



MOTIVATORS AND BARRIERS FOR WATER ENTERPRISES IN VIETNAM

JULY 2015

ENTERPRISE IN
WASH

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

The Institute for Sustainable Futures (ISF) was established by the University of Technology Sydney to work with industry, government and the community to develop sustainable futures through research and consultancy. Our mission is to create change toward sustainable futures that protect and enhance the environment, human well-being and social equity.

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EXECUTIVE SUMMARY

Introduction

Small-scale enterprises play an emerging and important role in supporting increased access to water services in Vietnam and elsewhere. While studies have been undertaken to examine the impact that small-scale enterprises have in the sector, little is known about what motivates them to become involved in service provision for the poor, or what they see as the key factors that support and hinder their viability and business success.

This study was undertaken by the Institute for Sustainable Futures, University of Technology Sydney, in partnership with the Centre for Natural Resources and Environmental Studies (CRES), Vietnam National University and East Meets West (EMW). It drew on literature in the fields of small-scale enterprises, entrepreneurship and social entrepreneurship and examined water enterprises in the provinces of Tien Giang, Dong Thap, Long An, An Giang, and Ben Tre, in the Mekong area. It investigated the motivations and drivers of these enterprises, and the barriers to their entry into the sector.

Study purpose and methods

The purpose of this study was to explore enterprise motivators and drivers of water enterprises and to provide insights into how these may be best harnessed and supported by development agencies and governments. It provides evidence on the key real and perceived 'barriers to entry' and business risks within Vietnam's culture and regulatory environment. This predominantly qualitative study involved structured interviews with female and males involved in leading or managing 20 existing water enterprises. As a part of the study, the opportunities for, and constraints on, women's participation in enterprise development were also examined.

The research tools were based on the literature and previous research on the political economy of enterprise engagement in water 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 were used to highlight common and atypical perspectives.

Enterprise characteristics

Water enterprise leaders interviewed (n = 20) were predominantly male, of the Kinh ethnic group and aged between 45 and 65. The majority had completed high school and acquired skills to run the water enterprise through short courses. Almost all respondents had previous work experience of up to ten years, the majority of which was in the public sector. Most water enterprise leaders also had another occupation concurrent to their role in the water enterprise although most said they spent more of their work time (60% or more) on the water enterprise than on their side job.

The enterprises were predominantly small businesses with a workforce of one to ten employees located in rural areas, with more than ten years of operation. Most enterprises had three areas or departments: management, administration and operations. Most of these departments had one to five employees. Most enterprises had staff that had completed senior high school and more than half had staff with a bachelor's degree, but none had staff with a master's degree. Membership of associations was common amongst the enterprises. The enterprises relied predominantly on family investment and/or bank loans as sources of business capital, and on word of mouth and direct selling to market their services. Almost all enterprises served five or

less communes, and all served both households and institutions. The number of households served by each enterprise ranged from less than 2,000 up to 12,500, although the majority served 2,500 households or less. The number of institutions served by each enterprise ranged from less than 2,000 up to 13,500, although the majority served less than 2,500 institutions. Almost all the enterprises produced less than 2,500 m³ of water per day, and the majority had an average water consumption of up to 10 m³/household/month, and water losses of up to 40%. Water tariffs ranged from 4,000 VND/m³ (USD 0.18/m³) to 10,000 VND/m³ (USD 0.46/m³), although the vast majority charged between 4,000 VND/m³ (USD 0.18/m³) and 8,000 VND/m³ (USD 0.37/m³), and only a small proportion charged more than this. The cost of water connection services ranged from below VND 500,000 (USD 23) to VND 2,000,000 (USD 92), although the majority of the enterprises charged less than VND 1,000,000 (USD 46).

Key findings

Entrepreneurial traits: Of the five entrepreneurial traits reported in the literature as characterising successful entrepreneurs, four were found amongst respondents, including proactiveness, need for achievement, innovativeness, and risk-taking. Leaders of successful enterprises tended to demonstrate a larger number of traits than leaders of unsuccessful enterprises. In particular respondents who led successful enterprises demonstrated a greater presence of need for achievement and proactiveness than other traits. Amongst leaders of highly successful enterprises and those with some success, need for achievement and proactiveness were more strongly present than other traits. Although these two traits were also present amongst leaders of unsuccessful enterprises, risk-taking was only evident amongst leaders of successful enterprises.

Pro-social traits and other motivations: Overall, entrepreneurs demonstrated a sense of social responsibility and the fact that all enterprises served poor and informal communities supports this. Further, a positive relationship was found between higher levels of pro-social traits and the percentage of low-income customers served by the enterprise. Interestingly, leaders of unsuccessful enterprises tended to demonstrate weaker pro-social traits than leaders of successful enterprises.

A range of factors underpinned a sense of social responsibility. In some cases entrepreneurs were intrinsically motivated through, for example, feelings of self-satisfaction in helping, religious beliefs, and a sense of empathy and compassion for the poor. In other cases, the underlying motive appeared to be extrinsic and related to the entrepreneurs' past or concurrent jobs if these were aligned with the objectives of the water enterprise. This was the case for five respondents who in the past had worked for government agencies that had a role in water service provision.

A broader range of motivations and benefits for the respondents, as well as other enterprise staff, were also evident. Reported benefits included: increased status and acknowledgement, lifestyle and time flexibility offered by the water enterprise job as well as the opportunity to acquire new skills, knowledge and experience. In addition, other benefits reported in relation to other enterprise staff included profit and the ability to support family income.

Levels of success: The majority (60%) of the water enterprises were considered to be successful, and one-third of these were highly successful. Most of the enterprises (74%) had observed some profit after establishment, 11% had not made any profit after three years of operation and only a minority (5%) declined after this same period.

Measures such as the monthly revenue, monthly profit margin, and annual average of accumulated assets provided an indication of business financial success. Significant variations were observed for each of these variables, although the majority of the enterprises reported values within the lower ranges of reported intervals. Reported monthly revenues ranged from less than VND 25 million (USD 147) up to VND 125 million (USD 5,733). However, of the 14 respondents who reported on this, 13 reported monthly revenues of less than VND 50 million (USD 2,293). The monthly profit varied from less than VND 25 million (USD 147) up to VND 125 million (USD 5,733), although most enterprises (65%) made less than VND 25 million (USD 147). The annual average of accumulated assets ranged from less than VND 150 million (USD 6,879) up to VND 2.5 billion (USD 1,146,500), although the majority (70%), accumulated an annual average of VND 350 million (USD 16,051) or below.

Relationship between success and enterprise characteristics: Greater previous experience in the private sector was found amongst leaders of successful enterprises than amongst leaders of unsuccessful enterprises, whose previous experience had been predominantly in the public sector. Age of the leader was also a factor, with younger enterprise leaders demonstrating greater success, and older leaders less success. Findings also revealed that enterprises with higher levels of success were larger, with more staff and more customers than unsuccessful ones. Further, higher levels of average water consumption from customers were found amongst enterprises with higher levels of success. Likewise, higher water tariffs and water connection fees were found amongst enterprises with higher levels of success.

Factors affecting success: Respondents' perceptions of what characterises a successful water enterprise leader and success factors of the water enterprise emphasised personality traits. Reported important personality traits for success included: enthusiasm, passion and self-motivation, thoroughness and meticulousness, commitment, being hardworking, and having pro-social motivations.

Of the contextual factors that can affect business success, respondents reported that operational aspects were the most challenging (38%), including high cost of materials and equipment, and high fixed expenses (e.g. high-energy costs, high maintenance and repair costs, and management of water storage). Respondents also highlighted financial challenges (18%) and access to market challenges (14%). Financial challenges included high interest rates for bank loans, official taxes, difficulties in meeting bank loan requirements, limited access to banking services, cost recovery challenges and customers' late payments. Access to market challenges included high levels of competition, unfavourable location and insufficient sales. A smaller proportion of respondents also emphasised human resource challenges (10%) and government and legal challenges (5%). These included difficulties in finding staff with the right skills, limited access to technical and business knowledge and skills, and unclear government legislation or lack of legislation.

In contrast, in response to an open-ended question concerning business success factors, respondents emphasised access to market factors as the most important. In particular, high levels of competition, unfavourable location and insufficient sales were the most commonly reported market-related challenges. Respondents also highlighted other factors, including government support and regulation, human resources and operational aspects. Amongst these, the most commonly reported included: access to training opportunities, support from local government, and access to water resources of appropriate quantity and quality.

Comparison of enterprise success with enterprise characteristics revealed that enterprises with higher levels of success had higher average water consumption and that unsuccessful enterprises tended to charge lower water tariffs.

Gender dimensions of success: It was found that female entrepreneurs achieved lower levels of success than male entrepreneurs. Nevertheless, the great majority of the respondents (84%)

perceived that it is easy for women to become entrepreneurs in Vietnam and to become involved in water enterprise in a paid capacity. This dominant perception was underpinned by other perceptions or beliefs. These included: the perception that there are many examples of women running businesses, the belief that women's personalities and natural skills are better suited for business management activities than men's, and that women are as capable as men to run a business or a water enterprise.

Cultural influences on enterprises: The literature suggests that the level of support for self-employment and entrepreneurial behaviour within the family, community and wider country context are important in determining entrepreneurial success.

The majority of the respondents (90% or above) perceived their roles as water enterprise leaders to be respected within their communities and self-employment to be highly valued in Vietnam. More than half of the respondents (56%) also perceived that business innovators had some status in Vietnam. In contrast, the majority of the respondents (more than 60%) didn't perceive business risk-taking to be valued within their families and communities, or within Vietnam.

Conclusion

This study examined the motivators, drivers and barriers influencing small-scale enterprise roles in water services in Vietnam. In particular, it provides insight into the entrepreneurial traits and motivations of these enterprises, including pro-social motivations, as well as their challenges. The majority of the water enterprises were considered to be successful, in that most had returned some profit after establishment, and only a minority had their profit decline after three years of operation. There was a predominant perception that it was easy for women to become entrepreneurs in Vietnam and obtain paid roles in a water enterprises, however it should be noted that the majority of enterprise leaders in the sample were male.

Characteristics of the enterprise leader influenced success. The most important of these characteristics were: their entrepreneurial and pro-social traits, their age and the sector of their previous work experience. Respondents who led successful enterprises tended to have a higher number of entrepreneurial traits and demonstrated higher risk-taking propensity, as well as a higher need for achievement and proactiveness. In addition, leaders of successful enterprises also tended to have a stronger sense of social responsibility. Finally, successful enterprises were predominantly led by younger respondents with previous experience in the private sector.

Characteristics of the enterprise itself also influenced business success, and some key challenges and success factors were found to shape success. Overall, successful enterprises tended to have more staff, higher levels of water consumption from customers, higher water tariffs and higher water connection fees. Across the sample, operational and financial challenges were the most pronounced challenges, and respondents identified the most important success factors to be market access and competition.

Respondents exhibited varied drivers for joining a water enterprise. A common motivation was a sense of social responsibility. Other motivations included financial gains, status and acknowledgement from the community, lifestyle benefits including time flexibility offered by the water enterprise job, and the opportunity to develop new skills, knowledge and experience. Cultural values associated with entrepreneurship were also noted. Whilst many respondents noted that working in a water enterprise was respected, and self-employment and business innovation were culturally valued, business risk-taking was not.

This study provides useful insights for efforts to support policy development and improvements in practice concerning enterprises roles in water services in Vietnam. In particular, recognising the presence of entrepreneurial traits amongst potential enterprise leaders can assist in the recruitment of appropriate candidates and in the targeting of support and training in the sector.

Equally, understanding the pro-social motivations of these entrepreneurs opens up a wider range of possible business models and forms of support for water service enterprises. Finally, knowledge of the key challenges faced by enterprises, and the cultural values associated with entrepreneurship, provides guidance to both government and external agencies on where they should focus their attention to facilitate effective enterprise roles.

1 INTRODUCTION

This document presents research on the motivators, drivers and barriers influencing small-scale enterprise roles in water services in Vietnam in the five provinces of Tien Giang, Dong Thap, Long An, An Giang, and Ben Tre, in the Mekong area.

1.1 BACKGROUND AND OBJECTIVES

1.1.1 Background

The basis upon which civil society organisations (CSOs) work with private and social enterprises is a shared interest in providing WASH services for the poor. CSOs have an interest in understanding what motivates enterprises' involvement in WASH service provision for the poor, and in the perspectives of enterprises about their businesses. For instance: Is the core motivation simply profit or are there more complex, extensive motivations? This study draws on literature in the fields of small-scale enterprises, entrepreneurship and social entrepreneurship to develop its theoretical basis.

The enterprises targeted in this research were small-scale private enterprises that have received support from the East Meets West Foundation, a CSO supporting private enterprise development in the water sector in Vietnam.

1.1.2 Research objectives

The purpose of this study is to explore the motivators and drivers of small-scale enterprises involved in water service provision. It considers how these motivations may be harnessed, and provides evidence based on the key real and perceived 'barriers to entry' and business risks within Indonesia's cultural and regulatory environment.

1.1.3 Research questions

The research questions were:

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

1.1.4 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 involves interviews with

females and males involved in existing enterprises. Opportunities for, and constraints on, women's participation in enterprise development were examined in brief.

1.2 METHODOLOGICAL DESIGN

1.2.1 Sample and sampling method

The sample included the leaders of 20 enterprises previously supported by EMWF, located in the provinces of Tien Giang, Dong Thap, Long An, An Giang, and Ben Tre (see Table 1), in the Mekong Delta region of southern Vietnam.

The sample was purposively selected and included both successful and less successful enterprises, a variety of enterprise sizes and both male- and female-led enterprises.

Table 1: Number of enterprises interviewed in each province

Location	Number of enterprises
Tien Giang	13
Dong Thap	2
Long An	1
An Giang	1
Ben Tre	3

1.2.2 Data and data collection

Data collection was undertaken in two phases:

- piloting of research tools in September 2014 by the Institute for Sustainable Futures (ISF) at the University of Technology Sydney (UTS), the Centre for Natural Resources and Environmental Studies (CRES), Vietnam National University and EMWF
- complete data collection in January 2015 conducted by the Centre for Natural Resources and Environmental Studies (CRES) and Vietnam National University.

A structured questionnaire was administered through face-to-face interviews.

1.2.3 Data collection tools

The main instrument was a structured questionnaire that examined 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 was used to enable triangulation of findings. In-depth responses were sought in certain areas.

1.2.4 Data analysis

An analytical framework was developed to guide the analysis process. This framework, which supported the testing of hypotheses, was developed from the literature (Ernst 2012; Freytag and Thurik 2007; Indarti and Langenberg 2004; Kelley 2013; Porter 1998; Porter 2008; Reynolds 2000; Robson 2010; Sinha 1996) and covers 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).

Addressing the first three analytical areas listed above involved scoring of each enterprise based on responses to relevant questions. Evidence of entrepreneurial traits was assessed based on a set of quantitative questions and qualitative questions which tested for the presence of the five characteristics: proactive approach, need for independence, need for achievement, innovativeness, and risk taking propensity. Evidence of pro-social traits was assessed by analysing responses to questions concerning the entrepreneurs' goals, motivations and benefits, future prospects, and the existence of strategies to reach the poor. In turn, the level of success was assessed by analysing the enterprises' profit growth after establishment and over recent years, monthly revenue and monthly profit margin in the past year, the amount of accumulated assets per year (VND/yr), and clarity of vision about the future of the business. The monthly revenue was adjusted to account for differences in the total number of households and institutions served.

A scoring protocol was developed and inter-rater reliability was tested and confirmed for the four researchers undertaking the analysis. Qualitative responses were categorised into relevant themes (allowing quantitative analysis of their recurrence) and also according to the use of illustrative quotes across both common and atypical perspectives.

1.2.5 Limitations

This study included a variety of limitations in the methodology. As a mixed method study, the approach included both quantitative and qualitative approaches. The sample size of 20 enterprises allowed for some recognition of trends and comparisons, particularly when complemented by the qualitative data, however in the absence of a larger sample size the findings can only be considered indicative. In addition, the interview data varied in quality. Some data demonstrated depth of interrogation in participant responses, while other data was brief and insubstantial. Another limitation was that the interviewee responses were translated from Vietnamese to English by the in-country researchers, and the final text may not always fully represent how participants expressed themselves.

2 ENTERPRISE CHARACTERISTICS

In characterising water enterprises two dimensions were considered: the characteristics of the entrepreneur or leader or owner of the enterprise, and the characteristics of the enterprise itself. Characteristics of the leader or owner of the enterprise included gender, age, education, work experience and time commitment. Characteristics of the enterprise included years of operation and geographic location, size and staff composition, legal status, source of capital, products and services offered, customer composition, association membership, family involvement in the business and marketing strategies.

2.1 PROFILE OF ENTERPRISES

2.1.1 Water enterprise leaders

Gender, ethnic group, age and education

Most of the respondents (80% or above) were male and from the Kinh ethnic group, and 74% were aged between 46 and 65 (Figure 1). Most (68%) had completed high school and a smaller proportion (22%) had completed college or university. Only two respondents had lower levels of education than this. One of them had completed secondary school and the other had completed primary school (Figure 2).

Figure 1. Gender, age and ethnicity of water enterprise leaders

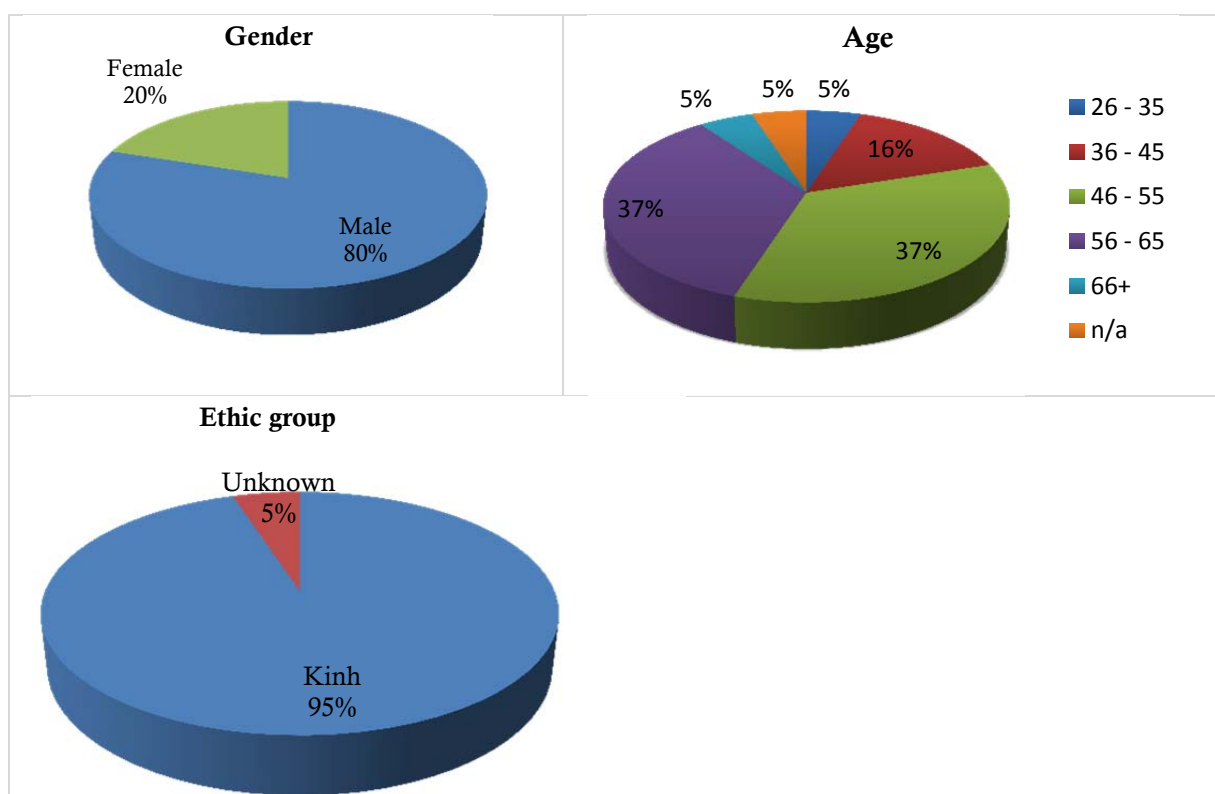
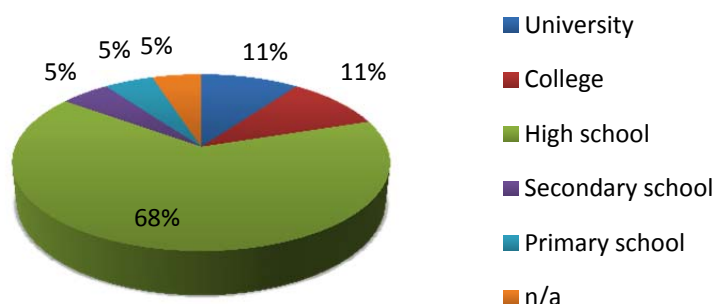
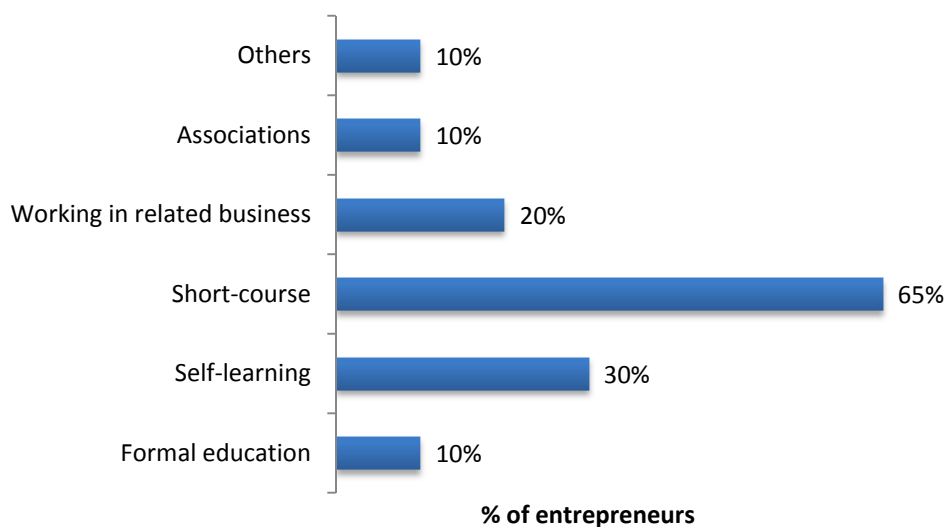


Figure 2. Education level of the water enterprise leaders



Most of the respondents (65%) had acquired skills to run the water enterprise through short courses. Half of the respondents (50%) had also developed their skills through self-learning and/or through previous work in a related sector. Other sources of skills for running the water enterprises included associations (10%) and formal education. Two respondents (10%) had also acquired relevant skills from their husbands who had previous working experience in the water sector (Figure 3).

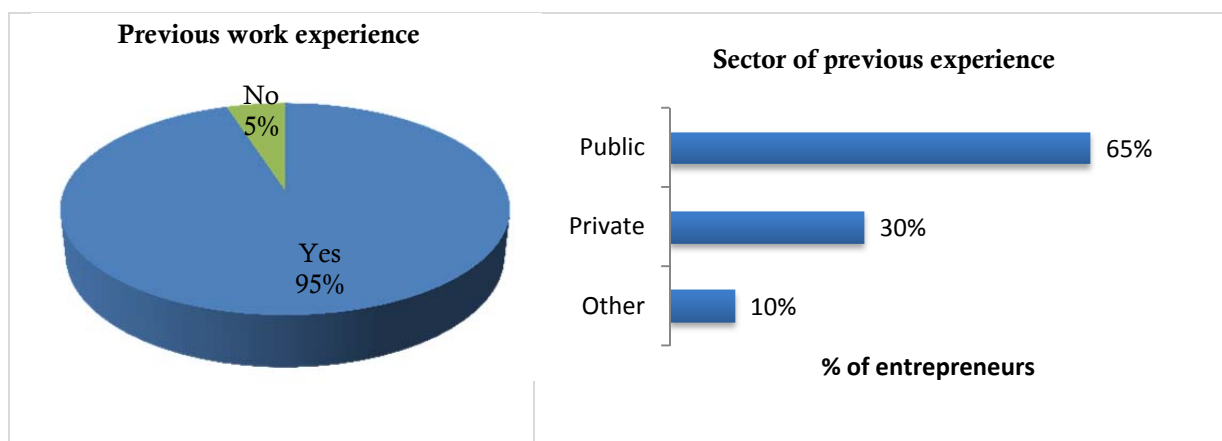
Figure 3. Source of skills for running enterprise



Work experience and time commitment

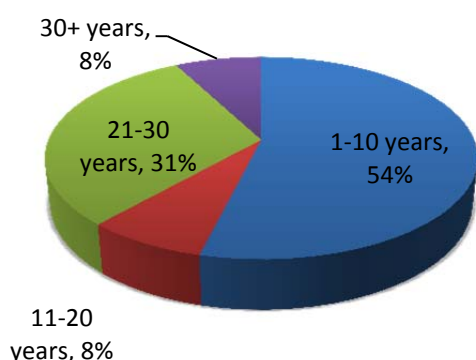
Most respondents (95%) had previous work experience. Of the 19 respondents who had previous work experience, 18 reported on the sector of their previous experience. Of these 18 respondents, the majority (65%) had previously worked in the public sector, and a smaller proportion (30%) had experience in the private sector. Two respondents also reported having experience in other areas such as farming (Figure 4).

Figure 4. Previous work experience of water enterprise leaders



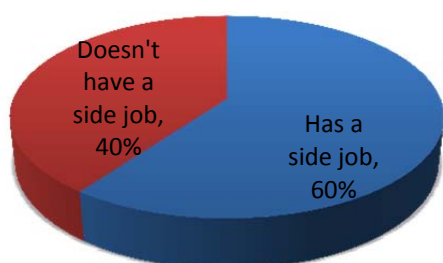
Of the 19 respondents who reported having previous work experience, more than half (54%) had up to 10 years of experience and only a small proportion (8%) had 30 years or more of previous working experience (Figure 5).

Figure 5. Length of previous work experience



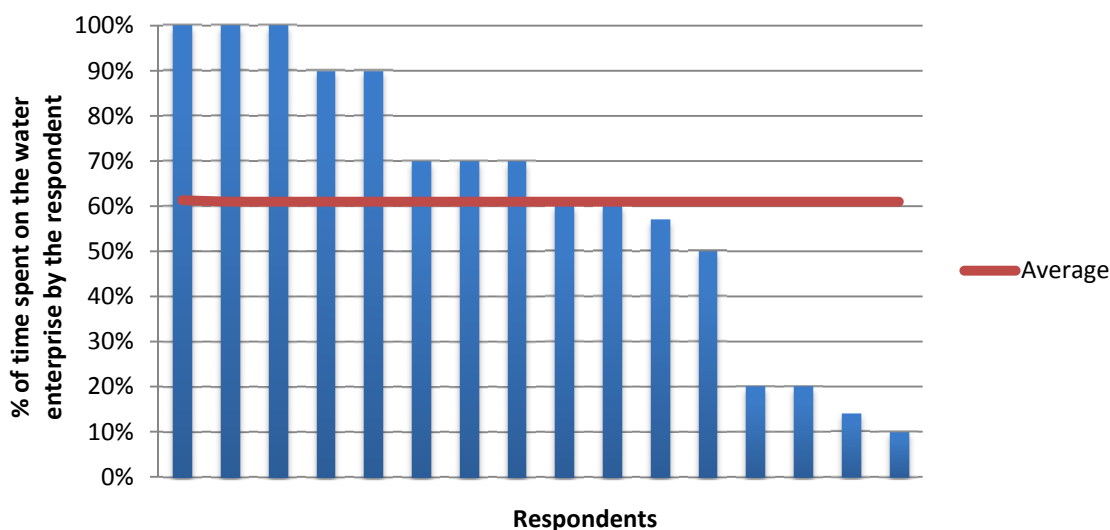
Most water enterprise leaders (60%) had another occupation which they held concurrently with their role in the water enterprise (Figure 6), such as farming (4 respondents), ice making and bottled water business (2 respondents), well drilling and building construction business (respondent), grocery shop business (1 respondent), retail of water supply equipment and spare parts, and government official (1 respondent).

Figure 6. Concurrent occupation of water enterprise leaders



Of the 16 respondents that reported on the time they spent on the water enterprise, more than half (10) said they spent more working hours (60% or more) on the water enterprise compared to their side job (Figure 7).

Figure 7. Percentage of time spent on the water enterprise per enterprise



Association membership

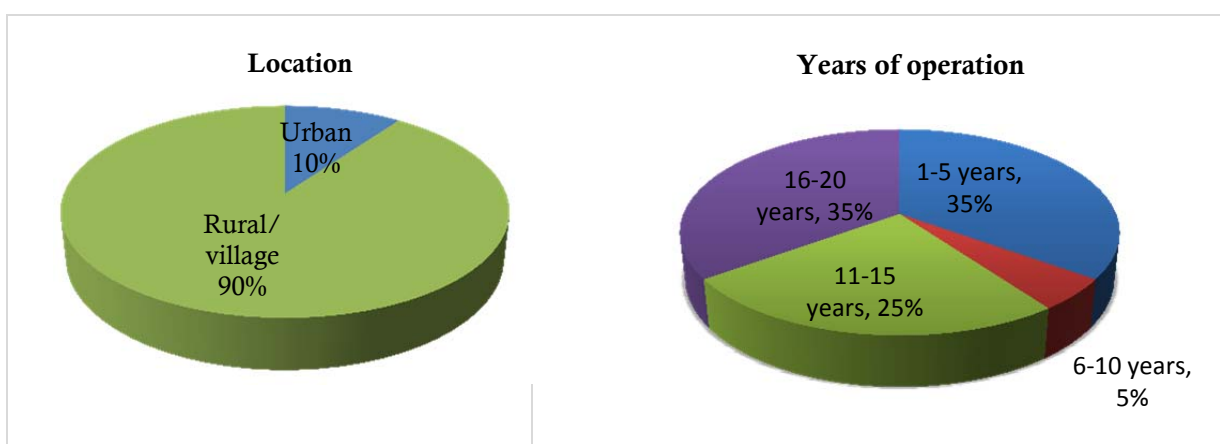
Only one enterprise leader was a member of a water or business-related association, namely the Clean Water Association of Cao Lanh City.

2.1.2 Water enterprises

Location and years of operation

All water enterprises were legal and most (90%) were located in rural areas. More than half (60%) had been in operation for more than ten years. A smaller proportion (40%) had been operating for ten years or less (Figure 8).

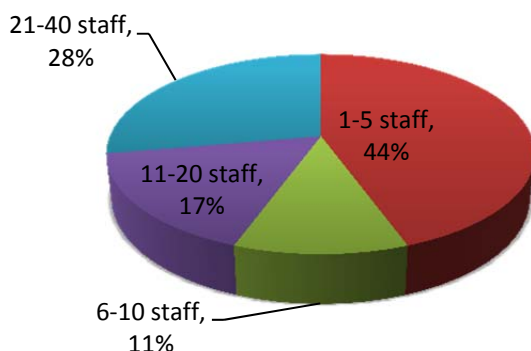
Figure 8. Location and years of operation of the sanitation enterprises



Size and staff composition

Of the 18 enterprises who reported on their number of staff, more than half (55%) were small businesses with one to ten employees (Figure 9).

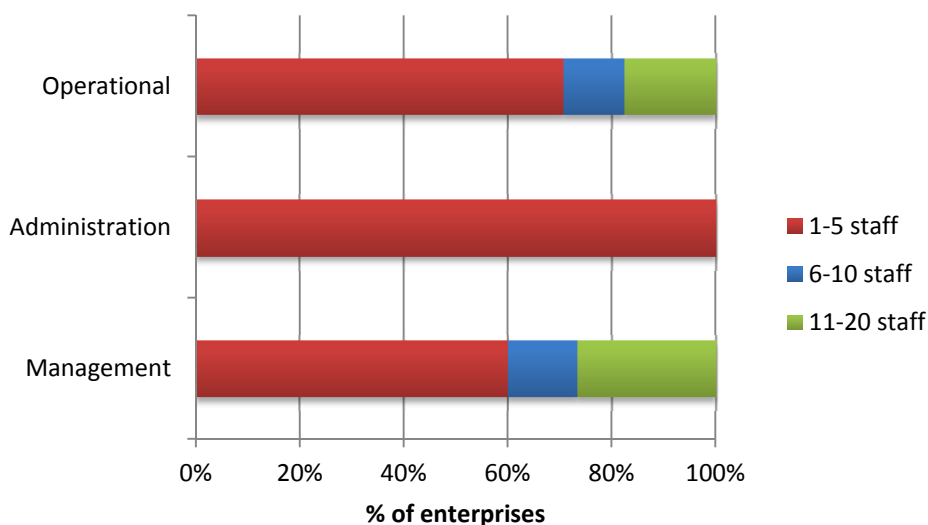
Figure 9: Number of employees of the water enterprises



Almost half of the enterprises (45%) employed only full-time staff. A smaller proportion (35%) employed both full-time and part-time staff, whereas only one enterprise employed only part-time staff. Amongst the seven enterprises that employed both full-time and part-time staff, in four cases, part-time staff represented 15% to 35% of the total number of staff. In two cases part-time staff represented 5% to 15%, and only in one case did part-time staff represent more than 35% of the total number of employees.

Most enterprises (60%) had three areas or departments: management, administration and operations. As Figure 10 shows, most of these departments (60% or more) had one to five employees.

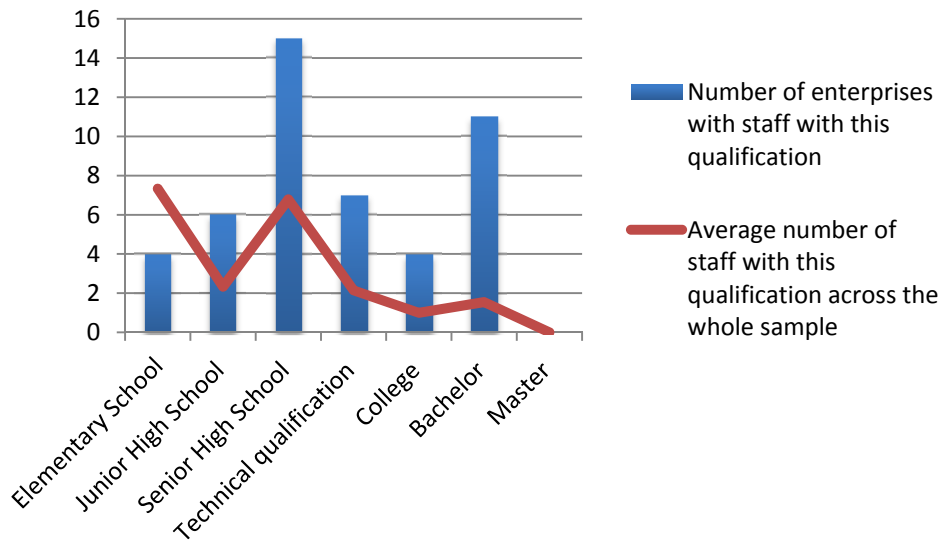
Figure 10. Number of employees of the water enterprises by department



Education level and work experience of the enterprise staff

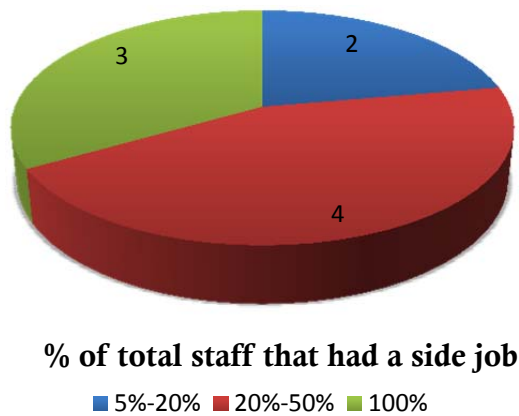
As Figure 11 shows, most of the enterprises (70%) had staff that had completed senior high school and more than half (55%) had staff with a bachelor’s degree, whereas none had staff with a master’s degree. A smaller proportion of enterprises (35% of less) had staff that had completed lower-level qualifications such as college, technical qualifications, junior high school, and elementary school.

Figure 11. Qualifications of staff



Nine out of the 20 enterprises reported on the number of staff that had a job held concurrently with their water enterprise jobs. All of these nine enterprises had staff with side jobs, however as **Figure 12** shows, in most of these enterprises (6 enterprises) 50% or less employees had a side job.

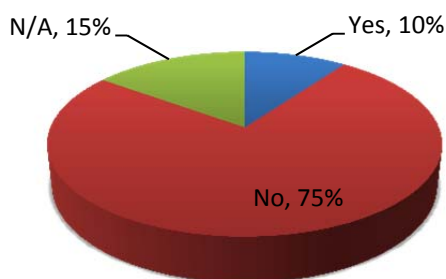
Figure 12. Number of enterprises that had staff with a side job and percentages of staff with a side job



Association membership

Only a small proportion of enterprises (10%) were members of a water- or business-related association (Figure 13). Similarly, as discussed earlier, only one enterprise leader was a member of an association.

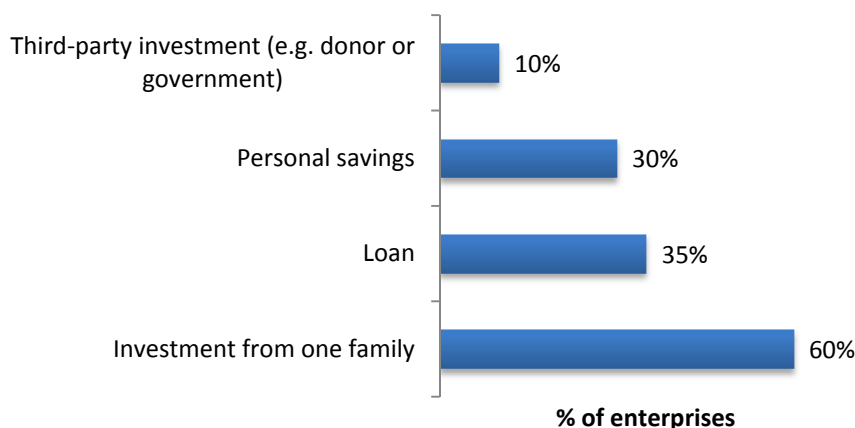
Figure 13. Proportion of enterprises that were members of a business-related association



Source of capital

As Figure 14 shows, the most common source of investment amongst the enterprises was family investment (60%), followed by bank loans (35%), personal savings (30%), and third-party investment (10%).

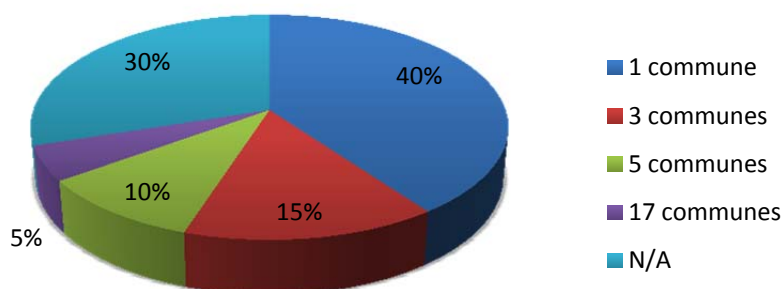
Figure 14: Source of investment



Geographic coverage and customer composition

As Figure 15 shows, most enterprises (95%) served five or less communes, with an outlier that served 17 communes. All enterprises served both households and institutions.

Figure 15. Number of communes served by the water enterprises



The number of households served ranged from less than 2,000 (12 enterprises) to between 2,000 and 6,000 households (7 enterprises), up to 12,500 households (1 enterprise) (see **Figure 16**). The number of institutions served ranged from less than 2,000 (13 enterprises), to between 2,000 and 6,000 institutions (5 enterprises), up to 13,500 institutions (**Figure 17**).

Figure 16: Number of households served by the enterprises

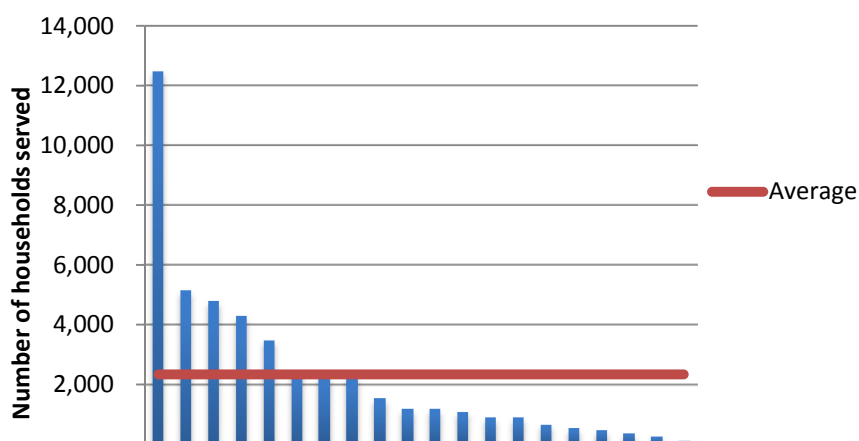
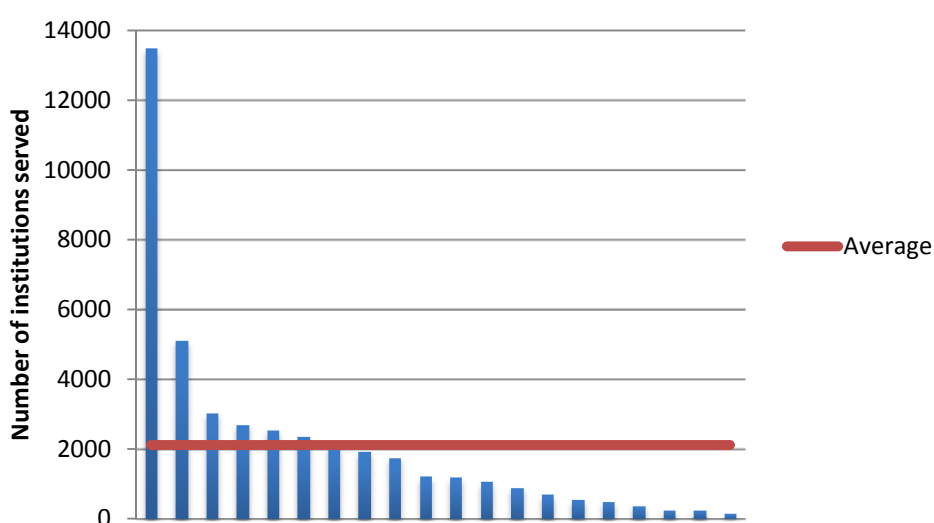


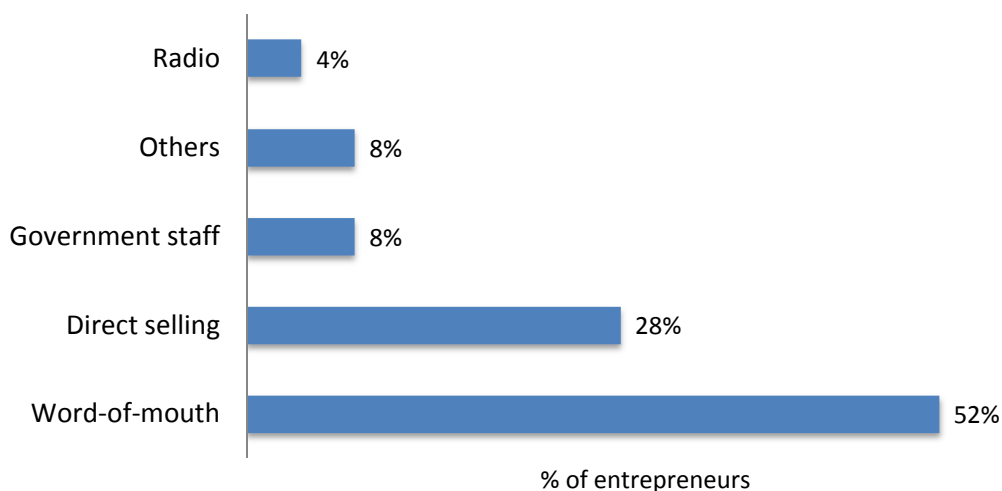
Figure 17: Number of institutions served by the enterprises



Marketing methods

As Figure 18 shows, of the 16 respondents who reported on the enterprise marketing methods, most (80%) relied on word of mouth and direct selling to market their services, and only 12% used radio and/or relied on government staff to promote the enterprise. A small proportion (8%) used other marketing methods such as community meetings and including the water enterprise contact details in the water bill.

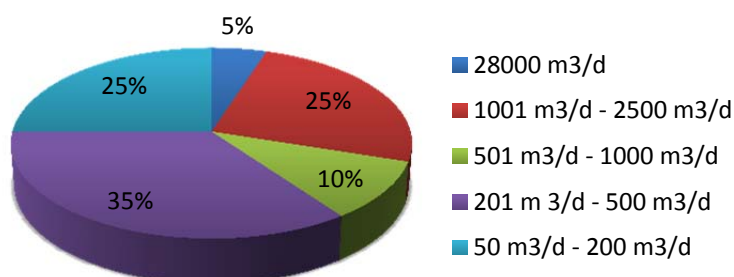
Figure 18: Marketing methods



Production capacity, water consumption and water losses

A wide range of production capacities was observed amongst the enterprises ranging from 50m³/day to 28,000 m³/day. Almost all the enterprises produced less than 2,500 m³/day. One outlier produced 28,000 m³/d (Figure 19).

Figure 19: Production capacity of the enterprises



For the majority of the enterprises (76%) the average water consumption per customers was between 0 and 10 m³/customer/month (Figure 20). Concerning water losses, the maximum amongst all enterprises was 60%, although the majority (90%) had between 0% to 40% of water losses (Figure 21).

Figure 20: Average water consumption (m³/customer/month)

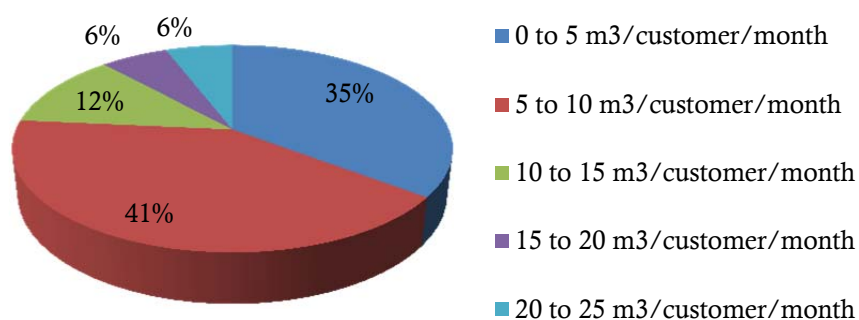
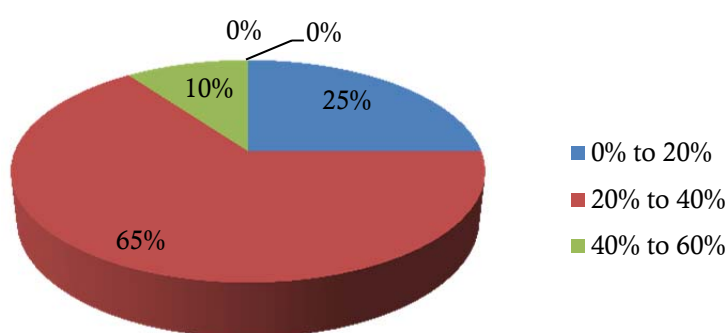


Figure 21: Average water loss (%)



Tariffs and cost of services

Water tariffs ranged from VND 4,000/m³ (USD 0.18/m³) to VND 10,000/m³ (USD 0.46/m³), although only 5% charged more than 8,000 VND/m³ (USD 0.37/m³), and half charged between 4,000 VND/m³ (USD 0.18/m³) and 6,000 VND/m³ (USD 0.28/m³) (Figure 22). The cost of water connection services ranged from below 500,000 VND (USD 23) to 2,000,000 VND (USD 92), although the majority of the enterprises (69%) charged less than 1,000,000 VND (USD 46) (Figure 23).

Figure 22: Water Tariffs (VND/m³)

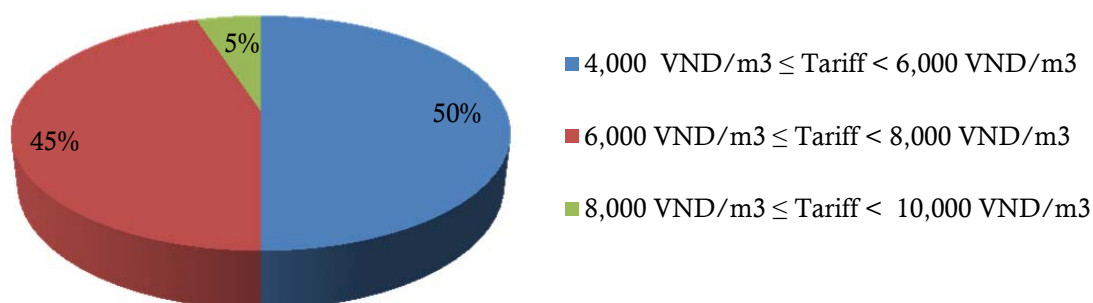
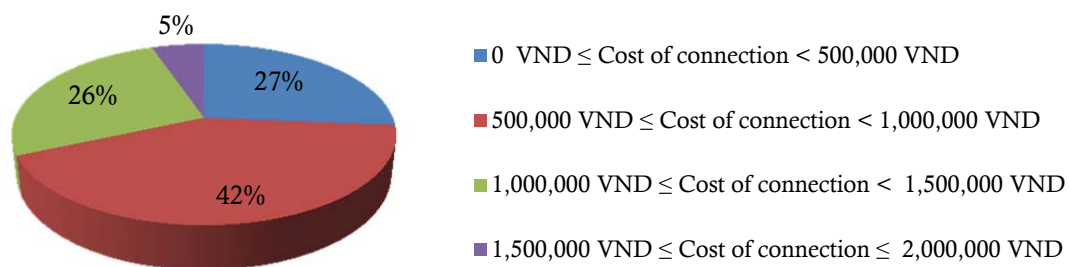


Figure 23: Cost of connection services (VND)



3 ENTREPRENEURIAL AND PRO-SOCIAL TRAITS AND MOTIVATIONS

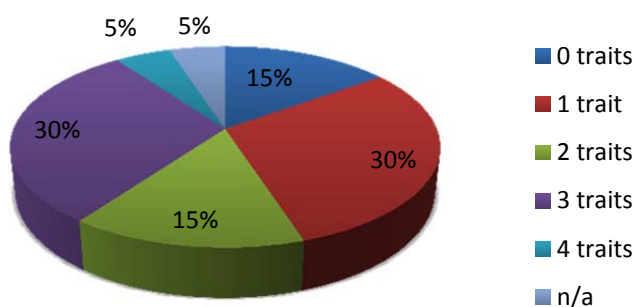
In this section we discuss the presence of entrepreneurial and pro-social traits and motivations amongst the entrepreneurs, as well as other types of motivations.

3.1 ENTREPRENEURSHIP AND ENTREPRENEURIAL TRAITS

According to Ernst (2012) entrepreneurs tend to have five core personality traits: a proactive approach, a need for independence, a need for achievement, innovativeness and risk-taking. In assessing the entrepreneurial ability of the respondents, these five entrepreneurial traits were considered. To test for the presence of these traits a set of quantitative questions and a set of qualitative questions were used.

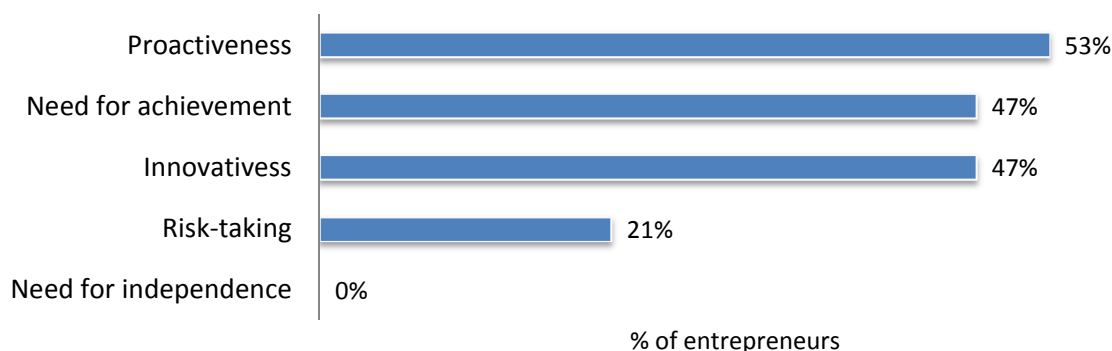
Most of the respondents (75%) demonstrated between one to three of the above traits (Figure 24). As Figure 25 shows, the most dominant entrepreneurial traits amongst these were proactiveness (53%), need for achievement (47%), and innovativeness (47%).

Figure 24: Number of traits demonstrated by the water enterprise leaders



It is important to note, however, that the presence of innovativeness was tested using quantitative questions concerning self-perceptions of innovativeness and qualitative questions exploring whether the enterprises had developed new products or services and/or explored opportunities for innovation. Of the nine enterprises who demonstrated innovativeness, almost all (8) demonstrated this based only on the quantitative questions, and against the qualitative question only one reported that it had developed new products or services, and that it had started selling additional products (pipes, taps and glue) to its customers.

Figure 25: Entrepreneurial traits demonstrated by water enterprise leaders



3.2 PRO-SOCIAL TRAITS AND MOTIVATIONS

The term pro-social is used to refer to the tendency of a person to voluntarily behave (or intend to behave) in a way that benefits others. Pro-social behaviour is usually carried out to promote wellbeing in the society (Brief & Motowidlo, 1996). Ernst (2012) identifies two core traits that characterise a pro-social personality: a sense of social responsibility, and empathy with the poor. The presence of these pro-social traits was assessed through seven questions that examined the entrepreneurs’ drivers and motivations to start their business, their business goals and future business prospects, perceived benefits from engaging in this type of business, whether they perceived the business as providing a social service, and their orientation towards serving the poor. Respondents that revealed any of these traits in two or fewer questions were considered to have weaker pro-social traits. Respondents that revealed these in three to four questions were considered to have medium pro-social traits, and respondents that revealed these in five or more questions were considered to have stronger pro-social traits (see Table 2).

It is assumed that respondents with strong pro-social traits focused more on promoting social wellbeing than on earning a profit.

Table 2: Levels of pro-social traits

Category	Score
Weaker pro-social traits	0 - 2
Medium pro-social traits	3 - 4
Strong pro-social traits	5+

The majority of the water enterprise leaders (85%) were considered as having medium to stronger pro-social traits, as shown in Figure 26. The fact that all enterprises served poor and informal communities is consistent with this. In addition, as Figure 27 shows, low-income customers only comprised 20% or less of the customer base of all of the water enterprises whose leaders demonstrated weaker pro-social traits. In contrast, for 47% of the enterprises whose leaders demonstrated medium to stronger pro-social traits, low-income customers represented 21% or more of their customer base (Figure 27).

Figure 26: Levels of pro-social traits present amongst the water enterprise leaders

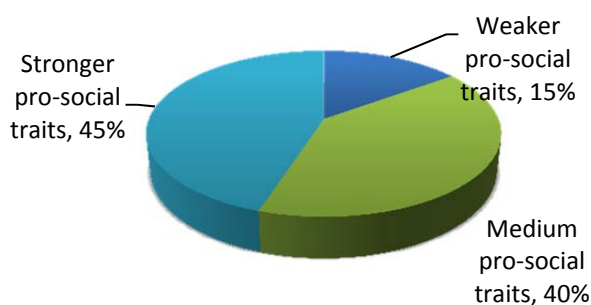
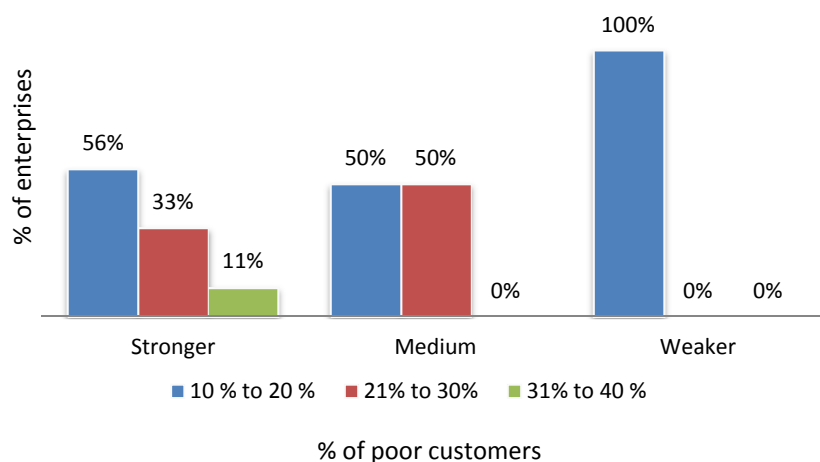
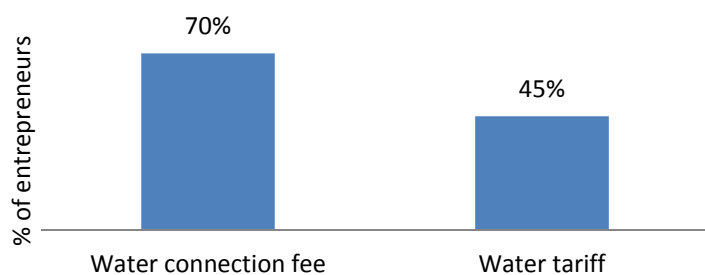


Figure 27: Percentage of low-income customers across water enterprises with different levels of pro-social traits



Most enterprises (70%) offered instalment payments for water connection services and a significant proportion (45%) also offered this option for the payment of water tariffs (Figure 28).

Figure 28: Percentage of enterprises that offered instalment payments for water connection fees and water tariffs



A variety of factors were found to drive a sense of social responsibility. For example, for three respondents this appeared to be linked to self-satisfaction contributing to social development: *“I feel satisfied because I can do something useful for the society.”* For one of these two respondents, this self-satisfaction in helping appeared to be linked to his Buddhist beliefs: *“I feel happy when I’m doing something good for the community.”*

A sense of empathy and compassion for the poor was also evident and appeared to underpin service provision to the poor. This was demonstrated by at least 12 respondents. For example one respondent noted: *“I have compassion for local people who haven’t got enough clean water to use.”* Another one added: *“I can’t stand seeing them [the poor] suffer too much.”*

There was evidence that pro-social motivations can also be extrinsically driven through the entrepreneurs’ past or concurrent jobs. For example, water service provision often aligns with government agencies’ roles of addressing community needs and promoting healthy communities. This could have been the case for at least five respondents who in the past had worked for agencies with a role in water service provision, such as the Provincial Centre for Rural Water Supply and Environmental Sanitation (PCERWASS), the District People’s Committee (DPC) and the Commune People’s Committee (CPC).

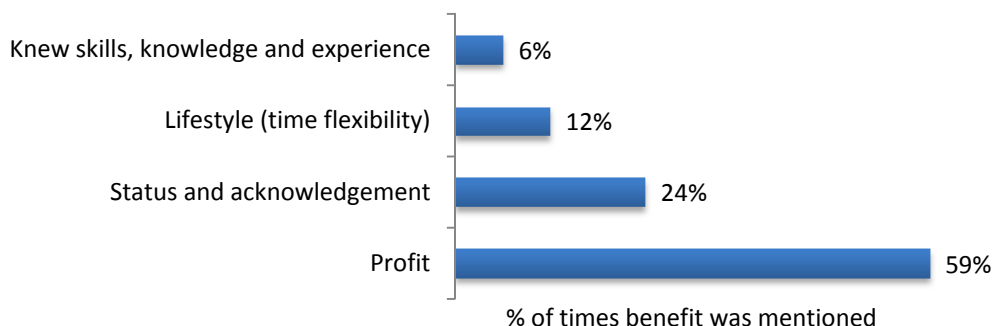
3.3 OTHER MOTIVATIONS

In addition to pro-social motivations, there were other factors encouraging entrepreneurs to become involved in these types of businesses and/or for staff to join a water enterprise. These are discussed in the sections that follow.

3.3.1 Other motivations of the water enterprise leader

The most commonly reported benefit beyond pro-social motivations was profit (59%). Status and public acknowledgement were also emphasised by 24% of the responses: *“I get the respect from local community”*. A smaller proportion of respondents also emphasised lifestyle factors and the flexible work hours offered by the water enterprise job (12%) and the opportunity to develop new skills, knowledge and experience (6%) (see Figure 29). For example when explaining the lifestyle and time flexibility benefits one respondent noted: *“I have flexible time and feel free in my mind because I manage the business by myself.”*

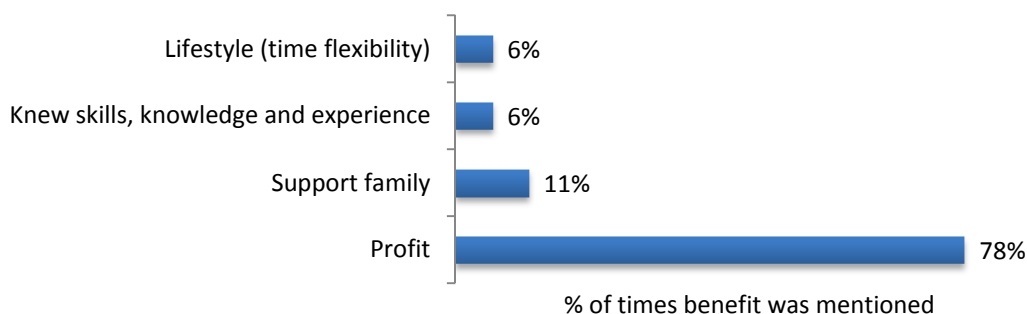
Figure 29: Benefits from engaging in the water enterprise for the water enterprise leader beyond social goals



3.3.2 Other motivations of water enterprise staff

Leaders of water enterprises reported that their staff were motivated to join the water enterprise by the following incentives: financial gains (78%), ability to support family financially (11%), opportunity to develop new skills, knowledge and experience (6%), and lifestyle and time flexibility (6%) (Figure 30). As one respondent noted: *“They get a higher salary than working as a farmer and more time flexibility than working in a state institution.”* Another one explained: *“They are able to develop more experience and at the same time help support their relatives.”*

Figure 30: Perceptions of the water enterprise leader of benefits from engaging in the water enterprise for the enterprise staff



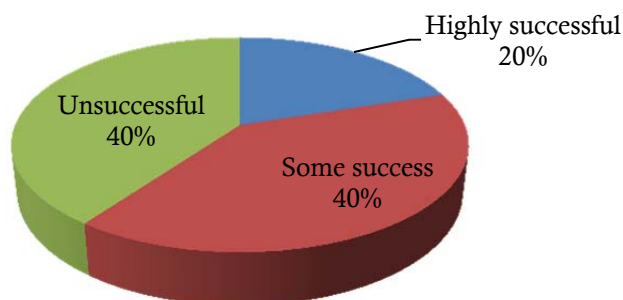
4 SUCCESS

In this section we analyse the different levels of success achieved across the sample and perceptions about the characteristics of successful entrepreneurs and success factors. Further, we discuss the relationship between success and a number of factors, such as the characteristics of the enterprise, entrepreneurial traits and skills, pro-social traits, contextual factors and gender. However, it should be noted that variations in the number of enterprises in each success category limited our ability to identify clear connections between the level of success and these factors. However some points could be drawn out as we focused instead on characterising the successful and unsuccessful enterprises, and highlighting any differences between them.

4.1 LEVELS OF SUCCESS ACHIEVED

Of the 20 water enterprises, the majority (60%) were considered to be highly successful or as having achieved some level of success, and 40% were considered unsuccessful (Figure 31).

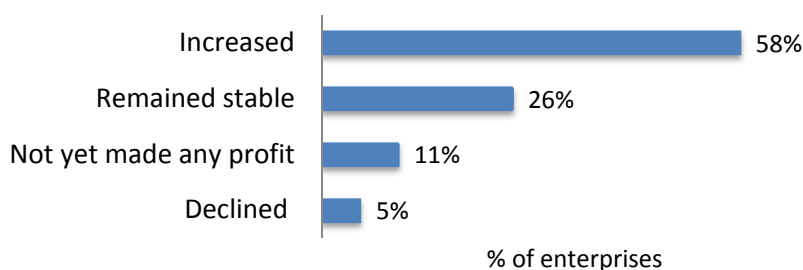
Figure 31: Level of success of the water enterprises



A number of factors were considered in assessing the levels of success of the enterprises: profit growth over recent years and after establishment, monthly revenue, and accumulated assets. The following paragraphs explain how the enterprises featured in each of these variables.

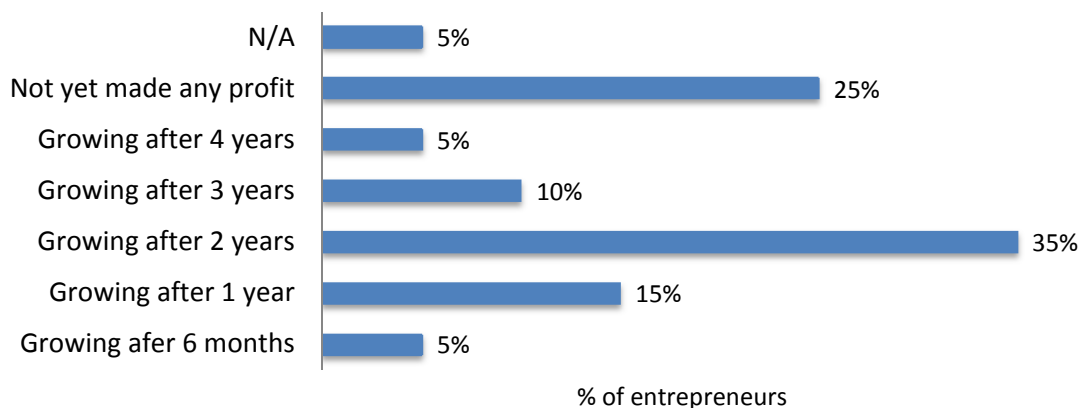
As Figure 32 shows, of the 19 enterprises who reported on their profit after three years of operation, more than half (58%) reported profits had increased, 11% said they had not yet made a profit, and 5% said their profits had declined.

Figure 32: Profit after three years of operation



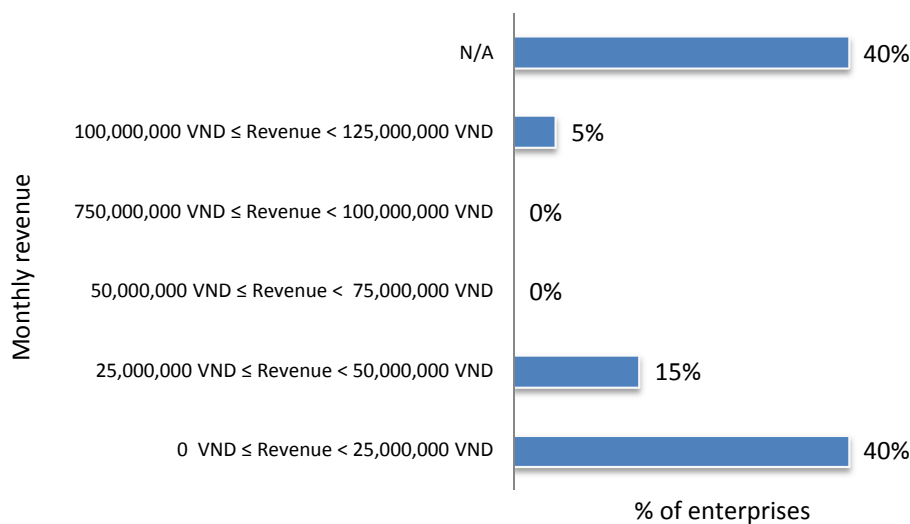
Further, the majority of the enterprises (75%) reported that profit growth happened after two years of operation (Figure 33).

Figure 33: Profit growth after establishment



The monthly revenue ranged from less than VND 25 million (USD 1,146) up to VND 125 million (USD 5,730). However, as shown in Figure 34, a significant proportion of enterprises (40%) reported this amount to be lower than VND 25 million (USD 1,146). Only a small proportion (15%) reported a revenue of between VND 25 million (USD 1,146) and VND 50 million (USD 2,292), and only one enterprise (5%) reported their monthly revenue was higher than VND 100 million (USD 4,586).

Figure 34: Monthly revenue

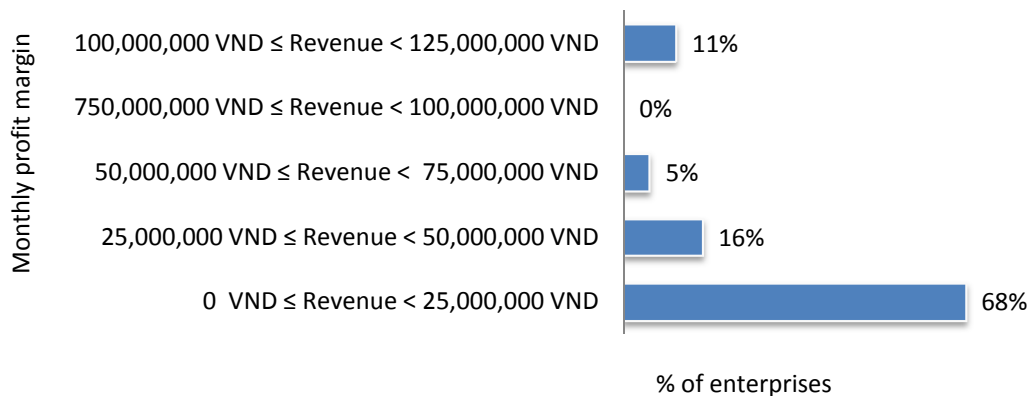


Data on monthly profit margins was also collected in preliminary stages of the research to assist with sampling. However, some contradictions were found between this data and the data collected on monthly revenue presented above (Figure 34), as some enterprises reported a significantly higher profit margin than revenue. This may indicate that enterprises didn't provide honest answers to these questions and/or misunderstood the question and reported on their monthly revenue when asked about their monthly profit and vice-versa.

The reported monthly profit ranged from less than VND 25 million (USD 1,146) to VND 125 million (USD 5,733). However, as Figure 35 shows, of the 19 enterprises that reported their

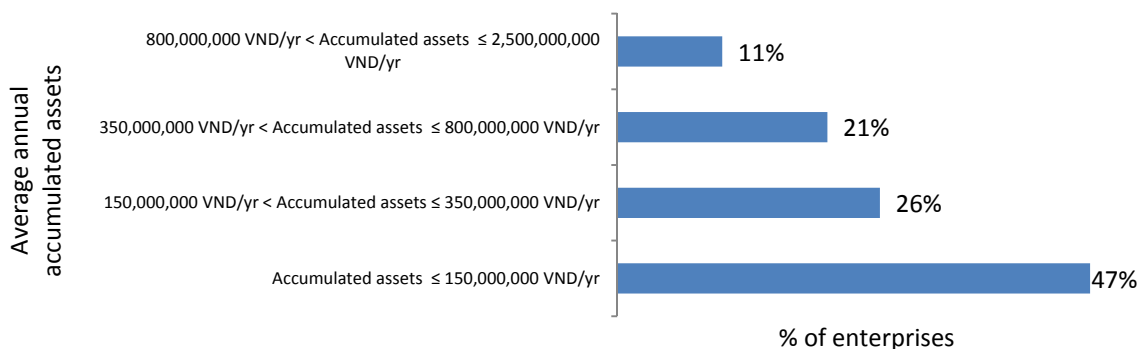
profits, more than half (68%) made less than VND 25 million (USD 1,146), and only a small proportion (11%) made VND 100 million (USD 4,586) or more.

Figure 35: Profit per month



The annual average of accumulated assets ranged from less than VND 150 million (USD 6,879) up to between 800 million (USD 36,672) and VND 2.5 billion (USD 1,146,500). However, as **Figure 36** shows, almost half (47%) reported their annual average of accumulated assets to be VND 150 million (USD 6,879) or below, and only a small proportion (11%) reported them to be above 800 million (USD 36,672).

Figure 36: Annual average of accumulated assets (VND)



4.2 PERCEPTIONS OF THE CHARACTERISTICS OF SUCCESSFUL ENTREPRENEURS

Based on an open-ended question about what characterises a successful entrepreneur, respondents’ perceptions included personality traits (68%), skills (18%), and other types of characteristics (14%) (Table 3).

Table 3: Perceived characteristics of a successful entrepreneur*

Personality traits	Skills	Other characteristics
<ul style="list-style-type: none"> • Ambitious • Brave • Committed • Dedicated • Enthusiastic/passionate/self-motivated • Flexible/tolerant • Hard-working • Have faith • Optimistic • Proactive • Risk-propensity • Sociable/friendly/communicative • Tenacious/persistent/patient • Thorough/meticulous/careful • Well-spoken • Willingness to learn 	<ul style="list-style-type: none"> • Appropriate skills to run the enterprise • Business management skills • Technical skills 	<ul style="list-style-type: none"> • Access to networks • Access to safe environmental resources • General experience and practice

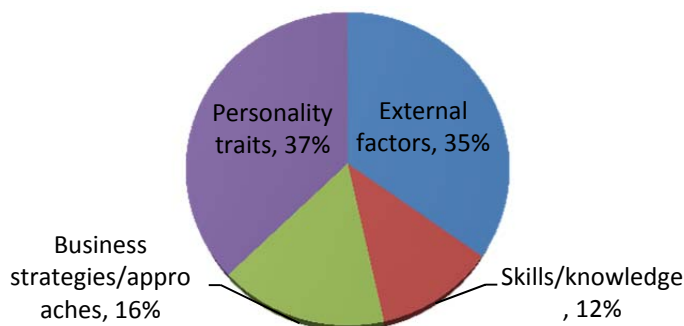
* Items in bold represent the most frequently reported characteristics

Of the personality traits, the most commonly reported were enthusiasm, passion and self-motivation (23%), and thoroughness and meticulousness (13%). When reporting on skills, 50% of respondents emphasised the skills needed to run the enterprise, although other responses were more specific and highlighted business management skills (25%) and technical skills (25%). In the ‘other characteristics’ category, the most commonly reported trait was general experience and practice, representing 67% of the responses. Other responses highlighted access to networks (17%), and access to safe environmental resources (17%).

4.3 PERCEPTIONS OF SUCCESS FACTORS

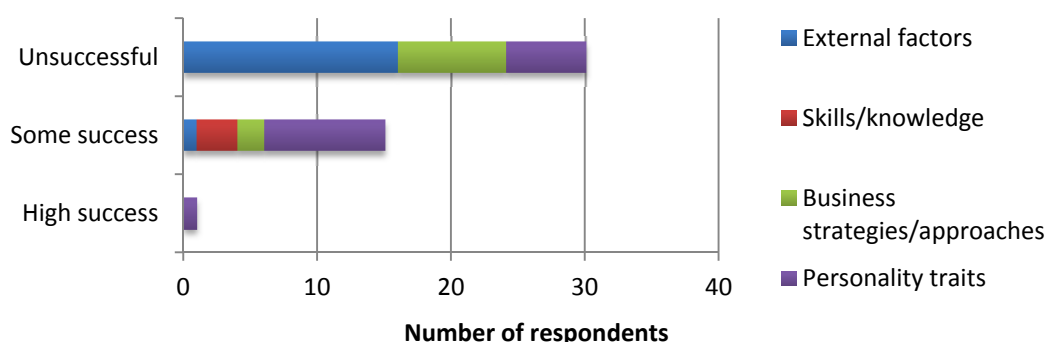
In response to an open-ended question about what contributed the most to the success of the respondent’s water enterprise, the reported success factors ranged from personality traits (37%), external contextual factors (35%), business strategies/approaches (16%), and skills and knowledge (12%) (Figure 37).

Figure 37: Categories of perceived success factors



As Figure 38 shows, in explaining what contributed to success, leaders of unsuccessful enterprises placed a greater emphasis on external factors than internal factors such as personality traits, skill/knowledge and business strategies/approaches than did leaders of successful enterprises. However, it should be noted that reported business strategies/approaches included hiring skilled staff, and as explained further below, and as shown in Figure 42, this was reported as a success factor only by leaders of unsuccessful enterprises.

Figure 38: Categories of perceived success factors across levels of enterprise success

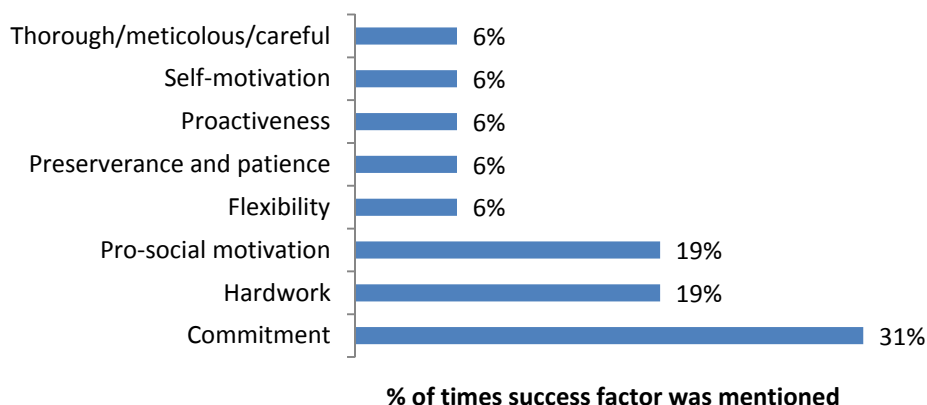


In the following sections we discuss the success factors that fall under these some of these categories in more detail. Success factors that fall under the category of external contextual factors are discussed in Section 4.8.

Personality traits as perceived success factors

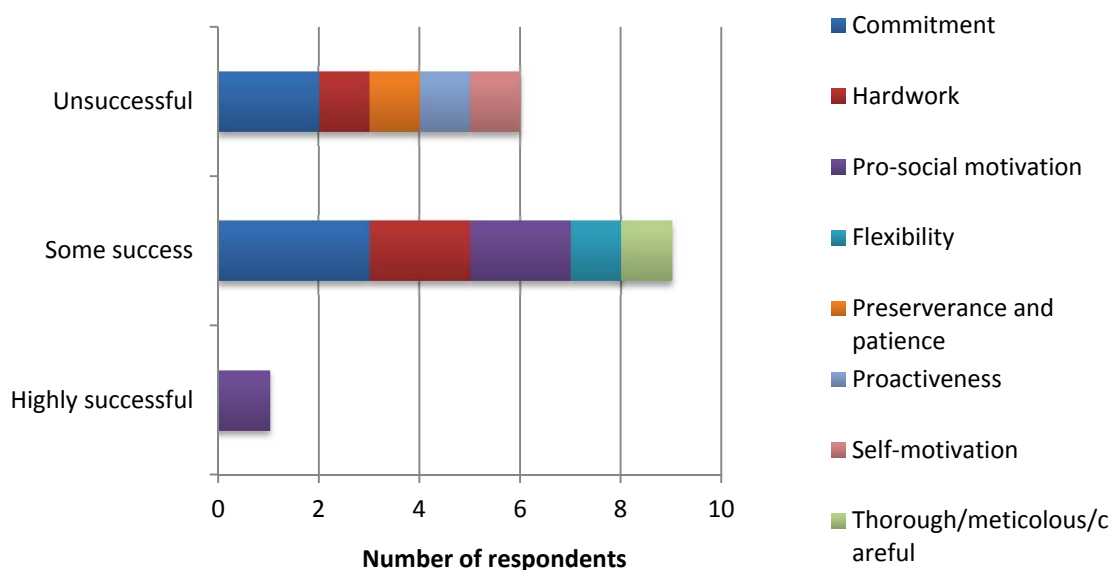
As Figure 39 below shows, amongst the personality traits reported as success factors, the most common were commitment, being hard working, and pro-social motivation. For example one respondent highlighted the importance of being *‘dedicated in serving customers ... sympathise with poor household’* and being *‘flexible in running the business.’*

Figure 39: Personality traits reported as success factors



Of the personality traits reported as success factors, pro-social motivation was only mentioned by leaders of highly successful enterprises or enterprises that achieved some level of success. Further, flexibility and thoroughness and meticulousness were only mentioned by enterprises that achieved some level of success (Figure 40).

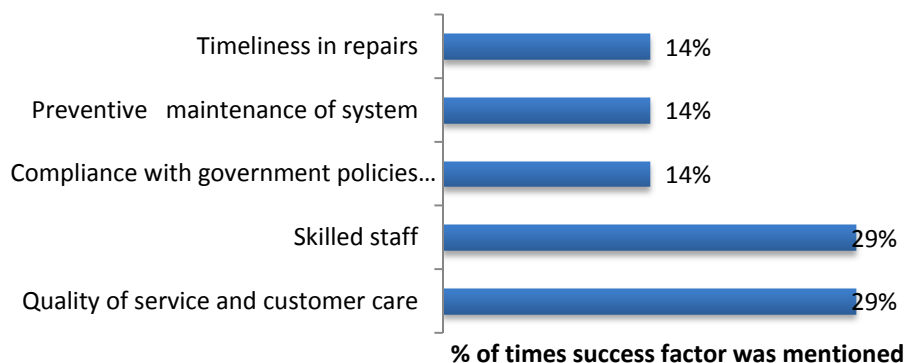
Figure 40: Personality traits reported as success factors and levels of success



Business strategies / approaches as perceived success factors

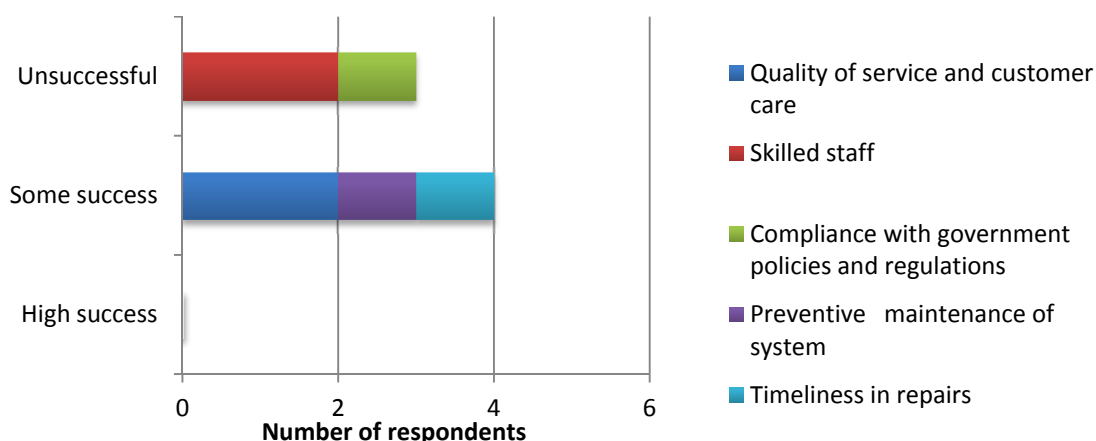
As Figure 41 shows, amongst the business strategies/approaches reported as success factors, quality of service and customer care, and trained and skilled employees, were the most common ones. For example, one respondent highlighted the importance of having ‘*phone systems always ready*’ to cater for customer complaints and reporting of problems, and of ‘*sending someone over to check out the reported problem immediately.*’ The same respondent also added that it is important to have ‘*good customer service*’ including ‘*reducing or offering free water use for poorer customers.*’

Figure 41: Business strategies/approaches reported as success factors



Leaders of successful and unsuccessful enterprises emphasised different business strategies/approaches. As Figure 42 shows, leaders of successful enterprises emphasised quality of service and customer care, preventive maintenance of the water system, and timeliness in repairs. In contrast, leaders of unsuccessful enterprises emphasised access to skilled staff and compliance with government policies and regulations.

Figure 42: Business strategies/approaches reported as success factors and levels of success

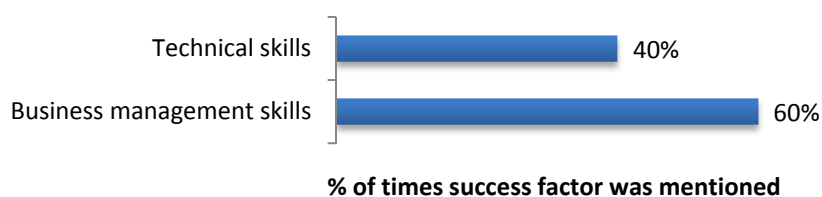


Skills and knowledge as perceived success factors

As

Figure 43 shows, amongst the skills and knowledge the respondents reported as success factors, the most common one was business management skills, followed by technical skills. These were reported only by leaders of enterprises that achieved some level of success.

Figure 43: Types of skills and knowledge reported as success factors

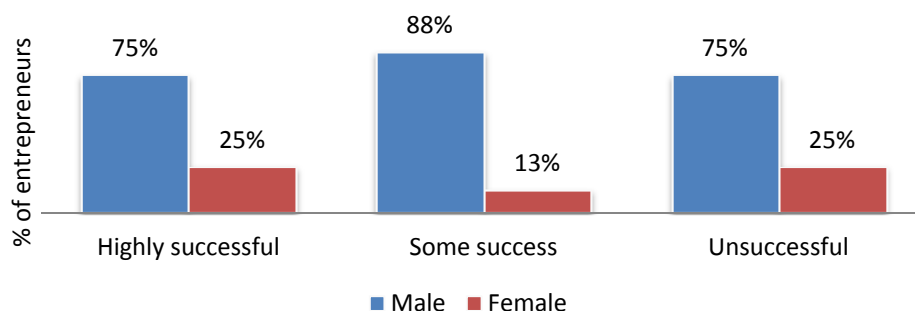


4.4 RELATIONSHIP BETWEEN SUCCESS AND CHARACTERISTICS OF THE ENTREPRENEURS

Gender, age and education

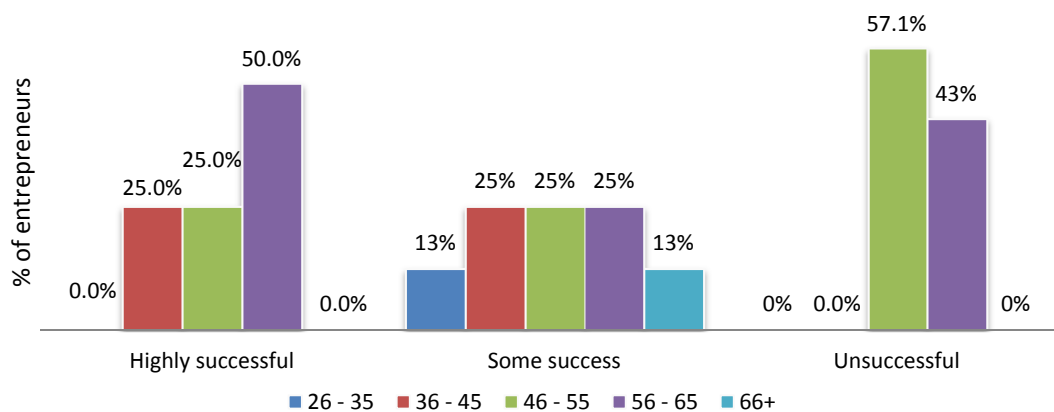
No clear connection was found between the gender of the respondents and the level of success of the water enterprise they led. Female respondents comprised 20% of the sample, and as Figure 44 shows, these were distributed across all levels of success.

Figure 44: Gender of the water enterprise leaders and levels of success



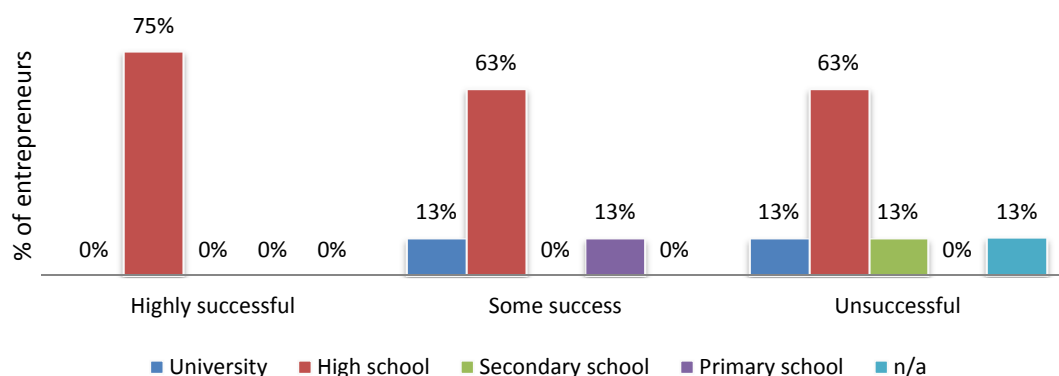
Concerning the relationship between the age of the respondents and the level of success of the enterprises they led, as Figure 45 shows, enterprise leaders within the 26 to 45 age group were only found amongst highly successful and some successful enterprises, whereas leaders of unsuccessful enterprises were all above 45 years old.

Figure 45: Age of the entrepreneurs and levels of success



As Figure 46 shows, there was no clear connection between the level of education of the respondents and the level of success of the enterprises they led. However, it is interesting to note that all leaders of highly successful enterprises had completed high school and that the majority (76%) of the enterprises that achieved some success had leaders who had completed high school or had a university degree.

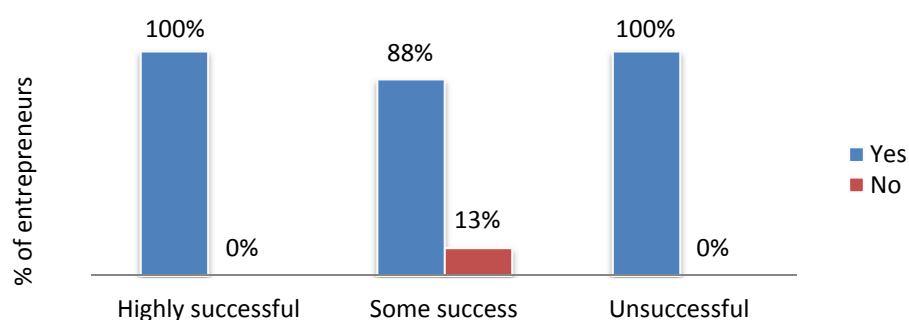
Figure 46: Education of the entrepreneurs and levels of success



Work experience and time commitment

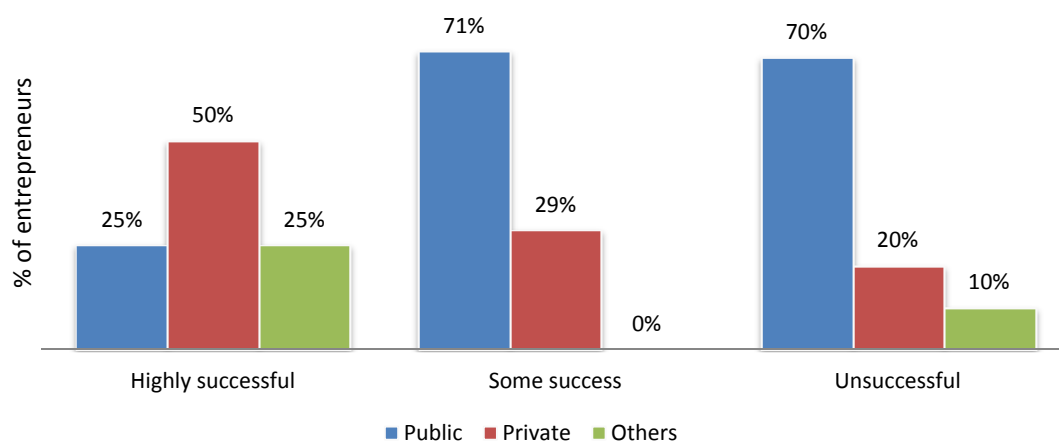
Almost all of the respondents (95%) had previous work experience, and as **Figure 47** shows no clear connection was found between the amount of work experience and the level of success of the enterprise they led.

Figure 47: Previous working experience of the enterprise leader and levels of success



It is interesting to note, however, that the previous experience of half of the leaders of the highly successful enterprises (50%) had been in the private sector, whereas in the case of unsuccessful enterprises, work experience had been predominantly (70%) in the public sector (**Figure 48**).

Figure 48: Relationship between sector of respondents' previous working experience and levels of success



Concerning time commitment, as **Figure 49** and **Figure 50** show, no connection was found between levels of success of the water enterprise and whether the respondents had a concurrent job. Moreover, no connection was found between the proportion of their work time they dedicated to their water enterprise and the levels of success of the water enterprise.

Figure 49: Proportion of water enterprise leaders with a side job and level of success

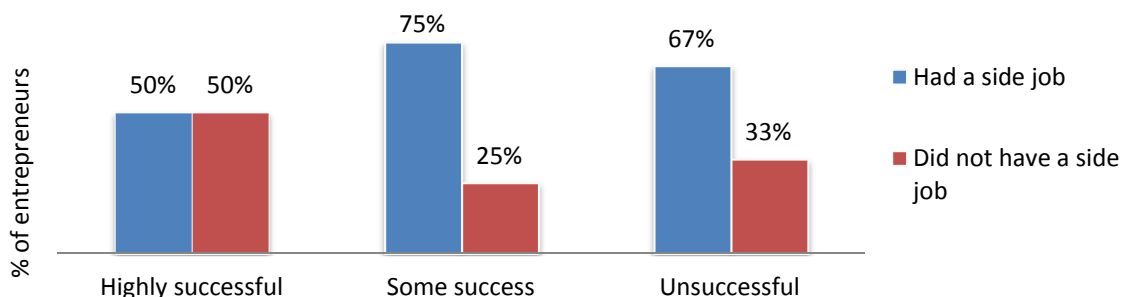
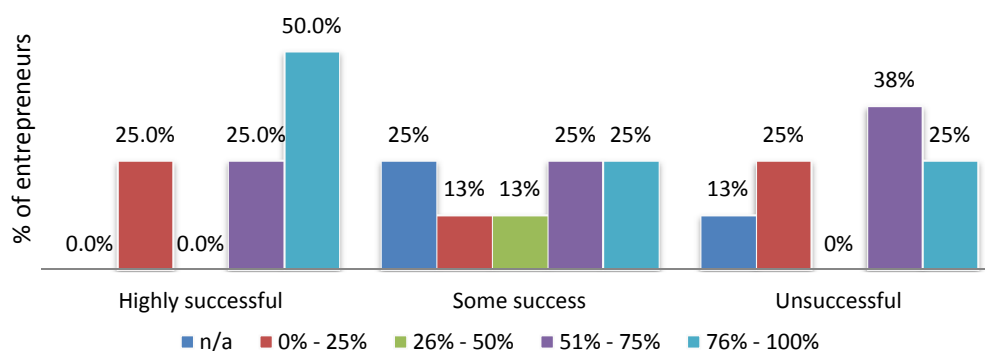


Figure 50: Time commitment of the respondents to the water enterprise and levels of success¹



4.5 RELATIONSHIP BETWEEN SUCCESS AND ENTERPRISE CHARACTERISTICS

Years of operation, location, and size

The findings did not reveal any strong relationships between success and the number of years of operation of the water enterprises (**Figure 51**), location of the enterprise (**Figure 52**), or number of staff (**Figure 53**). However, it should be noted that the majority of the highly successful enterprises (75%) had more than 10 years of operation (**Figure 51**) and that the only two enterprises that were located in urban areas were classified as unsuccessful (**Figure 52**). This result may initially appear counter-intuitive (since economies of scale usually support success in water enterprises). One possible explanation is competition from government service providers (PDAMs). Another is that their lack of success was due to their management, as both urban providers had low profits.

¹ Please note the time commitment was expressed by different enterprise leaders in different ways, and some were referring to a five-day week, and others to a seven-day week, hence this data should be treated with caution.

Figure 51: Years of operation of the water enterprises and levels of success

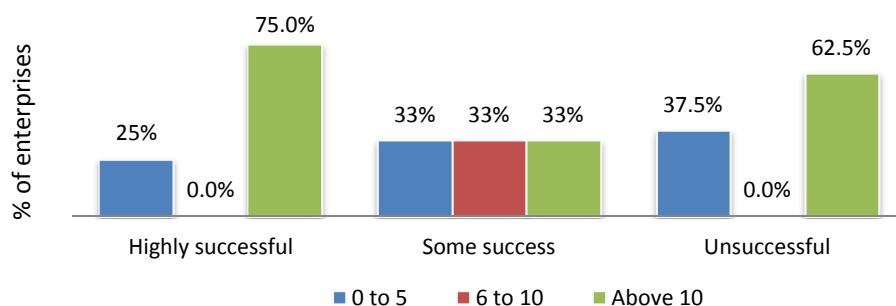
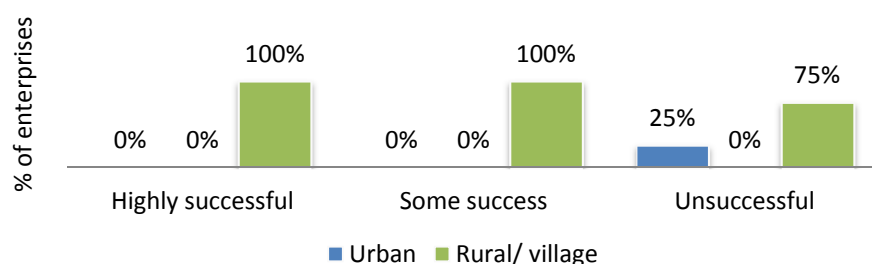
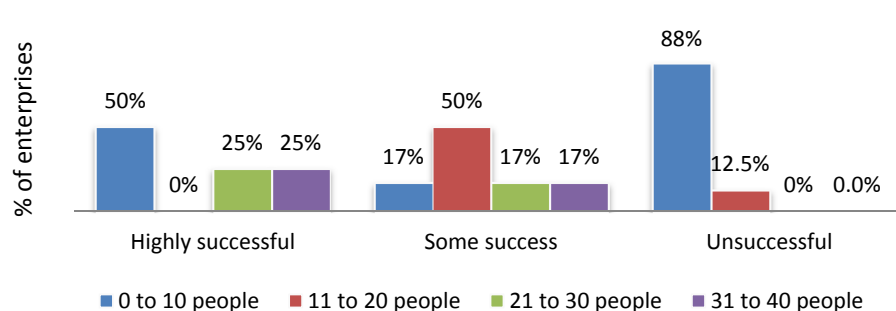


Figure 52: Location of the enterprise and levels of success



It is also interesting to note that the majority of the unsuccessful enterprises (88%) had less than 10 staff, whereas half of the highly successful enterprises and the majority of the ‘some success’ enterprises (84%) had more than 10 staff (Figure 53).

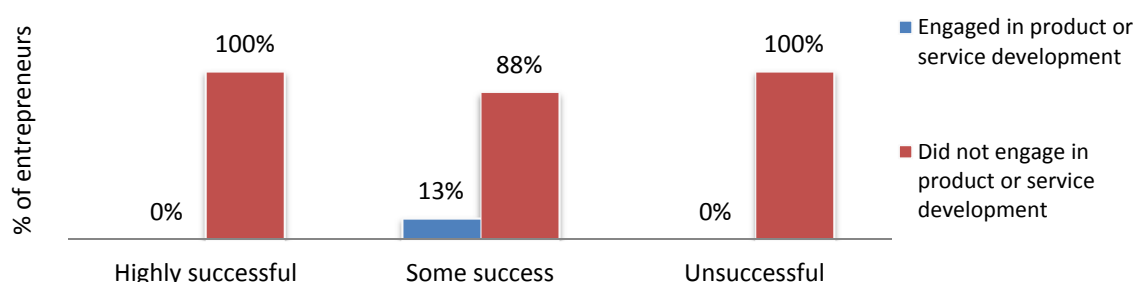
Figure 53: Number of staff of the enterprise and levels of success



Product and service development

As mentioned earlier, only one enterprise had engaged in product or service development, as Figure 54 shows. This was a successful enterprise.

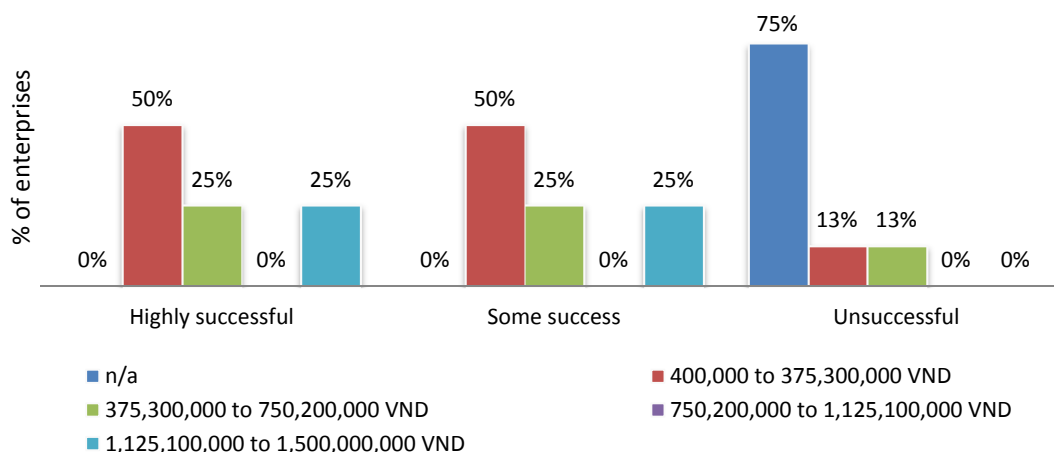
Figure 54: Product or service development and levels of success



Initial investment

As Figure 55 shows, only two of the unsuccessful enterprises reported on their initial investment. The amounts invested by these enterprises are within the lower ranges of investment observed across the sample. In contrast, higher ranges of investment were observed in 25% of both highly successful and ‘some success’ enterprises.

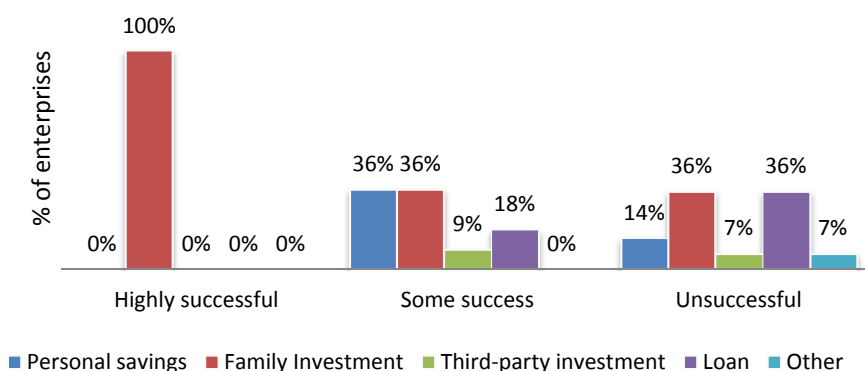
Figure 55: Initial investment and levels of success



Source of capital

As Figure 56 shows, all highly successful enterprises relied on capital investment from their families. In contrast, although a proportion of enterprises with lower levels of success (36%) also relied on this source of capital, most of the less successful enterprises relied on other sources of capital such as third-party investments and loans.

Figure 56: Source of capital and levels of success



Association membership

As mentioned earlier in Section 2.1.2, only two enterprises were members a sector-related business association. One of these was a ‘some success’ enterprise and the other was an unsuccessful enterprise. Both respondents reported this membership as beneficial to the enterprise and to themselves. Reported benefits included ‘access to information about new rules and regulations’, as well as ‘technical information’, and access to social networks and peer-to-peer learning. The role of the associations in advocating for issues shared by their members, such as the need to increase water tariffs, was also mentioned.

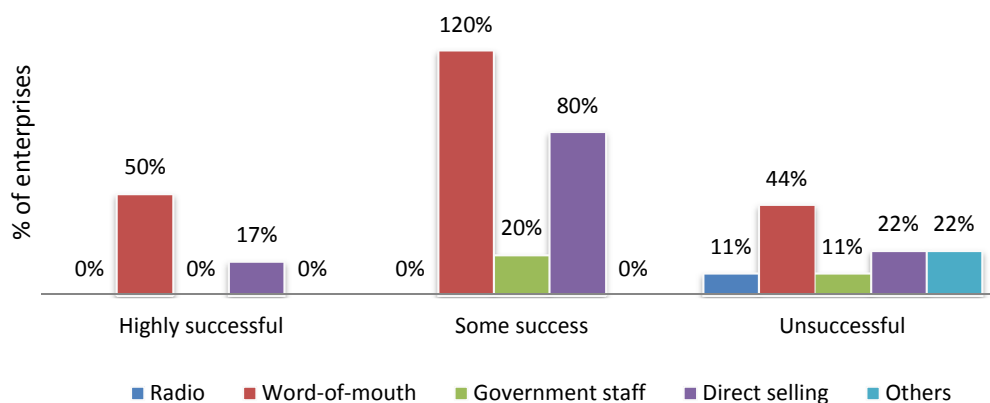
Customer composition

Most of the customers (more than 98%) across all three levels of success (highly successful, some success, and unsuccessful) were households. Therefore, it's not possible to identify a clear connection between the enterprises' customer composition and their levels of success.

Marketing methods

As mentioned earlier in Section 2.1.2, enterprises relied predominantly on word of mouth and direct selling to market their services, and as Figure 57 shows, no clear connection between success and marketing methods was found. Figure 57 shows however that marketing methods other than these predominant ones, such as radio, dissemination at community meetings and inclusion of the enterprise's contact details in the water bill, were used only by three unsuccessful enterprises. A possible explanation for this is that these enterprises resorted to these methods in an attempt to address their low levels of success by reaching out to more customers.

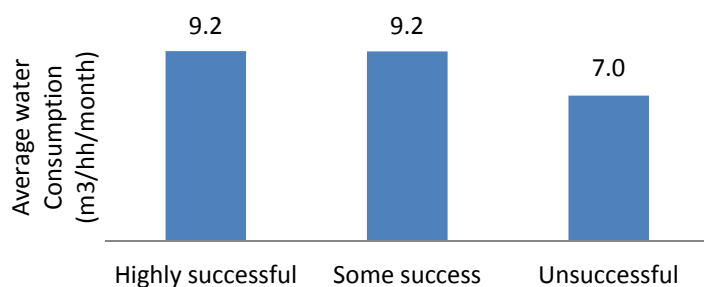
Figure 57: Marketing methods and levels of success



Water consumption, water losses and cost of services

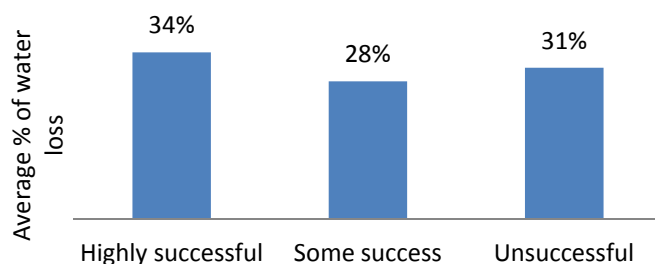
As Figure 58 shows, the customers of enterprises with higher levels of success had higher average levels of water consumption.

Figure 58: Average water consumption (m³ per household per month) and levels of success



However, no relation was found between the average percentage of water losses and levels of success (Figure 59).

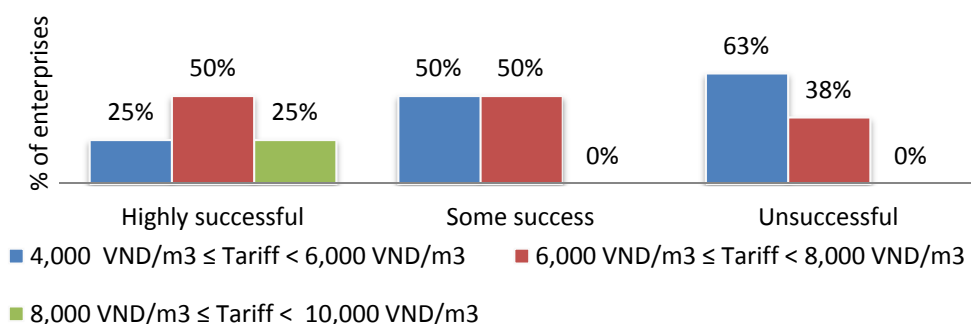
Figure 59: Average percentage of water loss and levels of success



Tariffs

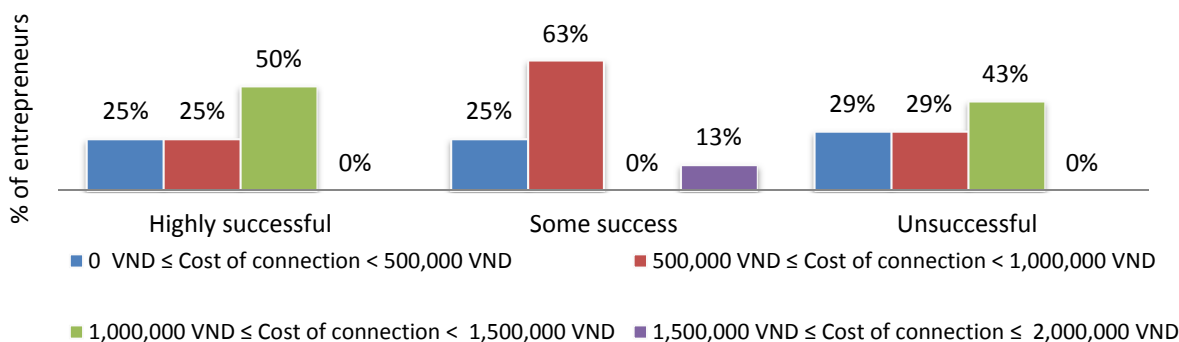
As mentioned earlier in Section 2.1.2, water tariffs ranged from 4,000 VND/m³ (USD 0.18/m³) to 10,000 VND/m³ (USD 0.46/m³). As **Figure 60** illustrates, the only enterprise that charged water tariffs at the higher end of this range (more than 8,000 VND/m³ (USD 0.37/m³)) was a highly successful enterprise. In contrast, it’s interesting to note that the majority of the unsuccessful enterprises (63%) charged tariffs at the lower end of this range (below 6,000 VND/m³ (USD 0.28/m³)) (**Figure 60**).

Figure 60: Water tariffs and levels of success



Similarly, the only enterprise that charged a connection service fee at the higher end of the range of fees (more than 1.5 million VND (USD 68.79)) reported across the sample, was a successful enterprise (‘some success’). Further, connection fees at the lower end of this range (below 500,000 VND (USD 22.93)) were not observed amongst highly successful enterprises (Figure 61).

Figure 61: Connection service fee and levels of success

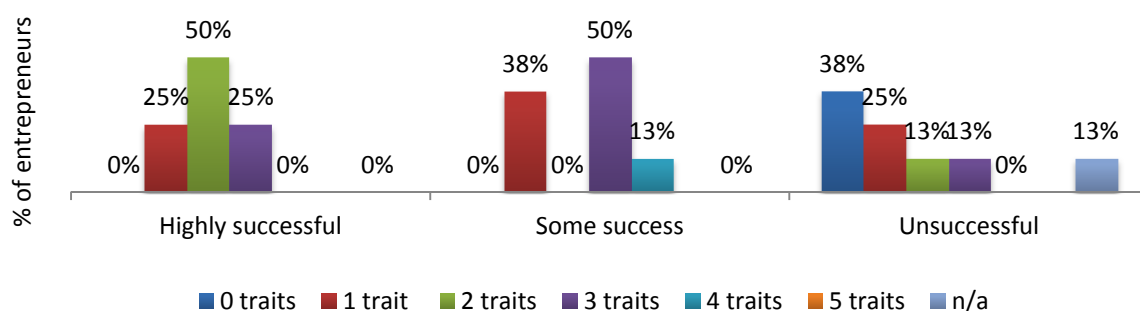


4.6 RELATIONSHIP BETWEEN SUCCESS AND ENTREPRENEURIAL TRAITS

In this section, we discuss the relationship between success and the five core entrepreneurial traits mentioned earlier in Section 3.1: proactiveness, need for independence, need for achievement, innovativeness, and risk taking.

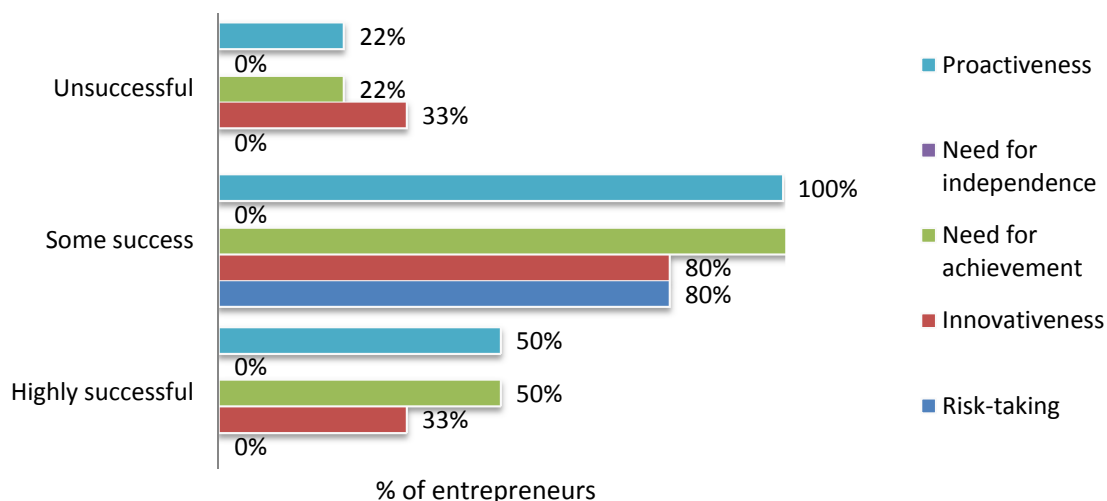
As Figure 62 shows, three out of the four leaders of the highly successful entrepreneurs (75%) had more than one of the five core entrepreneurial traits (two to three traits). Similarly, amongst the leaders of the enterprises that achieved some success, the majority (63%) had more than one trait (three to four traits). In contrast, the majority of the leaders of unsuccessful enterprises (63%) demonstrated only one trait or none.

Figure 62: Number of entrepreneurial traits and level of success



Further, amongst leaders of highly successful enterprises and those with some success, the need for achievement and proactiveness were more strongly present than other traits. Although these traits were also present amongst leaders of unsuccessful enterprises, innovativeness was instead the trait more strongly present amongst these enterprises. It’s interesting to note too that risk-taking was only evident amongst leaders of ‘some success’ enterprises.

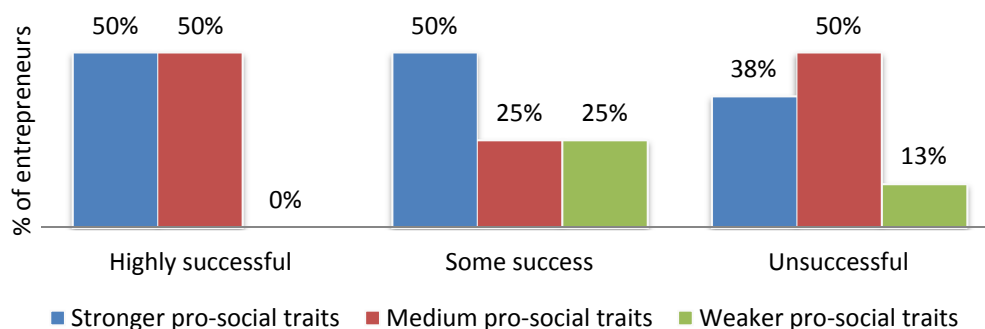
Figure 63: Entrepreneurial traits and levels of success



4.7 RELATIONSHIP BETWEEN PRO-SOCIAL TRAITS AND SUCCESS

As Figure 64 shows, all leaders of highly successful enterprises demonstrated medium to stronger pro-social traits, whereas weaker pro-social traits were only evident amongst lower levels of success (some success and unsuccessful). Further, although leaders of unsuccessful enterprises also demonstrated stronger pro-social traits, this level of pro-social traits were found in higher proportion amongst higher levels of success.

Figure 64: Pro-social traits and levels of success



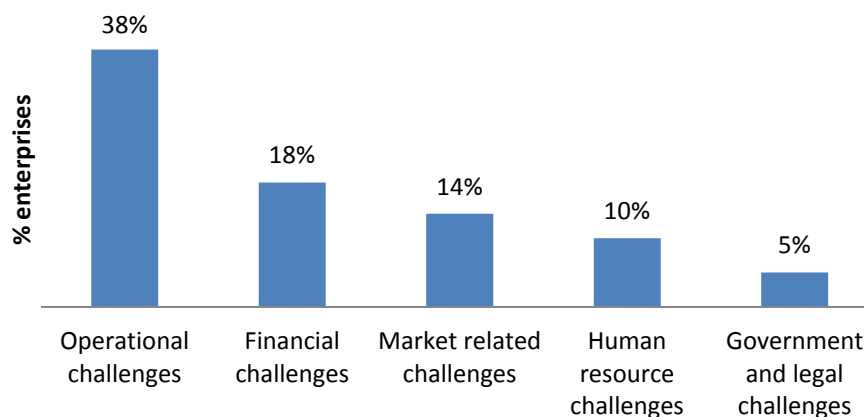
4.8 RELATIONSHIP BETWEEN CONTEXTUAL ELEMENTS AND SUCCESS

In this section we explore the challenges and success factors within the contextual business environment in which water enterprises operated, and how these relate to different levels of success. Six broad categories were used to classify these contextual challenges and success factors: finance, marketing, operations, human resources, government and regulation, and cultural perceptions.

Contextual challenges

As shown in Figure 65, of the reported challenges, the ones that were mentioned by the highest percentage of respondents (38%) fall under the category of operational challenges. This was followed by financial challenges (18%), market-related challenges (14%), human resource challenges (10%), and government and legal challenges (5%).

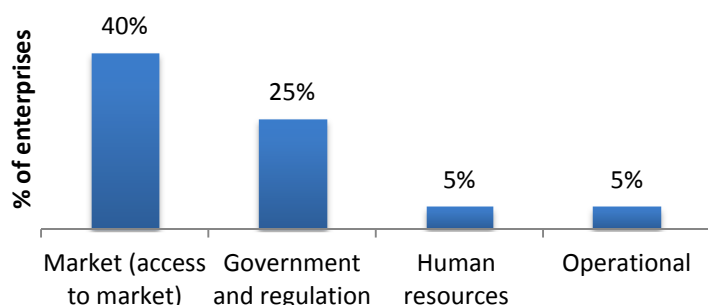
Figure 65: Types of reported contextual challenges



Contextual success factors

As mentioned in Section 4.3, respondents were asked an open-ended question about what mattered most in helping their water enterprise to succeed, and 35% of the responses related to external contextual factors. These factors ranged across the categories of market, government and regulation, human resources and operational aspects. As Figure 66 shows, a significant proportion of the reported contextual success factors related to access to market (40%) and government and regulation (25%). The remaining reported contextual success factors were equally distributed across the other categories.

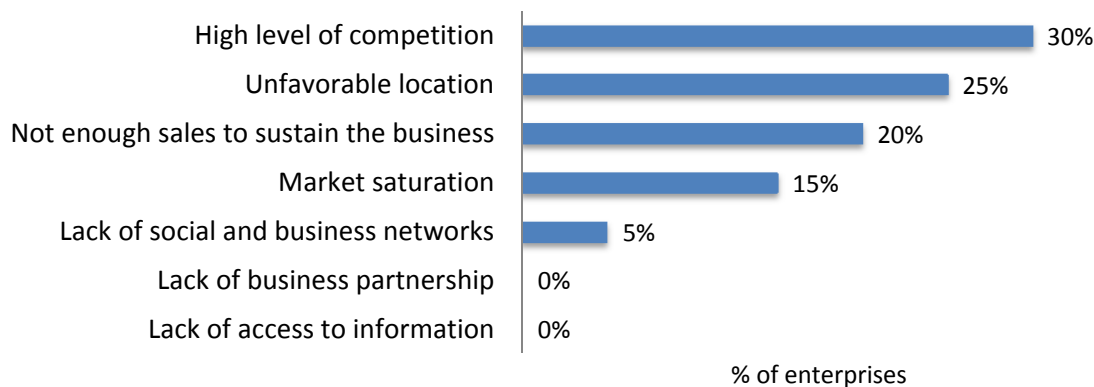
Figure 66: Types of reported success factors



Market-related challenges and success factors

Respondents emphasised market-related factors as success factors but not as challenges. As mentioned previously, and as shown in Figure 65, this type of challenge was reported by a small proportion of respondents (14%). Amongst these challenges, high levels of competition, unfavourable location and insufficient sales were the most commonly reported (Figure 67).

Figure 67: Market-related challenges



This type of challenge wasn't highlighted in responses to an open-ended question concerning the biggest challenges.

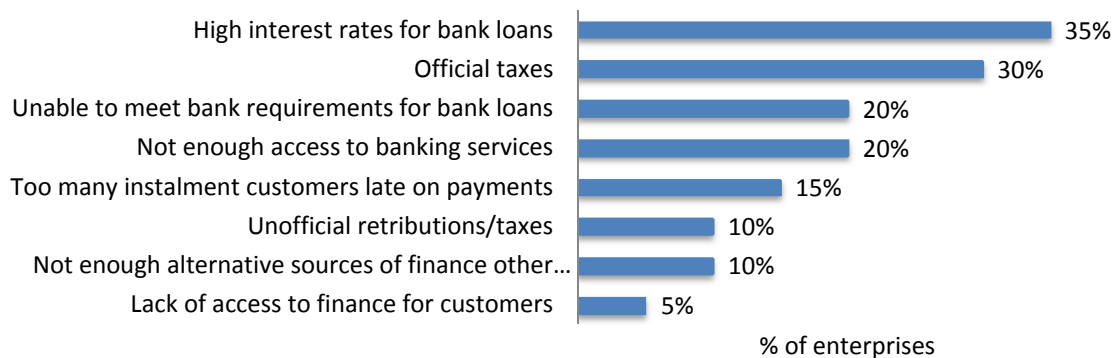
In contrast, as mentioned earlier, access to market challenges such as demand were highlighted in responses to an open-ended question concerning success factors. Challenges in this category were reported by 40% of the respondents (see Figure 66). For example, this success factor was emphasised by one respondent who noted the importance of his enterprise being located in an area of high demand.

Financial challenges and success factors

Respondents emphasised financial factors as challenges but not as success factors. As mentioned previously and as shown in Figure 65, this type of challenge was reported by 18% of

respondents. Amongst these, high interest rates for bank loans, official taxes, challenges in meeting bank loan requirements and limited access to banking services were the most commonly reported challenges (Figure 68).

Figure 68: Financial-related challenges



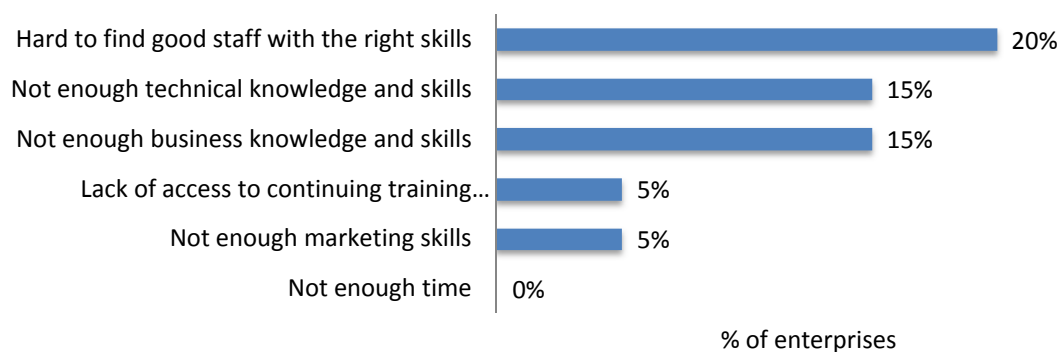
Financial challenges were also emphasised in responses to an open-ended question asking respondents to identify the biggest challenges, and represented 33% of the reported biggest challenges that fell under the category of contextual/external challenges². Financial challenges included lack of access to capital, cost recovery challenges and customers’ late payments, as well as high interest rates for bank loans.

In contrast, financial aspects were not highlighted in responses to an open-ended question concerning success factors, as shown in Figure 66.

Human resources challenges and success factors

Overall, respondents didn’t emphasise human resource factors as challenges or as success factors. As mentioned previously, and as shown in Figure 65, human resource-related challenges were reported by only 10% of the respondents. Amongst these, difficulties in finding staff with the right skills, and limited access to technical and business knowledge and skills, were the most commonly reported challenges (Figure 69).

Figure 69: Human resource-related challenges



Difficulties in finding staff with the right skills were also emphasised in responses to an open-ended question concerning the biggest challenges, although only one respondent reported this in

² Contextual/external challenges are here considered as challenges within the business environment in which water enterprises operate.

response to this question. Access to training opportunities was noted in responses to an open-ended question concerning success factors, although only one respondent mentioned this.

Government and legal challenges and success factors

Respondents emphasised government-related and legal factors as success factors but not as challenges. As **Figure 65** shows, only one respondent (5%) mentioned a challenge in this category, namely unclear legislation or lack of legislation.

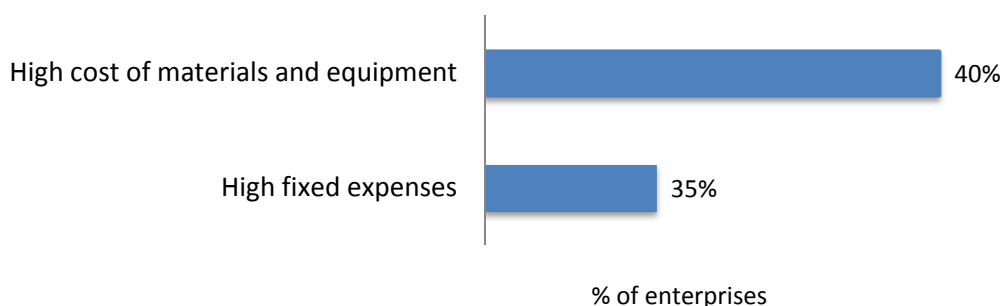
This challenge was also emphasised by one respondent in responses to an open-ended question concerning the biggest challenges, whereas another one highlighted high cost of taxes as the enterprise's biggest challenge.

Government and regulation aspects were also evident in responses to an open-ended question concerning success factors (see **Figure 66**). Responses to this question emphasised support from local government as a success factor.

Operational challenges and success factors

As shown in **Figure 65**, operational challenges were reported by a significant percentage of respondents (38%), and included high cost of materials and equipment (40%) and high fixed expenses (35%) (**Figure 70**).

Figure 70: Operational-related challenges



This type of challenge was also emphasised in responses to an open-ended question concerning the biggest challenges, and represented 33% of the reported biggest challenges that fell under the category of contextual/external challenges. These included scarcity of water resources, high-energy costs, high maintenance and repair costs, and management of water storage. For example one respondent noted: *'the piping system is relatively old, needs high repairing and operating costs, and has huge water losses which means low profit. The pipeline system runs under the roads. Whenever they widen or repair the road, it affects the pipeline system, and causes displacement or breakage, water loss and increases repairing costs.'* Another one also added: *'the big problem is storing water, it's so difficult to manage.'*

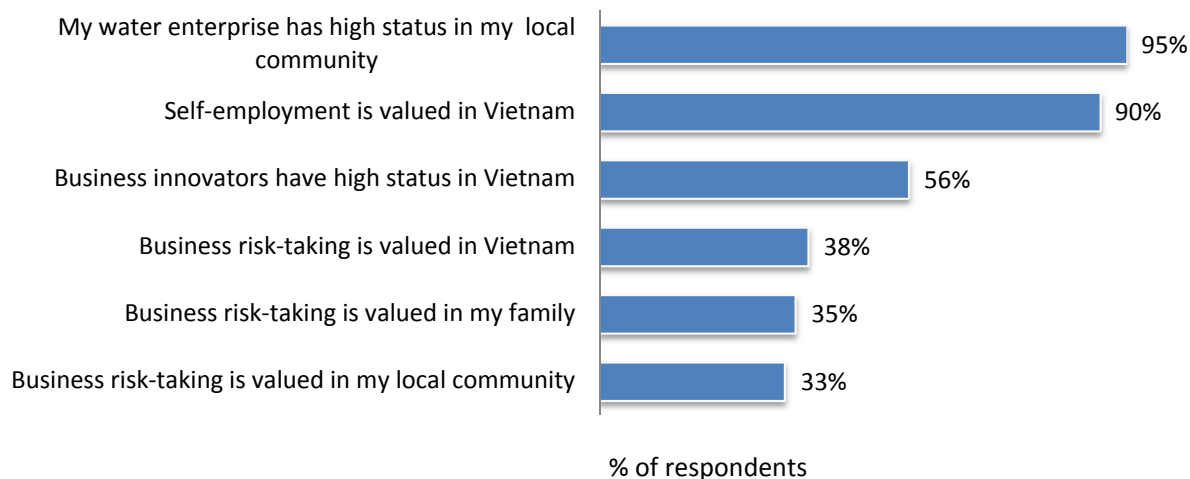
Access to water resources in appropriate quantities and quality was also highlighted in responses to an open-ended question concerning success factors, although only by one respondent.

Cultural influences

We also asked water enterprise leaders about their perceptions regarding cultural influences on businesses. As shown in **Figure 71**, the majority of the respondents (90% or above) perceived their water enterprises to be respected within their communities and self-employments to be highly valued in Vietnam. More than half of the respondents (56%) also perceived that business innovators had some status in Vietnam. In contrast, the majority of the respondents (more than 60%) didn't perceive business risk-taking to be valued within their families and communities, or within Vietnam. This suggests that the status of water enterprises within local communities, as

well as national values around self-employment and business innovators, can be significant influences on business success.

Figure 71: Cultural values on entrepreneurship perceived by the water enterprise leaders



4.9 RELATIONSHIP BETWEEN GENDER AND SUCCESS

Female respondents represented only 20% of the sample, which reflects the fact that Vietnam’s water sector remains largely male-dominated.

Of the four female enterprise leaders interviewed, two led unsuccessful enterprises and the two led successful enterprises including a highly successful one (Figure 72).

Figure 72: Levels of success amongst female water enterprise leaders.



However, as discussed earlier in Section 4.4, no clear connection was found between the gender of the respondents and the level of success of the water enterprises they led. Thus, in the following paragraphs we focus in characterising the female respondents in more detail in terms of demographics or owner variables such as age and educational background, and characteristics of the enterprise such as monthly revenue.

Of the three female enterprise leaders interviewed who reported on their age, one was in the 36 to 46 age bracket, and two were 56 to 65 years old (Figure 73). Two had completed high school and one had completed college (Figure 74).

Figure 73: Gender and age of the water enterprise leaders

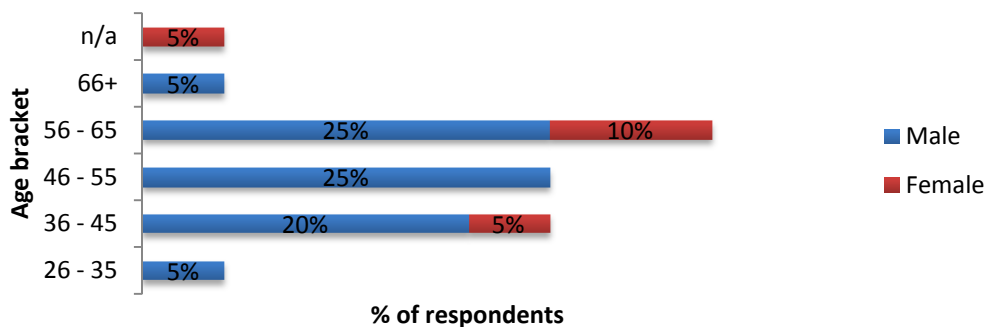
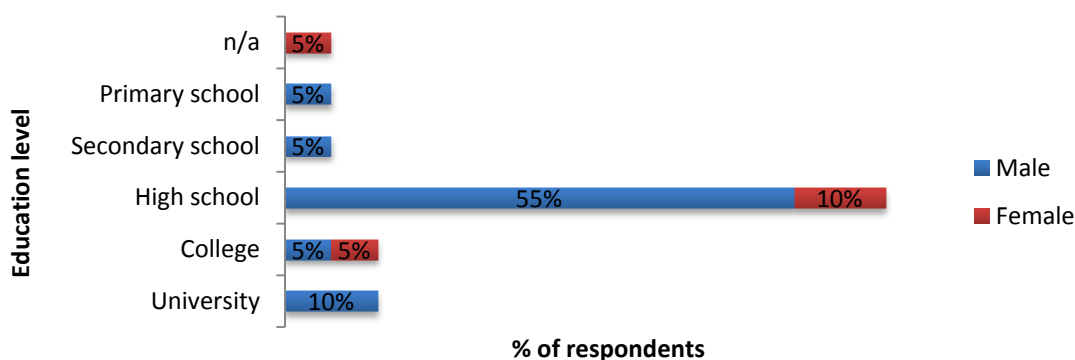
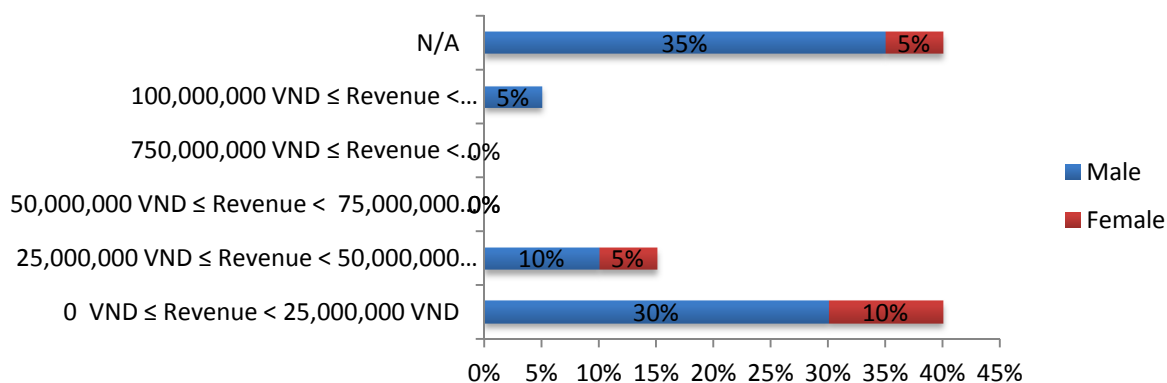


Figure 74: Gender and education level of the water enterprise leaders



Concerning the business monthly revenue, of the three female enterprise leaders who reported on this, all reported this to be below 50 million (USD 2,293), like the majority of the male respondents (Figure 75).

Figure 75: Relationship between gender and the business monthly revenue



As mentioned earlier in Section 4.1, data on monthly profit margins was also collected in the preliminary stages of the research to assist with sampling. However, some contradictions were found between this set of data and the data collected on monthly revenue, as some enterprises

reported a significantly higher profit than revenue. This was the case in two of the female-led enterprises. As explained earlier, this may reflect that enterprises didn't provide honest answers to these questions and/or misunderstood the question and reported on their monthly revenue when asked about their monthly profit.

Perceptions of contextual gender differences

Contextual gender differences can affect how easily women become entrepreneurs and they can influence success. Open-ended questions concerning how easy it is for women to become entrepreneurs in Vietnam, and how easy it is for them to become involved in a water enterprise in a paid capacity, were used to explore this issue.

In response to these questions, most respondents answered that it was 'easy' for women to become entrepreneurs in Vietnam (Figure 76), as well as for women to become involved in water enterprises in a paid capacity (Figure 77).

Figure 76: Proportion of respondents who considered that it was easy for women to become entrepreneurs in Vietnam

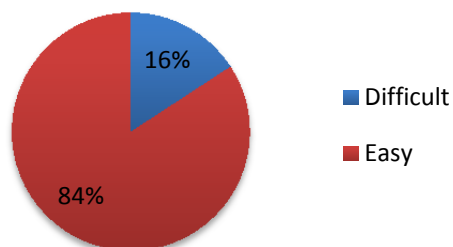
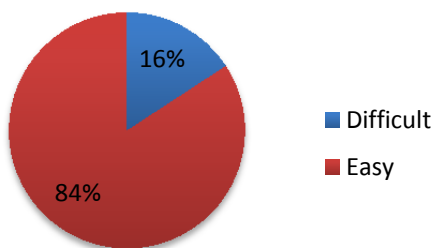


Figure 77: Proportion of respondents who considered that it was easy for women to become involved in a water enterprise in a paid capacity



Two of the three females who answered to this question considered that it was easy for women to become entrepreneurs in Vietnam, whereas one considered it to be difficult. In contrast, two of these respondents considered that it was difficult for women to become involved in a water enterprise in a paid capacity, whereas one considered it to be easy.

Reasons presented for why it's easy for women to become entrepreneurs

Amongst the reasons given for why it's easy for women to become entrepreneurs, or easy for them to be involved in a water enterprise in a paid capacity, the highest proportion (43%) were based on the perception that there are many examples of women running businesses: *"I know a lot of female entrepreneurs ... a lot of them are in the business of water service provision."*

A proportion of the reasons the reasons given (29%) were also based on the belief that women's personalities and natural skills are better suited for business management activities than men's. Qualities perceived to be stronger in women than in men included effective time management

and financial management, flexibility and patience and general social skills. For example, one respondent noted: *“Women have good emotional intelligence in business, they are friendly and patient.”*

A smaller proportion of the responses (28%) were associated to the belief that women are as capable as men to run a business and/or a water enterprise: *“woman now are equal as man”*.

Reasons presented for why it’s difficult for women to become entrepreneurs

Amongst the reasons given for why it’s difficult for women to become entrepreneurs, more than half (57%) were associated to the belief that compared to men, women are not suited to business activities and/or to the hard work involved in managing a business and/or water enterprise. For example one respondent said: *“It’s difficult ... working in a water enterprise needs a lot of effort, requires establishing good relationships with other people, local authorities, and customers.”*

A smaller proportion (29%) believed that working in a water enterprise was difficult for women because although women are naturally suited for administration tasks, they are not suited to dealing with the technical aspects of operating a water system: *“Women are not favoured in this business as they are not good at mechanics.”* Some responses (14%) were also based on the belief that it is women's role is to take care of domestic activities: *“women need to take care of their family”*.

5 DISCUSSION AND CONCLUSION

This study examined the motivators, drivers and barriers influencing small-scale enterprise roles in water services in Vietnam. In particular, it assessed the **relationship between the characteristics of the enterprise leader and of the enterprise itself and success**. Amongst others, these included the entrepreneurial and pro-social traits of the enterprise leaders. The research also sought to understand the **pro-social traits and other motivations and drivers** of the leaders and the staff who joined water enterprises. Attention was also given to **contextual factors affecting the success** of these enterprises. Lastly, the research also sought to understand dominant **perceptions around cultural values associated with entrepreneurship and gender differences** as potential drivers or barriers influencing the success of these enterprises.

Relationship between characteristics of the water enterprise leader and success

Using a set of criteria, enterprises were categorised into different levels of success. According to this categorisation, more than half of the water enterprises (60%) were considered to be successful, and of these, one-third were highly successful. A number of characteristics of the enterprise leader were evident as potentially influencing success. These included the entrepreneurial and pro-social traits of the enterprise leader, his/her age, and whether he/she had previous work experience in the private sector.

Respondents who led successful enterprises tended to more entrepreneurial traits and overall demonstrated higher risk-taking propensity as well as a higher need for achievement and a higher propensity for proactive behaviour. Although most respondents (75%) demonstrated one to three entrepreneurial traits, a higher proportion of entrepreneurial traits (two or more traits) was found amongst leaders of successful enterprises. Entrepreneurial traits evident amongst respondents included proactiveness, need for achievement, innovativeness, and risk-taking. Of these, risk-taking was the trait with strongest influence on success, as it was only evident amongst leaders of successful enterprises. Need for achievement and proactiveness also appeared to have some relevance to success. Although these traits were evident across different levels of success, they were more strongly present in leaders of successful enterprises, than in leaders of unsuccessful enterprises.

Leaders of successful enterprises also tended to have a stronger sense of social responsibility. Although most of the respondents (85%) were classified as having medium to stronger pro-social traits, stronger pro-social traits were evident in a higher proportion of enterprises with higher levels of success than unsuccessful enterprises. In addition, weaker pro-social traits were only evident amongst enterprises with lower levels of success (i.e. those in the 'some success' and 'unsuccessful' categories).

Concerning the age and previous working experience of the enterprise leaders, successful enterprises tended to be led by younger respondents and with previous experience in the private sector. Enterprise leaders in the 26 to 45 age group were only found amongst highly successful and some successful enterprises, whereas leaders of unsuccessful enterprises were all above 45 years old. In addition, half of the leaders of the highly successful enterprises (50%) had been in the private sector, whereas in the case of unsuccessful enterprises, their experience had been predominantly (70%) in the public sector.

Respondents' perceptions of what characterises a successful entrepreneur were also explored. The responses emphasised personality traits such as enthusiasm, passion and self-motivation, and thoroughness and meticulousness, as well as technical and business management skills. Other characteristics such as general experience and practice, access to networks, and access to safe environmental resources were also emphasised.

Relationship between characteristics of the water enterprises and success

In addition to characteristics of the enterprise leader, characteristics of the enterprise also potentially influenced success. These included the enterprise's number of staff, its level of water consumption, water tariffs and service connection fees. Overall, successful enterprises tended to have higher numbers of staff and levels of water consumption, and charged higher water tariffs and service connection fees. The majority of the unsuccessful enterprises (88%) had less than 10 staff, whereas half of the highly successful enterprises and the majority of the 'some success' enterprises (84%) had more than 10 staff. Further, successful enterprises had higher average water consumption levels than unsuccessful enterprises. Water tariffs and connection service fees ranged from 4,000 VND/m³ (USD 0.18/m³) to 10,000 VND/m³ (USD 0.46/m³), and 0 to 2,000,000 VND (USD 92), respectively. The only enterprise with tariffs at the higher end of this range (more than 8,000 VND/m³ (USD 0.37/m³)) was a highly successful enterprise. In contrast, the majority of the unsuccessful enterprises (63%) charged tariffs at the lower end of this range (below 6,000 VND/m³ (USD 0.28/m³)). Similarly, the only enterprise that charged a connection service fee at the higher end of the range of fees (more than 1.5 million VND (USD 68.79)) was a successful enterprise ('some success'). Further, connection fees at the lower end of this range (below 500,000 VND (USD 22.93)) were not observed amongst highly successful enterprises.

Pro-social traits and other types of motivations and drivers

A sense of social responsibility was a key driver for the water enterprise leaders to join in the water enterprise. A range of intrinsically and extrinsic factors was revealed as driving this sense of social responsibility. These included self-satisfaction about contributing positively to society and community development, religious beliefs, and a sense of empathy and compassion for the poor. There was also evidence of pro-social motivations being extrinsically driven through the respondents' past or concurrent jobs, when the objectives of these jobs aligned with the pro-social outcomes of the water enterprises.

The findings also revealed a broader range of motivations and benefits for the enterprise leader as well as other staff for engaging in the water enterprise beyond pro-social goals. These included profit and the ability to support relatives financially, status and acknowledgement from the community, lifestyle and time flexibility offered by the water enterprise job, and the opportunity to develop new skills, knowledge and experience.

Contextual factors affecting success

Different types of factors were emphasised as challenges and as success factors. Amongst the reported contextual challenges, operational factors such as the high cost of materials and equipment and high fixed expenses were the most common. In contrast, amongst the reported success factors, market factors such as demand were the most common. Emphasis was also given to other types of challenges including high levels of competition, high interest rates for bank loans, difficulties in finding staff with the right skills, and unclear legislation or the absence of legislation. Likewise, other success factors were also highlighted, including access to training opportunities, support from local government, and access to water resources of appropriate quantity and quality.

Perceptions of cultural values associated to entrepreneurship and gender differences

The findings suggest that cultural values around entrepreneurship can act as drivers as well as barriers to the success of water enterprises. The predominant perception amongst respondents was that water enterprises, self-employment and business innovation are all culturally valued, whereas business risk-taking is not. This means, for example, that water enterprise leaders may have cultural incentives to explore opportunities for innovation, but lack cultural support within their communities and families to take business risks, which may be necessary to support such explorations.

In turn, responses to questions on gender differences revealed a predominant perception that it is easy for women to become entrepreneurs in Vietnam and for them to become engaged in a water enterprise in a paid capacity. Reasons presented for this provide insights into what can influence the success of female entrepreneurs compared to male entrepreneurs. Of the reasons given for why it's easy for women to become entrepreneurs in Vietnam, including in a paid capacity in a water enterprise, the most common was based on the perception that there are many examples of women running businesses. Other reasons presented were associated with the perception that women's personalities and natural skills are better suited for business management activities than men's. Qualities perceived to be stronger in women included effective time management and financial management, flexibility and patience and general social skills. The belief that women are as capable as men to run a business and/or a water enterprise was also evident.

Overall, the findings of this study can provide useful insights to support policy development and improvements in practice related to enterprises' roles in water services. In particular, recognising entrepreneurial traits amongst potential enterprise leaders can assist in targeting appropriate candidates when providing training and support. Equally, understanding the pro-social motivations of these entrepreneurs, as well as other motivations, opens up a wider range of possible business models and forms of support for enterprises. Further, knowledge of the key challenges faced by enterprises provides guidance to both government and external agencies on where they should focus their attention in order to facilitate effective enterprise roles.

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7 APPENDIX 1: DATA COLLECTION FOR WATER ENTERPRISES

Place:

Date:

Name of interviewee:

Contact details:

Section 1: The Owner / General Manager / Director

1. Sex Female Male
2. Your ethnic group _____
3. Year of birth _____ (mm/yy)
4. Highest educational level attained

<input type="checkbox"/> None	<input type="checkbox"/> Primary School	<input type="checkbox"/> Secondary School
<input type="checkbox"/> High School	<input type="checkbox"/> College	<input type="checkbox"/> University (Bachelor Degree)
<input type="checkbox"/> University (Master Degree)	<input type="checkbox"/> Technical qualification	
5. Where did you get information and skills to run the Water Supply Enterprise?
 - Formal Education
 - Short-course
 - Working in related business
 - Associations
 - Self-learning
 - Others _____
6. Have you been working in a professional paid job before starting working at this water supply enterprise?
 - Never (**Go to Q 8**)
 - Yes; how long have you been working?: _____ (years)
7. If yes, in what sector? (Select all applicable)
 - Public Private Self-employed
 - Others, _____
8. Are you currently involved in any other job or business(es) besides the Water Supply Enterprise?
 - Yes, please specify what is your other Job/business?

 - No (**Go to Question 10**)
9. How much time do you spend on the Water Supply Enterprise compared to your other job/business(es)?
_____ (hours/day) OR _____ (days/week)

10. Are you a member of an association or business related association?

Yes; Please specify:

No

Section 2: The Water Supply Enterprise

11. Location of the business you operate

Urban Sub-Urban Rural/Village

12. a. Month and year of establishment _____/_____(mm/yyyy)

b. Month and year of legal formalisation (where this differs from year of establishment _____/_____(mm/yyyy)

13. What are the goals of this Water Supply Enterprise?

14. Status of the firm

<input type="checkbox"/> Informal (not registered)	<input type="checkbox"/> Legal formal (registered with govt/pay tax)
<input type="checkbox"/> Subsidiary	<input type="checkbox"/> Cooperative
	<input type="checkbox"/> Others, please specify _____ _____ _____

Section 3: Internal Arrangements of the Water Enterprise

15. Please fill-in the table below concerning staff working, or volunteering in water service provision.

	Paid full time	Paid part-time
Management staff (e.g. board of directors; general manager/director, deputy director; general assembly; etc)		
Total number of staff		
Salary range) (Rp/month)		
working hours/day or days/week		
Administration staff (e.g. treasurer, secretary, bookkeeper, etc)		
Total number of staff		
Salary range) (Rp/month)		
working hours/day or days/week		
Operational/technical staff (e.g. head of technical operations, technician, meter reader; tariff collector, etc)		
Total number of staff		
Salary range) (Rp/month)		
working hours/day or days/week		
Other type of staff (please specify): _____		
Total number of staff		
Salary range) (Rp/month)		
working hours/day or days/week		

Additional NOTES concerning arrangements for employees/members/volunteers

16. Percentage or number of people (from Q16), including the management, with any of the following qualifications (write number in boxes):

	Number of staff	Percentage (%)
Elementary School		
Junior High School		
Senior High School		
Diploma III		
Bachelor		
Master		

17. Percentage or number of people that are currently involved in any other job or business(es) besides the water enterprise? _____

18. Percentage or number of people (based on responses to Q16) that works in any of the following sectors (write number in boxes):

	Number of staff	Percentage (%)
Public		
Private		
Self-employed		
Others		

Section 4: The Water Supply Enterprise Business

19. Total number of households served: _____

20. Total number of institutions served: _____

21. Does your business provide services to poor and informal communities (that is households without legal land tenure)?

Yes; Why? _____

No; Why? _____

22. Percentage of low-income households (*note: ask respondent how the water enterprise defines low-income households – based on electricity consumption; income classification; location, materials or size of their home; other etc*): _____

23. Production capacity (m³): _____

24. Average water consumption (m³/month/customer): _____

25. Water loss (due to leakage in the system) (%): _____

26. Does the Water Supply Enterprise provide other products or services in addition to piped water supply? (*e.g. plumbing services at an additional fee, water treatment products such as chlorine, water supply equipment such as pipes, taps, rainwater tanks*)

No Yes; please specify: _____

27. Cost of providing new water connections (VND/connection) _____

28. Costs of any other services provided?

29. What is the expense-revenue ratio? _____

30. How much money, assets or time has been invested to establish the Water Supply Enterprise?

31. Amount and source of starting investment (multiple answers are allowed)

	Tick the right boxes below	Amount in VND
Personal savings from one member		
Personal savings from one or more members		
Investment from one family		
Third-party investment e.g. donor or government		
Loan		
Other, please specify		

32. Amount of accumulated assets (VND)_____

(Notes on accumulated assets and their value)

33. After establishment, how was your business doing (in terms of profit)?

- Not growing and declined
- Growing after 6 months
- Growing after 1 year)
- Growing after two years
- Stable
- Not yet profitable; When do you think it will break even?_____

34. For organisations that have been running for more than 3 years, in the last 2 years, has the business progressed in terms of profit?

- Declined
- Increased
- Remained stable
- Not yet profitable

35. What is the monthly average net revenue of the firm in the past year: VND_____/month

Or fill out one of this range:

Range:

- Revenue ≤ 3,000,000
- 3,000,000 < Revenue ≤ 25,000,000
- 25,000,000 < Revenue ≤ 50,000,000

- 50,000,000 < Revenue ≤ 75,000,000
- 75,000,000 < Revenue ≤ 100,000,000
- Revenue ≥ 100,000,000

36. How do you market and promote the Water Supply Enterprise services/products? (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 _____

37. Is the Water Supply Enterprise member of an association/federation or business related association?

- No (**Go to Section 5**) Yes

38. If 'Yes', which association and why?

39. What has that experience been like, to be a member of the association/federation? What are the benefits? What could be improved?

Section 5: Business Challenges and Success Factors

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

41. 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, on a scale of 1-4 how much of a challenge has it been to the success of your water supply business, where 1 is 'no challenge' and 4 is 'big challenge'.

1 = Not a challenge at all

2 = Not too much of a challenge

3 = Somewhat a challenge

4 = A big challenge

1.	<p>Not enough sales to sustain the business/low or lack of demand</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
2.	<p>Not enough business knowledge and skills</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
3.	<p>Not enough technical knowledge and skills</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
4.	<p>Not enough marketing skills</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
5.	<p>Not enough time</p> <p>1 = Not a challenge at all</p>

	<p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
6.	<p>Unfavorable location</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
7.	<p>Market saturation</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
8.	<p>Hard to find good staff with the right skills (e.g. masons, sales staff, admin, or other)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
9.	<p>Not enough access to banking services</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
10.	<p>High interest rates for bank loans</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
11.	<p>Unable to meet bank requirements for bank loans (e.g. collateral; financial statements)</p>

	<p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
12.	<p>Not enough alternative sources of finance other than bank (e.g. through social networks)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
13.	<p>Lack of access to finance for customers</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
14.	<p>High cost of materials and equipment</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
15.	<p>Lack of access to information (e.g. information about the needs and preferences of the market, source and cost of materials)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
18.	<p>Lack of access to continuing training opportunities and/or mentoring</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>

19.	<p>Unclear or lack of government legislation (e.g. legislation to become a formal business)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
20.	<p>Official taxes</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
21.	<p>Unofficial retributions/taxes</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
21.	<p>High level of competition (too many similar business)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
22.	<p>High fixed expenses (e.g. electricity, salary, venue rental, etc.)</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
23.	<p>Too many instalment customers late on payments</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>

24.	<p>Lack of social and business networks</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>
25.	<p>Lack of business partnerships</p> <p>1 = Not a challenge at all</p> <p>2 = Not too much of a challenge</p> <p>3 = Somewhat a challenge</p> <p>4 = A big challenge</p>

42. Of all the challenges you just talked about, which one is the biggest problem for the Water Supply Enterprise? Is there any another challenge that has also been a big problem?

43. When the Water Supply Enterprise faced problems in the past, how have these been faced/tackled/addressed? *[Prompts: For example: approached government agency, approached other sludge removal entrepreneurs, social networks, associations, approached NGOs, pay for someone for legal advice, attend training, paid a technician – subcontract someone expert/paid for some advice (technology, management, financial etc), approached bank, other – specify:....]*

Note: Unprompted response (i.e. answer provided straight away)

Note: Prompted response (i.e. after prompts provided above)

44. How do you feel about the support that has been available to help the Water Supply Enterprise when it has faced these challenges?

45. Do you have any specific comments about how the Provincial level policy and regulatory setting has affected enterprise operation and success (either in supporting or constraining)?

Section 6: Cultural and gender influences on entrepreneurship

46. I'm going to ask you questions and ask you to answer these in a scale of 1 (low) to 4 (high). We are looking for your personal views on these matters.

1.	<p>Business innovators have different levels of status in different countries. How much status you think they have in Vietnam?</p> <p>1 = no status at all</p> <p>2 = not too much status</p> <p>3 = some status</p> <p>4 = a lot of status</p>	1	2	3	4
2.	<p>Now thinking about your local community, what level of status do you think this organisation has?</p> <p>1 = no respect at all</p> <p>2 = not too much respect</p> <p>3 = some respect</p> <p>4 = a lot of respect</p>	1	2	3	4
3.	<p>Different countries have different values about self-employment as opposed employment in a larger institution. How much do you think self-employment is valued in Vietnam?</p> <p>1 = not valued at all</p> <p>2 = not valued too much</p> <p>3 = somewhat valued</p> <p>4 = highly valued</p>	1	2	3	4
4.	<p>Different countries also have different values around business risk-taking. How do you think business risk-taking is valued in Vietnam? (<i>e.g. expanding the business to new locations/areas; offering additional new services or products; investing in new technology; borrowing a loan from the bank; experimenting with different/new business approaches or techniques; investing on a marketing strategy</i>)</p> <p>1 = not valued at all</p> <p>2 = not valued too much</p> <p>3 = somewhat valued</p> <p>4 = highly valued</p>	1	2	3	4
5.	<p>And how do you think business risk-taking is valued in your community?</p> <p>1 = not valued at all</p> <p>2 = not valued too much</p>	1	2	3	4

	3 = somewhat valued 4 = highly valued				
6.	How do you think business risk-taking is valued in your family? 1 = not valued at all 2 = not valued too much 3 = somewhat valued 4 = highly valued	1	2	3	4
7.	Concerning differences between women and men in Vietnam. How easy do you think it is for women to become an entrepreneurs in Vietnam? 1 = not easy at all 2 = not very easy 3 = somewhat easy 4 = very easy	1	2	3	4
8.	And now concerning women and men in your community. How easy do you think it is for women to become involved in the Water Supply Enterprise <i>in a paid capacity</i> 1 = not easy at all 2 = not very easy 3 = somewhat easy 4 = very easy	1	2	3	4

47. Please explain your answer to question 51-7 above:

48. Please explain your answer to question 51-8 above:

[Note to interviewer: Ask respondent to explain any difference between ratings in question 49-7 and 49-8]

49. As a male/female (choose as appropriate) leading this enterprise, how has your involvement leading this enterprise affected how you feel about yourself at home - in terms of your self-confidence, self-esteem? In what ways?

50. In turn, has this affected relationships in your home at all? With your husband/wife or your immediate family? How?

51. Do you feel your involvement leading the enterprise has affected how you feel about yourself within your community? In what ways?

52. Do you think other people in the community have changed their perception of you due to your involvement in the enterprise? In what ways? What status do you have?

53. How 'normal' do you feel it is that a woman (or man, when interviewing a male) from a rural area leads an enterprise such as this? Do you see it as setting an example that others might follow? Why? Why not?

Section 7: Entrepreneurial characteristics and motivations

54. What type of person do you think makes a business in the area of water supply? [*Prompts: What skills do they have? What experience do they have? What type of personality do they have?*]

55. I'm going to ask you questions and ask you to answer these in a scale of 1 (low) to 4 (high). Please answer from a personal perspective.

1.	How easy do you think it is for you to discover new business opportunities?				
	1 = not easy at all	1	2	3	4
	2 = not very easy				
	3 = somewhat easy				

	4 = very easy				
2.	<p>How much do you see yourself as an innovator? (e.g. developing new technology, products or services, or packages of products or services; developing an innovative marketing strategy; developing a system to improve the management of the business such as innovative payment systems or business financial management systems)</p> <p>1 = not at all innovative</p> <p>2 = not too innovative</p> <p>3 = somewhat innovative</p> <p>4 = very innovative</p>	1	2	3	4
3.	<p>How easy is to make a profit/maintain a Water Supply Enterprise/water service provision business?</p> <p>1 = not easy at all</p> <p>2 = not very easy</p> <p>3 = somewhat easy</p> <p>4 = very easy</p>	1	2	3	4
4.	<p>When the Water Supply Enterprise started, how certain were you that it was going be success?</p> <p>1= not certain at all</p> <p>2 = not too certain</p> <p>3 = somewhat certain</p> <p>4 = very certain</p>	1	2	3	4
5.	<p>How confident are you of the future success of the Water Supply Enterprise now?</p> <p>1 = not confident at all</p> <p>2 = not too confident</p> <p>3 = somewhat confident</p> <p>4 = very confident</p>	1	2	3	4
6.	<p>How committed do you feel to continuing the Water Supply Enterprise into the future?</p> <p>1 = not committed at all</p> <p>2 = not too committed</p> <p>3 = somewhat committed</p> <p>4 = very committed</p>	1	2	3	4

<p>7.</p>	<p>In the Water Supply Enterprise, how much do you follow the same model/ideas as others?</p> <p>1= not very often at all</p> <p>2 = not too often</p> <p>3 = somewhat often</p> <p>4 = very often</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
<p>8.</p>	<p>How often have you tried new ideas for your services and products in the Water Supply Enterprise?</p> <p>1= not very often at all</p> <p>2 = not too often</p> <p>3 = somewhat often</p> <p>4 = very often</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
<p>9.</p>	<p>How important do you think is it to take risks in a business? (<i>e.g. expanding the business to new locations/areas; offering additional new services or products; investing on new technology; borrowing a loan from the bank; experimenting with different/new business approaches or techniques; investing on a marketing strategy</i>)</p> <p>1 = not important at all</p> <p>2 = not too important</p> <p>3 = somewhat mportant</p> <p>4 = very important</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
<p>10.</p>	<p>How confident do you feel to get a loan from a bank for the Water Supply Enterprise?</p> <p>1 = not confident at all</p> <p>2 = not too confident</p> <p>3 = somewhat confident</p> <p>4 = very confident</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
<p>11.</p>	<p>What is your level of confidence in yourself as an entrepreneur?</p> <p>1 = not confident at all</p> <p>2 = not too confident</p> <p>3 = somewhat confident</p> <p>4 = very confident</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
<p>12.</p>	<p>How confident are you to take risks in the business of water service provision?</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>

	1 = not confident at all				
	2 = not too confident				
	3 = somewhat confident				
	4 = very confident				

56. Has the Water Supply Enterprise developed new products or services for its customers? Can you give some examples?

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

58. What motivates people to join the Water Supply Enterprises paid staff? *[Prompt: Is it just financial benefit? Or there other reasons people wish to join as paid staff?]*

59. What motivates people to join water enterprise as volunteer staff?

60. Do you see the Water Supply Enterprise as business or as providing a social service or both? Why?

61. In 2 years from now, where do you see the Water Supply Enterprise? What should it look like? What will it have accomplished?

62. Why is this future you've described for the Water Supply Enterprise important to you?
