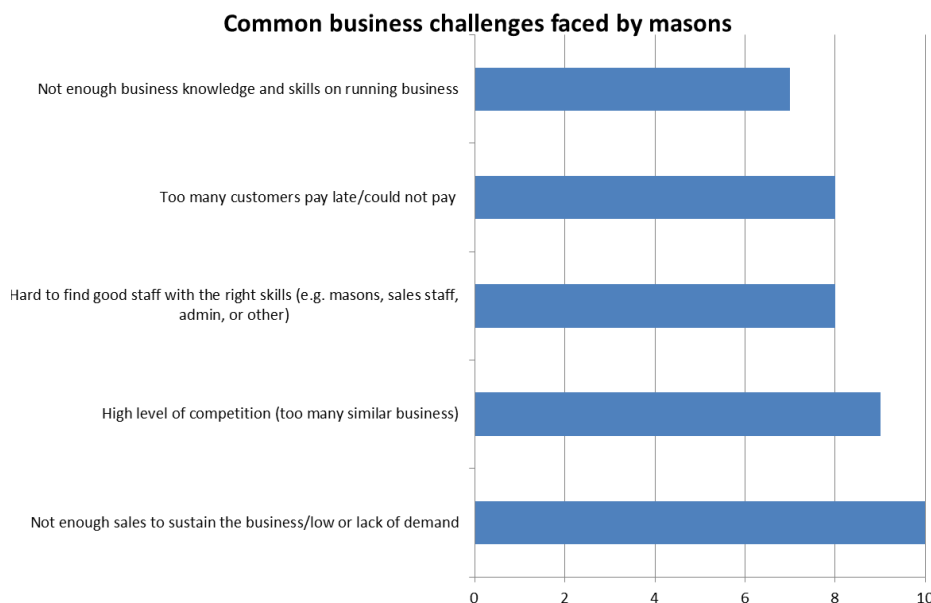


Figure 26: Common business challenges faced by masons

Of the common challenges mentioned above, respondents were ask to note the biggest of these they face, results are in Figure 27.

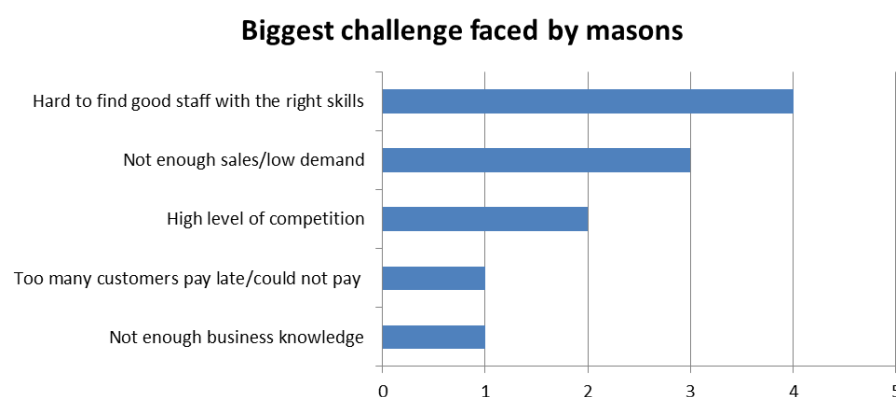


Figure 27: Biggest common challenge faced by masons

Additional problems and challenges faced by masons, along with how they were tackled, are provided in Table 9.

Table 9: Problems and solutions identified by masons

Problem	How mason faced the problem / response
Customers not paying	Get households to sign contract
High competition - many mason teams in communes	No solution proposed
Remote location of customers - transportation and cost challenges	Friends and Women's Union assist mason to access customers
	Ride motorbike with co-worker and share the cost or sleep at customer's house
Inadequate income	Borrow money from his friends when facing difficulties
	In future I am willing to get a loan from a bank

5. WOMEN AS ENTREPRENEURS IN SANITATION

CONTEXT

Fulfilling WASH roles is often associated with women's roles. It is women who are traditionally responsible for water collection, care of household members when they are ill, and women who tend to have intrinsic motivation to improve household sanitation. It has also been identified that there are unfulfilled opportunities for women to play more active roles in the broader WASH sector and the economic opportunities it can offer. Building toilets and mason-type work is more commonly associated with men's work, given the physical nature of this work and assumed gender roles. This situation creates barriers to women entering some elements of enterprise activity in the area of sanitation.

In 2011, SNV conducted training in Muong Ang on building toilets, specifically targeting women as participants. This research therefore had the opportunity to follow up on the general theme of women's role in sanitation enterprises, and examine the experiences of female masons.

This section begins with analysis from the structured questionnaire around gendered perspectives on entrepreneurship, and is followed by analysis from the oral histories approach – both providing insights into the issue of gender, in particular women's roles, in sanitation. This section is followed by a description of oral histories that provide deeper insight into how gender equality affects women's role in sanitation service provision.

INFLUENCES ON ENTREPRENEURSHIP AND MOTIVATIONS

Gender influences on entrepreneurship were examined through both the structured interviews and the oral history analysis, with the former source of data revealing differences in how women and men perceived gender to influence the ability to be entrepreneurs, and the ability to be a mason. There were also gender differences in the degree of pro-social traits present amongst male and female masons which are also explored below.

An important question to first consider is perceptions of the women and men as entrepreneurs, in particular entrepreneurs working as masons and constructing sanitation facilities. Respondents were also asked how easy they thought it was for women to become entrepreneurs in their community. Gender disaggregated responses are presented in Figure 28. Despite the small sample size, results reveal that more male masons thought it was *not easy* for women to be entrepreneurs, while more female masons thought it was *very easy* for them to play this role.

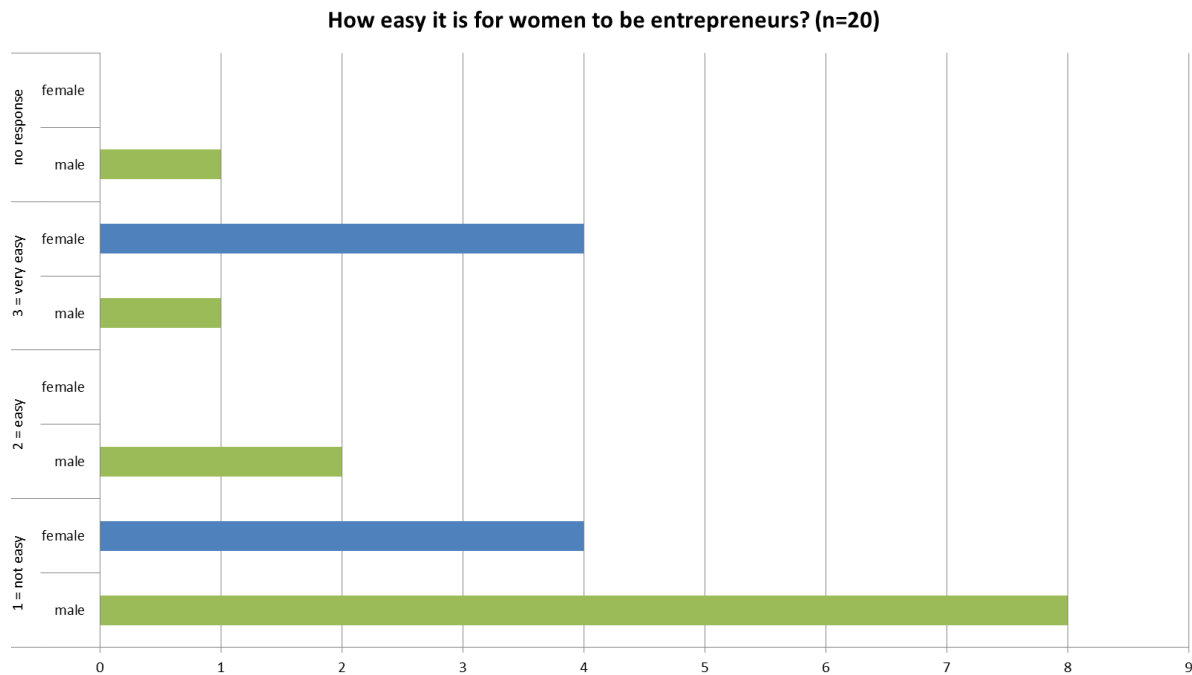


Figure 28: Perceptions of how easy it is for women to be entrepreneurs

One female mason scoring a 3 (very easy) noted: *“People think the mason is not a job for women... [because it is] heavy work – but to be entrepreneurs is good for women.”* Another female mason noted the differences between being a mason and an entrepreneur more generally: *“It is very difficult for a [woman to be a] mason because we are weak, both physical and skills. Women as entrepreneur – being a shop seller is very easy. The biggest issue is women have no investment capital, compared to male. Women are better at selling and smarter/work better.”* A male mason justified his scoring of this question as a 3 (very easy) *“Because many women are working as chief (master) mason. It is not difficult for women to become business owners. A lot of women are entrepreneurs.”*

Lower scores were justified for three main reasons. Firstly, some respondents thought about women as mason entrepreneurs, rather than entrepreneurs more generally. Such responses were accompanied by comments such as: *“It is more difficult, [women are] weaker, can't stand heavy work as assistant, less skills and they learn slower. Everyone has to start as a mason assistant and that's very hard work”* (male mason) and *“It is a heavy job, very hard work, not for women, as believed by many people... Men can be better than women because they are used to travel a lot”* (female mason). One male mason noted *“In life, men have more skills than women, so they can learn faster and can endure harder work”*.

The second reason why it was difficult for women to be entrepreneurs was due to gender roles in the community, and that the woman's role was at home, as noted by these masons: *“[Women are] busier with house work than men. They have more responsibilities at home than men”* (male mason) and *“It is difficult for women to become masons because women need to take care of the family”* (male mason) and another *“usually the husbands would stop [women working as masons] because of the discrimination against women”* (male mason). Interestingly, these comments all came from male masons.

The final reason respondents provided was that women lacked capital to become entrepreneurs. This was noted by both male and female masons: *“Lack of capital. Not so many women are business owners; there is a lack of money to invest”* (male mason) and *“It is difficult for women to be business women, due to the economic conditions of women”* (female mason).

One of the female chief masons recalled how she was made fun of when starting to work as a mason, and noted how hard it was to overcome public opinion. *“Before I think it was difficult, but as my [study] major was design. At first I felt ashamed, as a mason they laughed at me. Now I'm chief and*

skilled mason. It is not easy for women to be business owners. Women are neater than men, but business is difficult."

Another important area where women and men's different views provide insight on gendered roles and perspectives is with regard to issues of 'respect' in relation to the role of a mason. Respondents were asked what status they thought their mason business had in the community. Gender disaggregated responses are seen in Figure 29, showing similar results for males and females. Slightly more males perceived a higher level of respect (however results should be taken with caution due to small sample size).

Supporting qualitative responses also reveal interesting perceptions which align with the scores masons provided. Masons scoring highly (i.e. "masons receive a lot of respect") noted: *"They are respected a lot because people know that they don't get a lot of profit"* (male mason). This man believed that masons were more respected than farmers, as to be a mason more skills were required. A female mason also noted *"They (masons) are more respected than other occupations"*, with a male mason having similar views noting that masons are more respected *"due to the hard and more skilful work, rather than animal husbandry"*.

Masons scoring medium to low in terms of the respect they perceived from the community compared themselves to teachers, taxi-drivers, farmers and state workers, as noted by a female mason: *"Working as a mason isn't much respected. It's less respected than being a farmer because masons have to travel here and there and don't have a fix place to work whereas farming is the traditional occupation."* Another male mason perceived masons to have the same level of status as farmers.

Responses from several of the female masons noted their perceived respect from the community was related to their gender in parallel to their occupation as a mason. One noted: *"It is very difficult for women to be mason. People think it's not a job for a woman."* Another noted *"People respect me more, they give me higher priority because they believe me. I make everything clean after I build. Mason and farmer – they have the same respect. Some people respect mason, some don't, it's up to them"*.



ISF-UTS researchers with female masons in Muong Ang

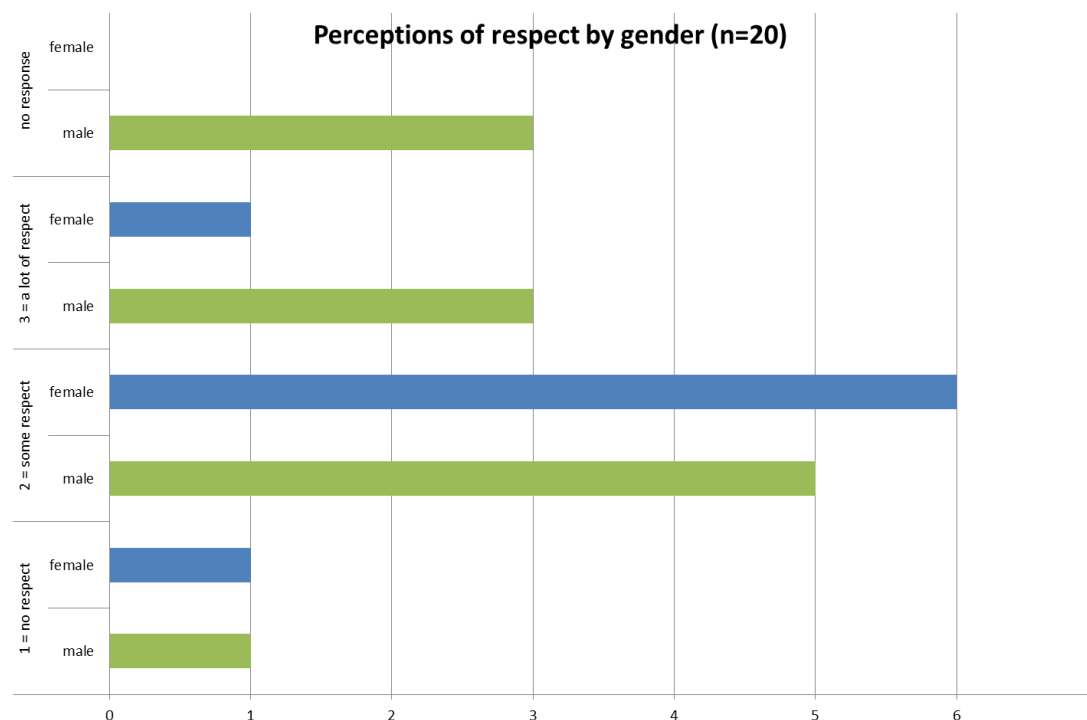


Figure 29: Perceptions of respect by gender

Additional reflections on the influence of gender are provided below which incorporates the oral history approach for three female masons.

ORAL HISTORIES

Oral histories were used to complement the structured questionnaire and provide deeper insight into how gender equality affects women’s role in sanitation service provision. Three female masons were selected to provide these stories. These women were asked to talk about their childhood, experiences growing up, and finally about how they viewed their roles as masons. Summaries of the three mason’s oral histories are presented in Boxes 1 – 3. Analysis and discussion is provided in the following section.

Box 1: Nguyen Thi Nguyet (Ms Nguyet)

Ms Nguyet was a chief mason, and began building toilets in 1994. She established her own mason team in 1996 with her husband. At the time of the interview, spent most of her time as a mason building houses rather than toilets.

Ms Nguyet was of Kinh ethnicity, born in Dien Bien in 1964. Her parents moved to Dien Bien in 1960 from Thai Binh Province (south of Hanoi) after a call from President Ho Chi Minh, encouraging Vietnamese people to move to less populated rural areas and improve agricultural productivity. Around 20 other families from Thai Binh Province moved to Dien Bien at the same time as Ms Nguyet’s parents – all of Kinh ethnicity. Prior to this influx of population, the dominant ethnic groups in Dien Bien were H’mong and Xa. Her parents were allocated several thousand acres of land for farming when they arrived in Dien Bien.

Ms Nguyet was the second child of five, with three brothers and a sister. Theirs was a typical family in Dien Bien. Her parents, as well as being farmers, had other skills and occupations – her mother was a shop owner, and her father was a carpenter. Their family was poor, and as a child Ms Nguyet remembered only having one meal – a bowl of rice – each day.

Ms Nguyet's parent's instilled a strong sense of compassion and openness to others in her, both explicitly and implicitly. For example, her father often helped other people, while her mother told her and her siblings not to scorn families poorer than them – *“We should respect the poor and not give them a bad attitude”*. In addition, her parents were kind and open to other ethnic groups. She noted that now, her daughter-in-law is Thai, and that *“I give a high priority to help Thai ethnic people. My children have many clothes – so since many Thai children do not have many clothes, I give them some of our clothes”*. She told of a childhood memory when she wore the Thai traditional dress on a visit to a Thai village with her parents and spoke with warmth and happiness about this experience, when people mistook her as being Thai.

Ms Nguyet's school life involved an influential teacher who supported her and her friends with additional food in hard times. Ms Nguyet sometimes stayed overnight with this teacher and thought of her as an additional parent. Despite the hardship, Ms Nguyet's parents were supportive of her education – an unusual perspective at a time when only boys were usually supported to go to school.

After finishing her schooling, Ms Nguyet trained as a nursery school teacher, and eventually was posted to Lai Chau Province in 1980 at a prominent school, because as she said – *“A lot of people liked me”*.

Ms Nguyet married at 17-18 years old, her husband was 10 years older than her. She and her husband visited her husband's parents in Ha Tay Province (now Hanoi), and remained there to live due parental obligations. Ms Nguyet remember how she was forced (by her in-laws) to leave her job as a teacher, which she did very reluctantly. The alternative would have been to divorce, which she did not want as she loved her husband. She noted she had dreams every night about still being a teacher, and how it was a pity she had to quit. Her own parents complained to her parents-in-law about their insistence on her quitting being a teacher (particularly given their support in allowing her to get an education, and their values of supporting their children to have successful futures), however it was only much later that her parent's in law agreed she should resume teaching.

Farming at her in-laws small parcel of land did not allow self-sufficiency and this was something they desired, so Ms Nguyet and her husband eventually returned to Dien Bien. Their request to the government for land was successful, so they moved back to Dien Bien near to her own parents. By this stage, they already had four children. This time, it was her husband who felt sorry to have to quit his job as a Military Officer. Ms Nguyet could not go back to her work as a teacher, as the education board may have posted her to remote places, where she could not look after her children. For this reason, she did not resume being a teacher. The decision not to resume teaching even when returning to Dien Bien was so she could remain with her children, which would not have been possible if she was posted as a teacher in a remote location.

Ms Nguyet retains deep feelings towards being a teacher, with a strong sense of value attached to this profession, for example: *“As a teacher, you use your mind. If people call me a teacher I feel happier than if they call me a mason.”* She also holds on to the fact that she was forced to quit her preferred vocation of teaching, with some sadness present in her final comments: *“My life is like this because of my parents in law, and my husband - he did so to obey to his parents, he did not listen to me. They forced me to quit my job. I don't complain now – I accept it.”*

The decision to become a mason was one of necessity; to earn money to provide for her family through a job that has a stable level of available work: *“It's important to have work every day - I don't get a salary so that's why I need to work”*.

Ms Nguyet became a mason, building toilets (amongst other construction types), in 1993. In 1996, she and her husband began their own mason team, allowing her to learn construction skills on the job, take on some authority with her husband and eventually become a chief mason. As a chief mason, she constructed toilets, houses, roads, walls, schools etc., and takes this role seriously, noting the attributes of a good mason include being kind-hearted and faithful. She says: *“People's houses are a big investment for them. We need to be kind and faithful to build a good house that lasts for them.”*

While not her first choice of vocation, she believes that through being a mason she has a level of respect from people in the community. She noted: *“My life is difficult as a mason. For a woman to be a mason it is hard. Even though I can now earn money – it's difficult as I have to use my body... People in the community respect people who are masons. Before they were not sure if they could do the job, they thought it was a little strange. But when people see we can do it, they are ok. They respect me now and I respect other masons also.”*

She also reflected later that the perspective in her community regarding respect towards women and men has changed over time, noting that: *“People in the past didn’t respect women (in general) but now the respect is equal because we can do the things men can do”*.

Box 2: Cầm Thị Minh (Ms Minh)

“I don’t think I’ll continue being a mason because I can’t complete my duties at home. When I have some time I’ll work as a mason, but mainly I’m a farmer.”

Ms Minh was trained by SNV in building toilets in 2011. Following this training, she played a strong role in advocating to others the benefits of hygienic sanitation as a mason assistant. However, Ms Minh did not see herself pursuing this role due to several perceptions (she believed women masons were paid less than men, and construction business owners often refused to pay their workers), constraints (her role working with the Women’s Union and her household responsibilities) and gendered expectations (that women’s role is primarily in the home, tending to animals and domestic duties).

Ms Minh was of Thai ethnicity, born in 1971 to a family of eight siblings – six females and two males, which was considered quite a large family within her community. She noted that most people in her village were farmers, as *“there were no other jobs except for farming”*. As a child, her parents allowed and encouraged all their children to study. She went to school until class 6. In her class there were always more males than females. For example, in one year there were 30 males and only two females, including her. Sometimes boys would be mean and joke with her, but her teacher, who was of Kinh ethnicity, always protected her. She used to go to her teacher’s house to do her homework and have lunch, as well as take care of her teacher’s children.

Although her parents encouraged her to study, she didn’t continue her studies further: *“My parents considered male and female the same. They encouraged me to learn and study but I didn’t like it, I was lazy.”* Besides this, she was also discouraged by other people to discontinue schooling: *“other people in the village told me ‘learning does not make you earn money’, so I felt ashamed and stopped learning.”* Today she regrets this decision: *“I feel sorry for not having learned more because once I was considered for a job position at the school but only people who had completed class 9 could apply. They asked me if I wanted to join but I only had completed up to class 6.”*

Ms Minh felt that her parents were the people who most influenced her. Her mother taught her how to do the housework and her father taught her farming skills. In her family there weren’t many boys, so she had to fill in for this and do the work of males in her family, such as farming. She and her brothers helped their parents financially. Ms Minh explained that: *“my father didn’t expect anything from me because I’m a female.”* On the other hand, in terms of parental expectations of her brothers, she added that her father would say: *“you are the only males in the family, so try your best to be successful so we can rely on you later.”*

She felt that men were more respected than women and described how often men took advantage of this when she was growing up: *“Men are more respected than women, so sometime they scare [or play tricks] women. When they tried to scare me I didn’t do anything. I’d just run away from them.”* However, she felt that over the years there has been a change regarding gender differences. For example, *“before if there was a party or celebration in the village, women and men wouldn’t eat together. Women and children would eat in the kitchen after men had eaten the best parts of the pig.”* Ms Minh believed the situation had changed now, with women seen more equal to men.

Ms Minh got married in 1994 and moved to Hon village in 1997, her husband’s village, which was close to the village where she was born. Her parents and her husband’s grandparents gave them land, which was a reason for them returning to the village. She has two children, one female, born in 1995 and one male, born in 1998. In terms of expectations from her children she said *“I expect them to have jobs so we can rely on them later.”*

In 2008 she was nominated by the women in her community to be the leader of the Women’s Union in her commune, which had 35 members. She said that the women in her community encouraged her to take on this role and added: *“it involved a lot of work and no money, and if I didn’t take it, nobody would.”* She did not receive any salary for this work but it involved money contributions from the members for the groups’

activities. She spent 1-2 days / month on this. She believed that to be in this position, good knowledge and intelligence were necessary, as well as a kind mind, love for the village and willingness to help.

She participated in the SNV toilet building training in 2011 and after that, passed on the knowledge to some people in her community and taught them how to build a latrine. She noted that: *“After the SNV training, I taught six households how to build latrines and they build latrines for them by themselves. They asked me to teach them.”* Ms Minh didn't aspire to have a career as a mason: *“I don't think I'll maintain being a mason because I can't quit my occupation [duties] at home. When I have some time I can work as a mason, but I'm a farmer... only if I really need the money, I work as a mason.”* She also added that her husband was not keen for her to be a mason, and that she would only work as a mason if the construction site was near to her home as she wants to stay near her family.

She didn't believe that being a mason was a particularly well-respected occupation *“Being a farmer is more respected than being a mason because sometimes when I work as a mason I don't get any money [meaning she does not always get paid]... my husband likes me to be a farmer more than being a mason.”* She also noted that *“Women do not usually work as a mason, only if they are too poor. Other than that, if the husband is at work, then they would just do crop husbandry.”*

She thought that it was hard for a woman to be a mason. Ms Minh noted female masons were paid less than males, and for both males and females, it was common for construction business owners to refuse to pay their workers. Ms Minh's view that it was difficult for women to be in business extended to other types of occupation: *“In my village not many women are owners of shops or restaurants.”*

Ms Minh's story highlights that she had the skills to pursue her role in a mason business, her responsibilities at home (housekeeping and farming) and her role in the Women's Union acted as a constraint for her to do so as she lacked the time to dedicate to the work. In addition, the financial barriers of women masons being paid less than men, and the uncertainty she felt in being paid, also influenced her decision to take on mason work.

Box 3: Nguyen Thi Toan (Ms Toan)

“Because I think a mason is just work. I don't need to feel ashamed. Men can be a mason, women can be a mason. My thinking has changed. The first time people said – you're a woman, why are you a mason? Now I feel very proud that I am a skilled mason.”

Ms Toan was a skilled and chief mason whose masonry role involved predominantly building toilets. Ms Toan also worked for the District Women's Union, and this role provided her with the means to interact closely with households and assisted her to introduce herself as a mason providing sanitation services. Her views on female masons had changed considerably since she began, with her confidence growing with the knowledge and experience she gained along the way.

Ms Toan was born in 1979 and grew up in Muong Ang District in a family of Kinh ethnicity, as one of 7 siblings – five girls and two boys. Her family was very poor compared to other families. Another difference to other families was that Ms Toan's parents were strong supporters of education for their children – she noted that: *“My family tried their very best to get as good an education as possible... It was unusual that my parents were so supportive of education. Some other families did not send their children to school – even if other families were richer than ours.”*

Despite this strong support, her two elder sisters had to stop their education to look after the family – that was their responsibility as elder sisters. Ms Toan and her siblings had a high respect for their parents and their teachers, and she noted that *“My mother taught me to learn and to follow at school”.*

Since Ms Toan's family was very poor, and she described an early memory of how growing up was a difficult life for her: *“When I was young I had to wake up very early. I had to go and look for crabs, snails and small shrimp to sell at the market. Other children went to school or stayed at home but I had to sell the crabs for my own school fees. Only my sisters who were not going to school came too. One or two friends were also in the same situation”.*

and they sometimes came too. After school I had extra jobs – looking after animals etc. I would do this before or after school.”

Ms Toan was a good student and as a result of her good marks, was awarded a scholarship at age 14. Ms Toan noted she was not surprised to have won, as she was good at maths, chemistry and physics. This experience had a strong impact on her, and she recalled how she still remembers what she was wearing when she won her scholarship.

Through Ms Toan’s earlier schooling, there were the same number of boys and girls in her class, with about 20% Thai and the rest Kinh ethnicity. Ms Toan noted that the gender breakdown changed through the course of her schooling, with more females in secondary school (25 females, 18 males), but more males in high school (36 males, 20 females). As class monitor, Ms Toan noted that: *“I remember these numbers because I was class monitor. The students voted for me – I am the one they believe. I was very proud of myself.”* Her confidence and a sense of satisfaction show in her comment that *“the boys obeyed me more than they obeyed the teacher”*. Such confidence and leadership as a school student was demonstrated in her current role as chief and skilled mason, and her ability to undertake a range of tasks across a number of concurrent occupations and responsibilities.

During her high school years, Ms Toan thought she would be a doctor or a teacher but her fear of injections and blood disallowed this. She then followed Chemistry, but had to pay high tuition fees, and she didn’t have enough money so stopped. Also another reason was the school needed to be nearby so she did not have to stay too far away from her parents. She noted: *“If I learn there [at the Chemistry school], I have not opportunity to take part time work. With 3 sisters in my family still at school – so how can my parents pay for me? So I stopped.”*

Ms Toan’s parents expected she would be a success and talented and when she stopped learning, she felt her parents were very sad and noted: *“My parents didn’t know I got into colleges. I sat an exam and afterwards many schools called me – Industry College, Than Lac Uni, Dien Bien – they all called for me to study with them. I chose Tay Bac – I went there to see if I could do part time work at the same time. But I quit because it was not possible.”*

Ms Toan became to be a mason who builds toilets in 2002, as after she graduated from school, she worked as a mason assistant. After attending SNV’s mason training, she became a skilled mason. She chose the profession of a mason to earn money, as it was a stable job and she had work every day. She noted that: *“I love being a mason. My major was drawing - I have good eyes for building so my major is good for being a mason. I can earn money.”* She also collected social insurance and worked at a restaurant. In the SNV training, Ms Toan noted that half participants were women, but since then, she has not seen the women again.

Ms Toan noted that before, she used to wear a hat and scarf to disguise herself as she was ashamed to be a woman mason, and was made fun of and laughed at, noting it was hard to overcome public opinion. Wearing her disguise, people did not know she was a woman until they came up close. She said initially, people asked – *“Who is ‘he’? But no, I am a lady! Sometimes I felt ashamed to be a mason. When I build, people look at me.”*

She said that after one year working as a mason, she got used to it and now, she doesn’t wear a hat and scarf, and is not ashamed anymore. When asked what changed, she responded: *“Because I think a mason is just work. I don’t need to feel ashamed. Men can be a mason, women can be a mason. My thinking has changed. The first time people said – you’re a woman, why are you a mason? Now I feel very proud that I am a skilled mason.”*

Over the past years, Ms Toan had built three big constructions and was very busy, particularly as she had also been recently married and had a child. She also worked as a carpenter, having learned this from her uncle and also a dealer in scrap metal. She also had an important position with the District Women’s Union, as Vice President of Muong Ang District, spending two days per week in that role. Her time as a mason was predominantly building toilets and is introduced to customers through her role in the Women’s Union. She noted that: *“I have a wider relationship with customers, I am more skillful also. More people care about me. People respect me also.”*

Issues of gender equality and gender-related drivers of how these three women came to be masons arose across in all three mason’s stories. These include family views towards educating boys and girls; gender roles in the family; parental obligations; cultural and social expectations of

men and women; shame associated with stepping out of traditional roles; issues of respect and the role of the Women's Union. Broader, macro-scale influences include underlying poverty, issues around ethnicity and political forces influencing internal migration.

As noted in the introduction, oral histories cannot be separated from the specific point in time in which they are told. For these three women, along with women across Vietnam, the Vietnam-American war (1960 – 1975) and the subsequent shift from Communism to a more capitalist society was highly influential on gender roles and a key point in Vietnam's history, including in northern Vietnam (Werner, 1981). None of the masons raised issues of the war explicitly, nor the implications of major policy reforms associated with *Doi Moi*; however women's roles changed markedly over this time (Beresford, 2008), and thus the implications need to be taken into account in the narrative analysis.

Key themes relating to gender were identified in the three women's stories, and these are described below.

Family views towards educating boys and girls

Support for education, particularly of girls, was not common amongst families in Muong Ang District. A commonality between Ms Minh and Ms Toan was their parent's strong support of education. Despite both families being very poor, efforts were made to send the girls in the family to school, even though this was not the norm in their communities. Ms Toan noted that *"It was unusual that my parents were so supportive of education... My family tried their very best to get as good an education as possible"*. Ms Toan was highly committed to her education, going on to win a scholarship. Ms Minh however, was less enthusiastic despite her parent's support. The parental support and encouragement provided to Ms Minh and Ms Toan for education would have provided a strong grounding for these women in later life, as masons and in other roles. Ms Toan's further education in technical drawing certainly helped her in her mason work. Their parent's valuing of education – against social norms and despite economic hardship – therefore influenced these women and assisted towards opportunities for income generation.

Family and parental obligations

As third daughter, Ms Toan noted that her two elder sisters had to stop their education to look after the family, as *"that was their responsibility as elder sisters."* Elder daughters therefore gave up their education for the sake of their parents and family – that was their cultural obligation. Ms Nguyet also experienced parental obligations driven by culture through her parents-in-law. Her culture determined that after she married, she and her husband would move in with her husband's parents – in fact she said her parents in law *"forced us to stay at home with them"*. This meant her quitting her much loved job as a teacher, to the dismay of her own family and friends. Her lack of choice in the matter was in part driven by cultural dimensions of gender, that females give up their freedoms and individual choices to support her husband and his family. However, her husband similarly gave up his job upon their return to Dien Bien, so these sacrifices can be seen to happen to both sexes.

Gender roles

Ms Minh was not particularly compelled to continue her work building household latrines, instead preferring her housekeeping and farming duties. Ms Nguyet was more inclined to continue, despite it not being her original passion (that being teaching), she had built up a relatively successful family business and invested emotional energy into doing her best in mason's role. Regarding her opinion on other people's perceptions of women as masons, Ms Nguyet believed that over time, if people observe women's abilities in a non-traditional role (e.g. masons), they can begin to respect them. She noted that *"Before they [community members] were not*

sure if they [female masons] could do the job, they thought it was a little strange. But when people see we can do it, they are ok. They respect me now and I respect other masons also”.

Ms Toan’s feelings on female masons, and her own role, had changed significantly since she began her work as a mason. Her growing experience, skills and resulting confidence in her own abilities enabled her to overcome earlier feelings of shame (demonstrated by covering herself up to disguise she was a woman). Ms Toan’s journey to become chief mason had resulted in a changed mindset with regards to traditional occupations for women, as she noted that “*men can be mason, women can be mason. My thinking has changed*”. Her capabilities beyond simply being a mason (e.g. her role as Vice President of the District Women’s Union, her role as dealer in scrap metal and her carpentry skills) further reflect her growth and confidence that breaks the mould of traditional women’s roles.

Poverty

All three masons noted the poor economic conditions their families were in as children, and over this period in Vietnam’s history, poor economic conditions were the norm for many families (Werner, 1981). The mason’s stories provided examples of lack of food and water, clothing in poor condition and also the kindness and support of teachers in providing meals and at times, shelter. The obligations of children to supplement funds for education, and / or look after parents later in life were apparent for both the females and males in the families.

Ethnicity

The current proportion of people of Thai ethnicity in Muong Ang is approx. 72%, while those of Kinh ethnicity is approx. 12%. The proportion of Kinh people has increased since the 1960s, when, as Ms Nguyet noted, Ho Chi Minh encouraged people across Vietnam to increase agricultural productivity in less densely populated mountainous areas. As a result, the proportion of Kinh ethnicity (the dominant ethnic group across Vietnam) increased in Dien Bien Province.

Ms Nguyet spoke on the topic of ethnicity, as her parents had instilled in her an openness to, and love of the Thai people. As a result of this upbringing and her own experiences of generosity from Thai people, she demonstrated genuine appreciation and gratitude which she repaid when she could. As a Thai person, Ms Minh mentioned ethnicity when she noted that her teacher, who was Kinh, “*always protected her*” when boys were mean to her.

DISCUSSION

There were several key gender issues that emerged from the structured questionnaire. Firstly, there were differences between men and women’s views on how easy it was for women to be masons. More men thought it was *not easy* for women to play these roles, and more women thought it was *very easy* for them to play these roles.

Secondly, there was a gendered dimension to perceptions of the roles of men and women. Men believed women should be at home attending to housework and family commitments, thus believed it was (or would be) difficult for women to be masons. Women were more open to playing a variety of roles, including the role of mason. These findings are echoed by research conducted by others (e.g. ILO, 2007), which found differences in the constraints (real and perceived) faced by male and female entrepreneurs.

Another challenge for women to be masons (or entrepreneurs more generally) was that women often lacked their own capital, and were in more stressed economic conditions than men which provided an obstacle to entrepreneurship. This aligns with past research in Vietnam which noted how women can face challenges accessing finance if land is only registered in their husband’s name, rather than jointly (Hampel-Milagroza, 2010). Finally, one female mason noted how she

was initially ridiculed when first working as a mason and it took time for her to build her own confidence to overcome these public perceptions.

While pro-social traits acted as a motivator for some (11 out of 20) but not all masons, it was female masons who demonstrated stronger pro-social traits than their male counter-parts. This finding highlights an area of difference between male and female masons, and an area where women may be better supported to take advantage of their pro-social motivations.

The oral history analysis also raised interesting gender issues, such as gender roles in the family and cultural and social expectations of men and women; shame associated with stepping out of traditional roles; and issues of respect.

The above issues can be seen to demonstrate the changes in the way women are viewed in Vietnamese society over time. A 1981 analysis of women's roles in Vietnam society noted that the post-war, socialist society enabled women greater parity with men, specifically noting the north of Vietnam as an area where women moved into more socialist and political roles (Werner, 1981). However, with the introduction of market reforms in the mid-late 1980s, women's roles began to change as state enterprises shed labour, and women were forced to retreat to unpaid household labour (Beresford, 2008). The latter situation and corresponding status of women appears to dominate in the men's views towards women's roles; i.e. that they need to fulfil these household responsibilities rather than participate in income generation outside the home. These views would likely be much different had market reforms not taken place in the 1980s, and a socialist society had remained.

This gender analysis highlights that perceptions of gender, and the roles men and women play in society, are not static, but shaped by a number of factors, either explicitly (e.g. socialism encouraging women's participation in politics) or implicitly (e.g. changes in labour markets meaning fewer paid opportunities for women). Perceptions of women's roles in society therefore need therefore be taken into account in terms of political, economic and historical context.

6. DISCUSSION AND IMPLICATIONS

SUMMARY OF KEY FINDINGS

An overview of the profiles of the sanitation businesses is shown below.

Table 10: Summary of sanitation businesses

Characteristics	Sanitation entrepreneurs
Gender	40% female, 60% male.
Age	75% were under 36 years old.
Education level	25% had completed primary school, 40% completed secondary school, 25% had completed high school and 10% had technical or intermediate qualifications (all stated as highest education level attained).
Previous work experience	80% had no previous professional experience.
Other concurrent job (side-job)	90% had a side-job, of which many worked in animal husbandry and agriculture.
Time spent building toilets	Two masons that spent 100% of their time on the mason business, but did not spend all their time on building toilets. Of the time spent on their mason business, three masons spent 100% of their time building toilets.
Time spent as a mason	60% had joined or established the mason team over the last 10 years.
Size (number of staff)	2 businesses had 40 or more employees, 2 had 19-20 and the remaining 11 businesses had between 2-10 staff (5 were unknown).
Legal status	70% were informal and not registered.
Business initiation	30% of businesses were initiated by a family member, 40% initiated by the mason themselves and 40% by another mason.
Source of capital	66% drew on personal savings, 25% had accessed loans, and 21% had accessed grants and society funds.
Service offered	40% sold toilet pans, 40% offered installation without superstructure, and 45% offered installation with superstructure. 75% offered construction/installation only (labour only).
Customer base	40% exclusively served households and 10% served exclusively institutions. The remainder served a mix of households and institutions, with households constituting a greater proportion.
Marketing methods	60% used previous customer's recommendations, 10% practiced direct selling techniques and one relied on government staff (Women's Union).

A summary of the key findings is presented below.

Toilet construction can be, but is not always, the focus of masons trained in building toilets:

Of the 20 masons, all of whom were trained in toilet construction, eight spent the bulk of their time building toilets, while nine spent the bulk of their time in their mason business building “other” construction types, and of these nine, six did not build toilets at all. The degree of knowledge of financial earnings and profit was quite limited amongst the 20 masons due to the team based nature of their businesses, and how assistant masons often had little to do with the accounting side of the business.

Masons generally exhibited limited entrepreneurial traits: Presence of three key entrepreneurial traits (risk taking, innovativeness, proactiveness) was generally weak amongst respondents. The ‘need for achievement’ was the most common entrepreneurial trait, though still only present amongst half the masons. The ‘need for independence’ was absent for all masons. This can be explained by the team based (and often family based) nature of the businesses. Most masons did not consider themselves entrepreneurs, rather their vocation was one of necessity and lack of other choices for income generation. There was indicative evidence that businesses with higher revenue and profit were linked to a greater propensity for entrepreneurial traits. There was also emerging evidence that amongst our sample, a higher number of entrepreneurial traits was associated with stronger pro-social traits. However both of these indications would require more detailed research and a larger sample size to draw any clear conclusions concerning such links.

A range of key challenges limit business success: Masons were asked to identify the key challenge they faced in their work, which included not being paid by customers, inadequate workload, accidents, weather and disagreements with customers. The most common challenges cited from the list of challenges provided included not enough sales, high competition, and the difficulty in finding staff. Other challenges were that too many customers paid late and the lack of business knowledge and skills required to run a business.

A range of findings related to gendered roles and perceptions are important to note:

Female masons demonstrated stronger pro-social traits than their male counter-parts: Pro-social traits were used to describe the tendency of a person to voluntarily behave (or intent to behave) in a way that benefits others. Pro-social traits acted as a motivator for some (11 out of 20) but not all masons. More males exhibited no or weak pro-social traits compared to females. More females exhibited medium or strong pro-social traits compared to males. Of the nine masons without pro-social traits, many noted the sole purpose was to earn money. This aligns somewhat to other studies that have demonstrated Vietnamese male entrepreneurs to be ‘growth oriented’ entrepreneurs to a larger extent than women (ILO, 2007).

Female and male mason views differed concerning gender and entrepreneurship: In terms of gender perceptions, more males thought it was *not easy* for women to become entrepreneurs when compared to women’s perceptions. It was also interesting that more women thought it *was easy* for women to become entrepreneurs when compared to men’s perceptions.

It is possible to change perceptions about female roles in sanitation services: Perceptions of gender roles, and gender equality generally, also shaped the way people (both men and women) viewed female masons. There was evidence that as it became more common to see women working in non-traditional gender roles (e.g. working as masons), others became more accepting of this and the confidence of these women increased.

Female masons often lacked their own capital: This was raised by both male and female masons, i.e. that women were in more stressed economic conditions than men, which provided an obstacle to entrepreneurship and potentially establishing their own enterprise.

A complex range of factors mediated women’s choice to become a female mason: The oral history analysis provided examples of how early experiences in education can instil confidence such that later in life women may undertake non-traditional roles, as was the case for Ms Toan who was able to overcome feelings of shame as a female mason to become a proud and confident Chief Mason. Beyond this, a range of factors influenced women’s motivations, opportunities and constraints in taking on such a role, including parental obligations; cultural and social expectations of men and women; challenges associated with stepping out of traditional roles; and issues of respect and how it is earned and perceived.

The following table summarises the overarching motivations (or enablers) and barriers (or constraints) to sanitation enterprises in Muong Ang. They are grouped according to the component of the analysis from which they are drawn.

Table 11: Summary of motivators and barriers for sanitation enterprises

Motivators / enablers	Barriers / constraints
Characteristics of success and challenges	
<ul style="list-style-type: none"> • Dedication • Determination • Ability and willingness to learn • Technical skills (e.g. in design / drawing) • Solidarity with team 	<ul style="list-style-type: none"> • Not being paid by customers / paid late • Inadequate workload / not enough sales • Accidents • Disagreement with customer • Lack of / limited business knowledge • Difficulty in finding staff with right skills • High level of competition • Remote location of customers (transportation and cost challenges) • Inadequate income from mason business
Entrepreneurial and pro-social traits	
<ul style="list-style-type: none"> • Willing to learn • Skilled in construction • Experience in working with other masons • The presence of pro-social traits provided an additional driver for some masons to continue in their role 	<ul style="list-style-type: none"> • Limited presence of entrepreneurial traits, particularly risk-taking, proactiveness and innovativeness
Gender differences affecting women’s role in sanitation businesses	
<ul style="list-style-type: none"> • The belief instilled from childhood that females and males are essentially the same and can perform in the same job • Education encouraged for girls • Financial status allowing for education for both girls and boys • Confidence gained through experience, allowing female masons to overcome feelings of shame or inadequacy • Having a role within the Women’s Union provided a means of introduction to potential customers 	<ul style="list-style-type: none"> • Preconceived idea that masonry work is not for women due to physical nature of the work (may be true for some women, not for others) • Preconceived idea that women are slower learners and have less skills than men generally • Some women lack investment capital required for mason business • Belief in cultural gender roles amongst some masons led them to see women’s role was at home • Sense of shame some women felt in stepping out of these gender roles • Limited / lack of female mason role models to encourage them to persist with the job should they want to • The perception (predominantly amongst men) that it is difficult for women to be entrepreneurs can act as a barrier to entry. Some males may discourage women to play mason roles, or be reluctant to take them on as mason assistants.

PRACTICAL ACTIONS TO ENGAGE MASONS IN SANITATION ENTERPRISES

Three key findings that can help to inform actions to better engage and support masons in sanitation enterprises include the following: limited entrepreneurial traits amongst masons, observation of stronger pro-social traits amongst female masons and female masons' lack of access to capital.

Masons involved in this research exhibited limited traits commonly associated with entrepreneurship. For example, most were not risk-takers, had limited proactiveness and did not demonstrate a degree of innovation in their work. This poses a challenge for agencies looking to support the 'supply-side' of sanitation provision, as it is unlikely that such masons will spontaneously build, grow and expand their businesses to meet the needs of rural communities. It points to the need to consider ways of targeting of recruitment processes of potential entrepreneurs and specifically seek individuals that demonstrate entrepreneurial traits. However it is also possible that such individuals will not be easily found in some locations, and particularly amongst masons. Hence further strategies may need to be developed, potentially combining skill-sets of different actors on the supply-side.

The second key finding was that female masons demonstrated stronger pro-social traits than their male counter-parts. Suggested actions to build on this for CSOs are provided below and include building social enterprises which maximise pro-social motivations and introduce the potential for women to profit from these ventures as well.

Another key finding was that female masons were found to often lack their capital which could provide a barrier to entrepreneurship and enterprise establishment. Other research provides insights into such challenges, for example Hampel-Milagrosa (2010) suggest that "significant but weak" differences exist in terms of how males and females can register land ownership and build savings. Hampel-Milagrosa's (2010) research also notes differences in education between male and female entrepreneurs, providing males with more confidence when establishing a business. ILO (2007) note that if land is registered only in the husband's name, the wife can face challenges accessing financial services – but it is possible for land to be registered in both the husband and wife's name to overcome this barrier. Overcoming this obstacle may involve changes to the way assets are registered (see government actions below).

Practical actions and implications for CSOs/NGOs

Attention to demand creation, marketing skills of masons and potential for smart subsidies are all areas that deserve further action and experimentation by CSOs/NGOs. These are described below, followed by several specific actions related to increasing women's roles in sanitation enterprises.

Demand creation remains a critical role for CSOs/NGOs to work on together with government. Some of the barriers or challenges raised by masons included an inadequate workload for masons, not enough sales and inadequate income from their business. By appropriately addressing the demand side (in the context of underlying poverty and ethnic diversity in Muong Ang), mason businesses may find themselves with a greater customer base, and thereby extending their potential profits. Increased coordination between the locations of demand creation and supply-chain support activities is also essential.

In addition to inadequate sales, masons also noted a high level of competition. Concurrently, many noted the only form of marketing was through previous customer recommendations. This situation presents an opportunity to introduce the idea of marketing to masons. While marketing in a Western sense appears to be absent in Muong Ang, CSOs familiar with the context may be

able to formulate culturally appropriate approaches to assist masons market their services to potential customers.

The study's findings also provide evidence that support to the poor to purchase toilets is still needed. This comes from the barriers or challenges raised by masons noting that customers were not always able to pay on time, and often required payment by instalments. Supporting the poor to be able to purchase sanitation products and services is acknowledged as a difficult challenge to address, and 'smart' subsidies remain an emerging and important area for experimentation and investigation.

"Difficulty in finding staff with right skills" was highlighted as a barrier or challenge by masons. Since most indicated they learned on the job, this is not surprising. Overcoming this challenge may be through training courses or more formal mentoring – both options may be considered by CSOs as a means to support masons in the future.

Actions to support findings related to womens' roles in sanitation enterprises include the potential for sanitation associations for women, engagement with relevant national organisations focused on women's role in entrepreneurship, and building on female masons' strong pro-social orientation to develop social enterprise models of development.

A key finding was that changes in perceptions about female roles in sanitation is possible, and some female masons were able to overcome feelings of shame of stepping out of gender roles which led to confidence in their roles as masons. Hampel-Milagrosa (2010) notes that womens' internal perceptions of themselves as entrepreneurs can be a barrier to them entering the business environment. Furthermore, ILO (2007) points to the benefits of women's business clubs and associations for sharing of information and establishing networks. This research's findings, combined with findings from elsewhere suggest that CSOs could help to establish and maintain sanitation associations for women, which would support female masons to build confidence in playing leading roles in sanitation and thus overcome the negative internal perceptions harboured by some women.

The Vietnam Women Entrepreneurs Council (VWEC) is an organisation under the Vietnam Chamber of Commerce and Industry (VCCI). CSOs could therefore work more closely with VWEC to raise the issue that sanitation is an area of business that women can play particular roles, and supporting them to do so may be of interest.

Given that female masons demonstrated stronger pro-social traits than their male counter-parts, CSOs could build on this motivation and suggest that female masons, with the right skills, could also attain an income from their work in sanitation through good business management. This could be the basis for successful social enterprises, which are motivated by both social and business goals.

Practical actions and implications for government

Two key areas require further engagement from government, they are support to technical and business skills training for masons, and development of targeted smart subsidy approaches.

Government has an important role to support training of masons to build toilets. Training may be focused on the physical construction of toilets or on the skills required to run a business. Government should also work to continue to develop appropriate ways to increase demand, noting the context of underlying poverty and ethnic diversity, as mentioned above, which may require differentiated behaviour communication strategies. All levels of government are implicated- provincial, district and commune level.

The remote location of some customers was raised as a challenge, with masons highlighting that transportation and cost proved difficult. This issue is discussed at length in a separate paper (see Gero et al., 2015), with potential actions included (for example, subsidies to small-scale suppliers and services in remote locations, subsidised credit to poor households or output based subsidies).

Finally, “*Not being paid by customers / paid late*” was also raised as a key challenge. Actions to support to poor households may include subsidies, loans, rotating funds or vouchers for sanitation products or services. In addition, actions may be formulated in combination with the challenges associated with the remote nature of households, as noted above.

Two broad areas of importance for government to increase the role of women in sanitation enterprises and in small-business more broadly concern education, particularly vocational education, for girls and strengthened attention to women’s access to capital.

The Vietnam government has acknowledged gender to be an issue in the business sector, and introduced new policy and reforms through the implementation laws on Gender Equality, Investment and Enterprises as well as other Decrees to support female entrepreneurship. While the aim of such reforms is to provide more equal opportunities for female entrepreneurship, more can be done to support women entrepreneurs through other avenues.

For example, the government can play a stronger role in supporting the provision of education for girls, particularly vocational education. This will further the understanding and awareness that girls have the same potential abilities as boys if they are provided with the same opportunities. Encouraging education for girls from an early age may also begin to address the challenge raised by some masons that some women lack investment capital required to start a business. Further, vocational education for girls may be another way to more specifically address the barriers women and girls face to working as masons, providing them with practical experience and confidence to take on roles in sanitation service provision.

A specific action to address female masons lacking their own capital may be to provide adequate information to women entrepreneurs regarding co-registration of land with their husband to allow for access to financial services and loans. This information may be channelled through Provincial Government, or the Women’s Union.

7. CONCLUSION

The report has presented the findings from the study which investigated the motivators and barriers faced by masons – or sanitation enterprises – in Muong Ang District, north-west Vietnam. Results highlight that beyond the “need for achievement”, masons generally lacked traits identified in the literature that are associated with being an entrepreneur. Some were motivated by pro-social goals, such as keeping the environment clean and helping others with access to hygienic sanitation options.

Barriers to entry for sanitation enterprises included the inability for some customers to pay, high competition amongst mason teams and limited available work. Difficulty in finding the right staff and limited business knowledge was also raised as a challenge for some mason business owners. These challenges may be overcome through measures such as targeted training, and government support for poor customers. More nuanced policy relating to supporting the private sector in rural and remote locations may also be needed, with CSOs and research institutions able to play roles in providing an evidence base for such policies.

By taking a gender lens to analysis, results revealed differences in male and female interviewee’s perceptions of female masons, which often stemmed from how females were viewed more generally, and the roles they played in the home and providing for their families. Women were able to perform in the role of mason – some becoming chief masons with their own teams, and gaining confidence as they did so. As more examples of females in these roles emerge, it is anticipated that perceptions of women’s roles may begin to change and more females can have active roles in sanitation businesses. It is also important to note that gender roles in Vietnam are dynamic, and these have shifted over time due to political and economic influences. Shifts in political ideology from socialism to capitalism have meant women’s roles have changed from being politically and economically active in society, to being more constricted to household occupations.

This research has shown that more could be done to attract and retain women in small business roles that relate to sanitation – an area closely related to women’s roles in a traditional sense. For example, the government could provide vocational education for girls as a way to specifically address the barriers women and girls face to working as masons, providing them with practical experience and confidence to take on roles in sanitation. CSOs, through their relationships with communities, government and other organisations working in sanitation, may be able to assist in enabling the sharing of such stories. Establishing mason associations, which have provided a supportive environment for businesses in other locations, may also be an area CSOs can provide support. Associations may also be formed for female masons to specifically address the barriers they face. Doing so may help to overcome perceptions of gender stereotypes that have in the past provided barriers to women playing certain roles, for example as masons and entrepreneurs. By building on and increasing the motivating factors and addressing the barriers and challenges, and understanding that gender roles in sanitation can be flexible, opportunities can be maximised to enhance the environment for sanitation enterprises to become successful.

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APPENDIX 1: DATA COLLECTION FOR MASONS

Section 1: The business owner / mason

1. Sex : Female Male
2. Where do you live? _____(commune) _____(village)
3. Your ethnic group _____
4. Year of birth _____ (mm/yy)
5. Highest educational level attained
 - None Primary School Secondary School High School
 - College University (Bachelor Degree) University (Master Degree)
 - Technical qualification
6. Where did you get information and skills to be able to build latrines as a business?
 - Formal Education
 - Short-course
 - Working in related business
 - Associations
 - Self-learning
 - Others, _____
7. Have you been working in a professional paid job before working as a mason?
 - Never (**Go to Q8**)
 - Yes; if so how long have you been working?: ____ (years)
8. If yes, in what sector? (*Select all applicable*)
 - Public Private Self-employed
 - Others _____
9. Are you currently involved in any other job or business(es) besides the mason business?
 - Yes, please specify what is your other Job/business?

 - No (**Go to question 10**)
10. How much time do you spend on your mason business compared to your other job/business(es)?
_____ (hours/day) OR _____ (days/week)
11. Do you work in a team? (Yes/No)
12. What is your role in the business?
 - Mason Assistant Skilled Mason
 - Master Mason Other: _____
13. What proportion of your time as a mason is spent building:

Latrines: _____ % of time /// Houses / other: _____ % of time

14. Over one year, how much of your profits in VND would come from building toilets, and how much would be made from houses/other?

Latrines: _____ % of profits /// Houses / other: _____ % of profits

Section 2: The Business

15. a. Month and year of establishment of the team _____ / _____ (mm/yyyy)
 b. When did you join the team? _____ / _____ (mm/yyyy)
 c. When did you start building toilets specifically? _____ / _____ (mm/yyyy)
 d. Notes: _____

16. Location where the business operates (select all relevant)

Urban Sub-Urban Rural/Village

Notes: _____

17. What are your business goals?

18. Think back to when you first decided to build toilets as part of being a mason. What was your main reason for doing so? [*Prompt: if profit is one of the reasons presented, ask: 'why did you choose this particular business opportunity and not another one?'*]

19. Is your business still operating?

Yes

No. Why did it stop?

20. After establishment, how was your business doing (*in terms of profit or revenue from toilets specifically*)?

Not growing and declined

Growing after 6 months

Growing after 1 year

Growing after two years

Not yet made any profit; When do you think it will break even? _____

21. If you've been operating for more than 3 years, how has the business progressed in terms of profit/revenue from building toilets in in the last 2 years?

Declined

Increased

Remained stable

Not yet made any profit

22. Who started the firm? (*Multiple answers possible*)

- Yourself
- A family member. Please specify _____
- Other, please specify _____

a. Have any of your family members ever been involved in the business (*past and currently?*)

- Yes No **(Go to Q 23).**

b. What are the benefits and challenges/difficulties of running a family business?

23. Status of the firm

- Informal (not registered) Legal Formal(registered with govt/pay tax)
- Subsidiary Cooperative
- Other _____

24. How much have you invested of your own money, assets or time to this business?

25. Amount of starting investment VND _____)

Notes on value of starting investment

26. For any accumulated assets (eg tools, motorbike etc.) what is the amount of accumulated assets VND

Notes on accumulated assets and their value

27. As a result of being a mason, what have you been able to buy or spend your money on?

28. Source of capital (multiple answers possible)

<input type="checkbox"/> Personal savings/investment	<input type="checkbox"/> Joint venture with colleagues/friends
<input type="checkbox"/> Family investment	<input type="checkbox"/> Third-party investment
<input type="checkbox"/> Loan	<input type="checkbox"/> Others, please specify
<input type="checkbox"/> Red Certificate	

29. What services do you offer or products do you sell? (*Select all applicable*)

<input type="checkbox"/> Construction / Installation only (labour, no materials)	<input type="checkbox"/> Full-toilet package (without superstructure, not installed)
<input type="checkbox"/> Toilet pan	<input type="checkbox"/> Full-toilet package (with superstructure, not installed)
	<input type="checkbox"/> Installation of full-toilet package (without superstructure)
	<input type="checkbox"/> Installation of full-toilet package (with superstructure)

	<input type="checkbox"/> other, (specify)
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30. What are the costs of your services and products?

Products	Cost (pit latrine)	Cost (Double vault latrine)	Cost (septic tank latrine)
<input type="checkbox"/> Construction / Installation only (labour, no materials)			
<input type="checkbox"/> Toilet pan			
<input type="checkbox"/> Full-toilet package (without superstructure, not installed)			
<input type="checkbox"/> Full-toilet package (with superstructure, not installed)			
Other? Types? Ventilated Improved Pit, Double Vault Latrine. Etc?			
<input type="checkbox"/> other , (specify)			
Services	Cost (pit latrine)	Cost (Double vault latrine)	Cost (septic tank latrine)
<input type="checkbox"/> Installation of full-toilet package (without superstructure)			
<input type="checkbox"/> Installation of full-toilet package (with superstructure)			
<input type="checkbox"/> other , (specify)			

NOTES: _____

31. What is the monthly average net revenue of your mason business in the past year:

Actual amount: _____/week? month? year?

32. What's the composition of your customers?

a. Individual/households: _____%

b. Institution; private and government: _____%

33. Do you offer customer payment in installments?

Yes No

34. What proportion of your customers need to pay in installments? _____%

35. What is the number of your employees, in addition to the owner?

	Full-time employees	Part-time employees
At start-up:	_____	_____
At present:	_____	_____

36. How do you market and promote your business (*product and services?*) (*multiple answers possible*)

<input type="checkbox"/> Web-page/Internet	<input type="checkbox"/> TV	<input type="checkbox"/> Radio	<input type="checkbox"/> Previous customer's recommendation
<input type="checkbox"/> Government staff	<input type="checkbox"/> Direct selling	<input type="checkbox"/> Newspapers	<input type="checkbox"/> Posters/flyers
<input type="checkbox"/> Advertising board	<input type="checkbox"/> Store visibility	<input type="checkbox"/> Sales Agent	<input type="checkbox"/> other _____

Section 3: Entrepreneurial personality and motivations

37. What type of person do you think makes a successful sanitation entrepreneur?

- a. Unprompted response: _____
- b. what type of personality do they have? _____
- c. What skills do they have? _____
- d. What experience do they have? _____

38. I'm going to ask you questions and ask you to answer these in a scale of 1 (low) to 4 (high).

1.	How easy do you think it is for you to discover new business opportunities?	1	2	3	4
2.	How much do you see yourself as an innovator?	1	2	3	4
3.	How easy is to make a profit/maintain a business as a mason?	1	2	3	4
4.	When you started this business, how certain were you that it was going be success?	1	2	3	4
5.	How confident are you of the future success of your business now?	1	2	3	4
6.	How committed do you feel to continuing your business into the future?	1	2	3	4
7.	In your mason business, how much do you follow the same model/ideas as others?	1	2	3	4
8.	How often have you tried new ideas for your services and products in your business?	1	2	3	4
9.	How important do you think is it to take risks in a business?	1	2	3	4
10.	How confident do you feel to get a loan from a bank?	1	2	3	4
11.	What is your level of confidence in yourself as an entrepreneur?	1	2	3	4
12.	How dangerous do you think it is to take risks in the area of mason business?	1	2	3	4

39. Have you developed new products or services for your customers? Can you give some examples?

40. Have there been some other benefits for you of being involved in this business other than profit? What have these been?

41. Do you see yourself as running a business or providing a social service or both? Why do you describe yourself this way?

42. In 2 years from now, where do you see your business, or what do you expect it should look like? What will you have accomplished?

43. Why is this future you've described for your business important to you?

44. There is a range of factors that can be important for business success. Based on your experience, what mattered most in helping you to be successful? Are there any other things that have also been important?

- 45. a. What are the risks that you face as a mason?
- b. Of the risks you listed, which one is the biggest one?
- c. How often does it happen?

46. It is normal for businesses to face various challenges over time. Some of the common challenges for example are [name a few from the list]. For your business, some of these may not have been a challenge at all, or only a small challenge, whereas other may have been a big challenge. Starting with lack of demand for example, based on your experience, has it been a challenge for you? (yes or no)

		Yes	No
1.	Not enough sales to sustain the business/low or lack of demand		
2.	Not enough business knowledge and skills		
3.	Hard to find good staff with the right skills (e.g. masons, sales staff, admin, or other)		
4.	Too many customers pay late		
5.	High level of competition (too many similar business)		
6.	Other		

47. Of all the challenges you just talked about, which one is the biggest problem for you? Is there any another challenge that has also been a big problem, could you talk more about them?

48. When you faced problems in your business in the past, how have you faced these? [*Prompts: For example: approached government agency, approached other masons, social networks, mason associations, approached NGOs, pay for someone for legal advice, attend training, pay technician – subcontract someone expert/pay for some advice (technology, management, financial etc.), approached bank, other – specify:....*]

Note to enumerator: Unprompted response

Note to enumerator: prompted response

49. How do you feel about the support that has been available to help you when you have faced these challenges?

Section 4: Cultural and gender influences on entrepreneurship

50. I'm going to ask you questions and ask you to answer these in a scale of 1 (low) to 3 (high).

1.	Thinking about your local community, what level of status do you think your mason business has? [1-no respect; 2-respect; 3 a lot of respect]	1	2	3
2.	Notes on above:			
3.	Concerning women and men in your community. How easy do you think it is for women to become entrepreneurs in your community? [1-not easy, 2- easy, 3- very easy]	1	2	3
4.	Notes on above:			

Thank you

APPENDIX 2: METHODOLOGY AND DATA COLLECTION TOOL FOR ORAL HISTORY INTERVIEWS

Research Objective:

The purpose of this oral history ‘sub-project’ is to understand how broad social and cultural dynamics shaped the lives of selected female masons, and led to their roles in sanitation in Dien Bien Province (Vietnam). It is expected to give insight into how gender equality affects women’s role in sanitation service provision, since in many countries it is assumed that women cannot, or will not be interested, to play active roles in building toilets as a livelihood activity.

Overarching guidance on methodological approach:

- Both parties should agree to the approximate length of the interview in advance (likely 1.5 hours on top of prior TS2 Mason Questionnaire)
 - Have a specific discussion about ethics- flag that we will cover some fairly personal questions, and are very interested in their responses to these. In writing up the stories, we can either:
 - name and attribute the stories to them, in which case we would need to develop a process for them to check what was written and approve it
 - leave them anonymous (or with a ‘made-up’ name)
 - Keep questions simple and short and open-ended to encourage narrative (i.e. not yes / no questions). Use phrases like “describe”, “tell me about”, “set the scene” ...
 - Ask follow up questions. Ensure they know you are interested in the subject and they should elaborate. Do not skip the details, rather, ask for more explanation.
 - This interview is considered a conversation, not a question-and-answer session. The questions below are a general guide of things to talk about, but it is not expected the questions will be asked in order, or even using these specific questions. They are more topics to cover.
 - Allow silence and give them time to think. Aim to give non-verbal feedback to show you are listening (e.g. nod head, don’t say hmmm , uh-huh)
 - End with light conversation – do not end on an intense note.
-

Biographical information

- Where she was born
- When she was born
- Where she grew up
- How many sisters, and how many brothers?
- Parent’s jobs / source of income / livelihood?

Questions on your community and village life

- How did others in your community make a living / support their families?
- What was typical about your family, compared to others in your community?
- What was different about your family, compared to others in your community?

- Can you describe a strong memory of growing up in your community, something that stands out in your mind that made an impact on you as a child?
- Who were some of the people in your early years who influenced who you are today?
- Why or how did this influence come through?
- Can you describe how you came to be a mason that builds toilets?

Questions on education

- Describe your memories of going to school
- How long was this for?
- What was it like going to school in your village?
- What differences in opportunities did girls and boys have at your school, or in your community?
- If or how did this affect your decision or approach to being a female mason?
- What would you say this process involved – what shaped the decisions to get to this point?

Questions on gender

- What was it like growing up, as a girl in your village?
- How did this change as you grew up?
- What was easy about it, and why?
- What was difficult, and why?
- Can you describe any expectations your family had of you?
 - As a child?
 - As a teenager?
 - As an adult?
- How did these expectations fit within those of your village – were they normal, or different? Can you explain how?

Questions on being a mason

- What kind of mason are you (assistant, head/lead mason etc.)?
- How unusual, or not, is it for females to be masons? (particularly head mason, not just assistant)?
- Why do you think this is so?
- Have you faced any challenges or barriers being a woman in this role? Why do you think these have arisen?
- How do you think your own life story we have just been talking about has contributed to your role as a mason?