



SUMMARY OF RESEARCH REPORT 3

MOTIVATORS AND BARRIERS FOR WATER AND SANITATION ENTERPRISES IN INDONESIA

JULY 2015



This summary presents key findings of research into the motivators, traits and challenges faced by sanitation entrepreneurs, water enterprises and sludge removal companies in Indonesia.

Small-scale enterprises play increasingly important roles in supporting increased access to water and sanitation products and services in Indonesia and elsewhere. While studies have examined the impacts of the enterprises which play these roles, little is known about what motivates enterprises to become involved in service provision for the poor, and what enterprises see as the key factors that support and hinder their viability and business success.

This study was undertaken by the Institute for Sustainable Futures, University of Technology Sydney with University Gadjah Mada in partnership with Plan Indonesia. It drew on literature in the fields of small-scale enterprises, entrepreneurship and social entrepreneurship to investigate the motivations, drivers and barriers associated with the following three sets of enterprises in the provinces of West Java,

Central Java, Yogyakarta, East Java and East Nusa Tenggara:

- sanitation entrepreneurs providing sanitation products and services in rural, suburban and urban areas
- water service providers existing as cooperatives, village-owned enterprises or other formalised structures in rural contexts
- sludge removal businesses operating in urban and small town contexts

STUDY PURPOSE AND METHODS

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

This predominantly qualitative study involved structured interviews with females and males



Researchers interviewing sanitation entrepreneurs



Sanitation entrepreneur, Eastern Indonesia

involved in leading or managing 101 existing enterprises. As a part of the study, the opportunities for, and constraints on, women's participation in enterprise development were also examined.

Research tools were developed based on the literature and previous research on the political economy of enterprise engagement in water and sanitation services in Indonesia. An analytical framework guided the analysis process used to identify entrepreneurial traits and the most important factors influencing enterprise success. Qualitative responses were categorised into relevant themes (allowing



Truck owned by a sludge removal enterprise for de-sludging services

quantitative analysis of their recurrence) and illustrative quotes used to highlight common and atypical perspectives.

ENTERPRISE CHARACTERISTICS

The **sanitation entrepreneurs** interviewed (n = 56) were predominantly male, aged between 36 and 55, relatively highly educated, and with previous work experience in a variety of sectors, including a significant proportion concurrently working for the government. Most also had other jobs in parallel to their sanitation business and the majority were operating in rural areas. The businesses were predominantly informal and

the public sector. Most also had another occupation in addition to the water enterprise. Most water enterprises were located in rural areas, had operated for ten years or more, and had formal legal status as village-owned enterprises or cooperatives. The enterprises were predominantly small with six to ten people. Third party investment from donors or government was the main source of business capital. Most enterprises served both households and institutions and covered from one to four villages. Services offered were predominantly limited to water supply. Word of mouth and direct selling were the most common marketing methods, although a significant proportion also relied on government to promote their services.

The **sludge removal enterprises** interviewed (n = 24) were predominantly male, aged between 36 and 55, with a high level of education, and with more than five years of work experience mainly in the private sector or running other types of businesses. Half also devoted their time to other jobs in parallel to the sludge removal business. The businesses were predominantly informal, micro-sized, with more than five years of operation and operating in urban and suburban areas. Most also served both households and institutions, offered de-sludging service only, and relied on personal or family savings as the main source of business capital. Word of mouth was the most commonly used marketing method.

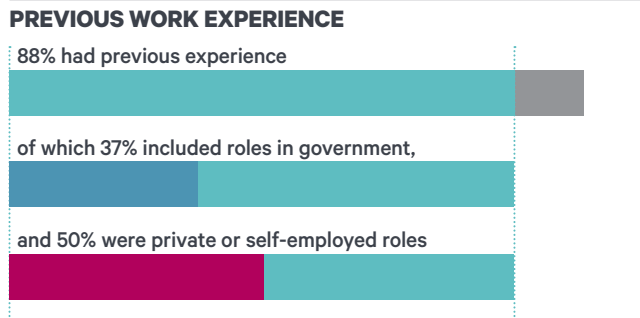
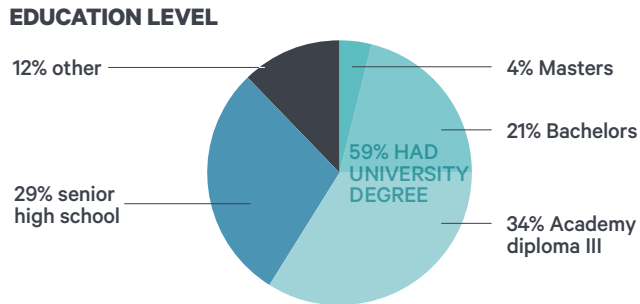
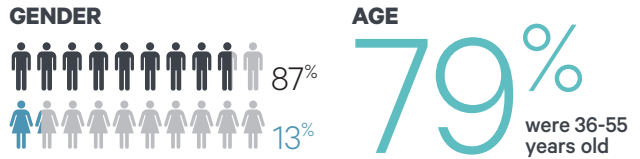
An overview of the profiles of the enterprise owners and businesses are shown on the next pages.

micro-sized with no more than five years of operation, and relied on personal savings as the main source of business capital. Toilet pans and installation of the full toilet package without superstructure were offered by most businesses. The main customers of most businesses were households. Word of mouth, flyers and brochures, as well as government networks and sale agents were the most commonly used marketing methods.

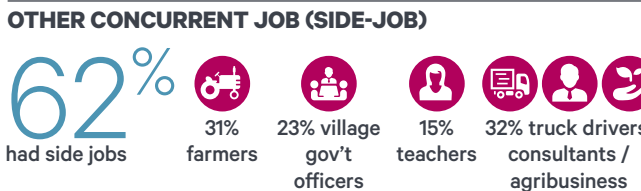
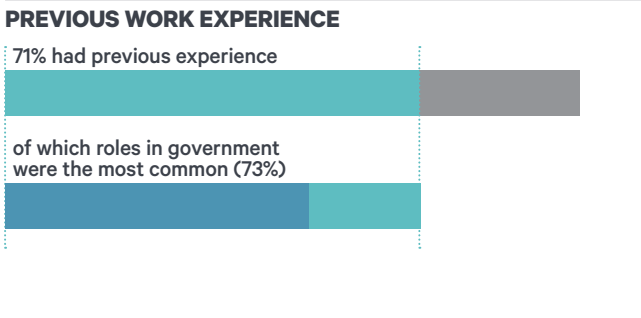
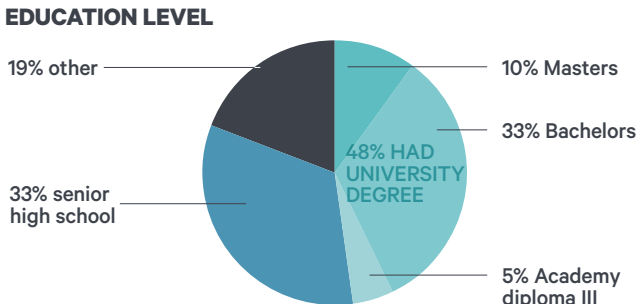
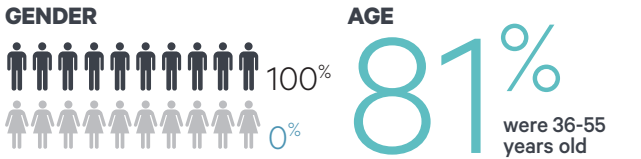
The **water enterprise leaders** interviewed (n = 21) were all male, aged between 36 and 55, with a high level of education, and with previous work experience, mainly in

PROFILE OF THE WATER ENTERPRISE LEADERS

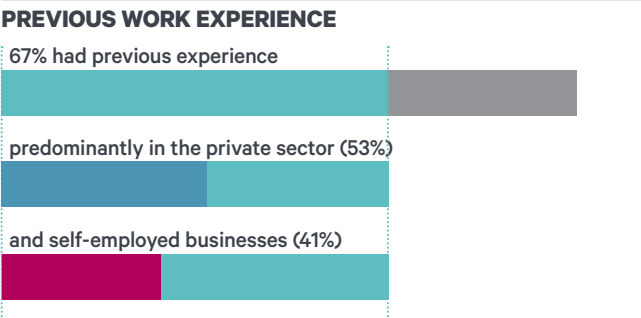
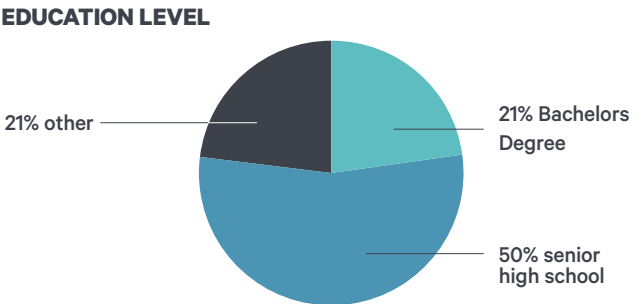
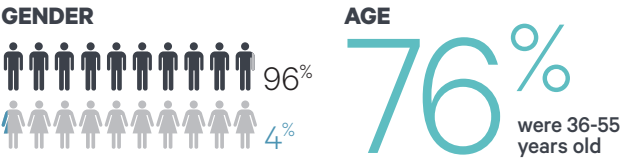
SANITATION ENTREPRENEURS



WATER ENTERPRISES LEADERS



SLUDGE REMOVAL ENTREPRENEURS



PROFILE OF THE ENTERPRISES

CHARACTERISTICS	SANITATION ENTREPRENEURS	WATER ENTERPRISES LEADERS	SLUDGE REMOVAL ENTREPRENEURS
Location and coverage area	23% urban 25% suburban 52% rural	95% rural and 5% suburban 43% covered 1-2 villages only 43% covered 3-4 villages 14% covered more than 4 villages	42% urban 54% suburban 4% rural
Number of years in operation	71% had been operating for 0-5 years 14% for 6-10 years old 13% for more than 10 years	62% had been in operation for 10 years or more 33% between 7 and 9 years 5% below 7 years	38% had been in operation for 6-15 years 34% for 16 years or more 5% for 0-5 years
Size (number of staff)	70% no full-time (FT) staff 23% have 1-4 FT staff 4% had 5-10 FT staff 2% had more than 10 FT staff 43% had no part-time (PT) staff 34% had 1-4 PT staff 16% had 5-10 PT staff 4% had more than 10 PT staff	52% had 6 to 10 full-time (FT) staff 29% had 11 FT staff or more 5% had 1-5 FT staff	33% had no full-time (FT) staff (sole trading) 33% had 1-2 FT staff 33% had more than 2 FT staff
Legal status	89% were informal and not registered	52% were village-owned enterprises 28% were cooperatives 15% were another type (association, foundation, etc.) 5% informal	63% were informal and not registered
Family roles	46% involved other family members	<i>Question not considered in questionnaire for water enterprises</i>	62% involved other family members
Association membership	75% were members of a sanitation related association	76% were members of a water related association	25% were members of a sludge removal related association
Source of capital	66% drew on personal savings 25% had accessed loans 21% had accessed grants and society funds 11% had accessed capital through joint ventures with colleagues 10% through third-party or family investment	86% drew on a third party (donor or government) 48% from an NGO 15% from personal savings of members 10% had accessed loans	96% drew on personal or family savings 33% had accessed loans 13% had accessed capital through joint ventures with colleagues or friends
Service offered	61% sold toilet pans 55% provided installation without superstructure 23% provided installation with superstructure	86% drew on a third party (donor or government) 48% from an NGO 15% from personal savings of members 10% had accessed loans	54% offered de-sludging services only 46% provided other services in addition to this (e.g. well drilling, pump services and building or repairing septic tanks)
Customer base	59% served households only 37% served both households and institutions	86% served both households and institutions 14% served only households	88% served both households and institutional customers 12% targeted individual households
Marketing methods	18% used word of mouth 14% relied on government staff 13% used flyers or brochures 11% used community social gatherings 11% used sale agents 14% used internet, TV, radio, newspaper and/or advertising board	76% used word of mouth 62% used direct selling 43% relied on government to raise awareness of and promote their services	96% used word of mouth 75% used newspapers 46% used and posters, flyers or brochures 29% used internet 25% used sale agents 21% used advertising boards 13% relied on government to promote their services 8% used radio or yellow pages

KEY FINDINGS ABOUT SANITATION ENTREPRENEURS

Entrepreneurial traits: All five entrepreneurial traits reported in the literature to characterise entrepreneurs were found amongst sanitation entrepreneurs. These five traits are: a proactive approach, need for independence, need for achievement, innovativeness, and risk taking. More successful entrepreneurs demonstrated a larger number of traits than less successful entrepreneurs. In particular they demonstrated a greater presence of a proactive approach, innovativeness and risk-taking traits.

Pro-social traits: A sense of social responsibility was predominant amongst entrepreneurs (Figure 2). Both successful and unsuccessful entrepreneurs demonstrated this trait. A range reasons for this was found. In some cases entrepreneurs were intrinsically motivated through, for example, a sense of empathy with the poor, religious beliefs and feelings of self-satisfaction in helping. In other cases, the underlying motive appeared to be extrinsic and related to the entrepreneur's current side job, if this job was aligned with the objectives of the business. This was the case of entrepreneurs who were also sanitarians. The findings also revealed a broader range of motivations and benefits from engaging in the sanitation business beyond pro-social goals. These included extended social networks, increased recognition and status, and pride. In line with this presence of social responsibility, the majority served the poor (69%) and allowed customers to pay in instalments (68%).

“

There are many opportunities in the sanitation field that have not been touched yet. ... I think this business will keep growing.

– Sanitation entrepreneur

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Usually poor people would like to have a toilet, so I prepare what they need. If their money is limited, then they can pay by instalments in a specified time. I was poor. Therefore I know how it feels. I would love to help them.

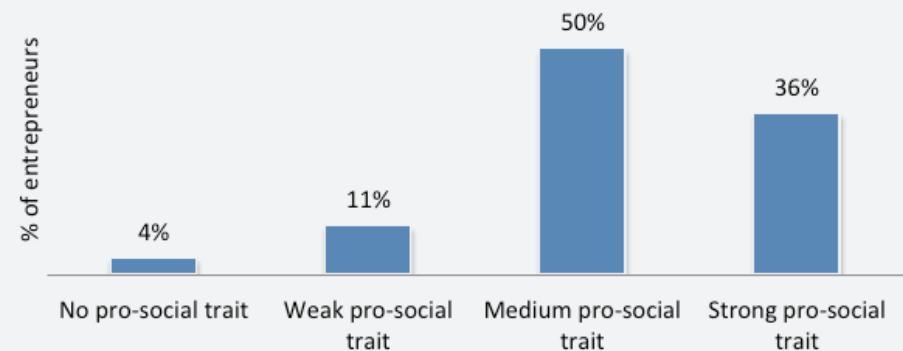
– Sanitation entrepreneur

Levels of success: The majority (77%) of the sanitation businesses interviewed were considered to be successful, with 14% as highly successful. Most had increased or remained stable after 3 years of operation and only a minority didn't grow and declined soon after establishment. More than half of the enterprises (55%) made monthly revenues lower than IDR 5 million (USD 376).

FIGURE 1 KEY TRAITS PERCEIVED AS IMPORTANT FOR A SUCCESSFUL SANITATION ENTREPRENEUR



FIGURE 2 LEVELS OF PRO-SOCIAL TRAITS PRESENT AMONGST SANITATION ENTREPRENEURS



Relationship between success and enterprise characteristics: A relationship between success and time commitment, as well as the sector of the entrepreneurs' previous experience was found. The majority of high success entrepreneurs spent a higher number of days per week on the business than unsuccessful entrepreneurs. Further, greater experience in government was evident amongst highly successful entrepreneurs than others.

A relationship between success and a number of characteristics of the enterprise was also found. These included the location, size and staff composition, years of operation, as well as engagement in product or service development, and initial investment. Higher levels of success were found amongst enterprises located in sub-urban and urban areas. Concerning the age of the enterprise, the majority of businesses had five years of operation or less, however the proportion of enterprises operating for more than ten years was highest in highly successful enterprises. Further, higher numbers of staff were found amongst enterprises with higher levels of success, and in general successful enterprises employed more part-time staff than others. Highly successful enterprises also tended to be more active in product and service development activities than enterprises with lower levels of success. The findings also revealed higher amounts of initial investment amongst successful entrepreneurs than unsuccessful entrepreneurs.

Association membership was also highlighted as an important contributor to success, as most of the successful entrepreneurs were members of sector-related associations and reported this to be a positive experience. Commonly reported benefits of association membership included camaraderie and friendship, access to information, development of technical skills and networking. Overall, the key business success factors most commonly reported were networks, the existence of demand and favourable business locations.

Factors affecting success: Respondents' perceptions of what characterises a successful sanitation entrepreneur emphasised personality traits such as persistence, self-motivation, risk-taking, friendliness, as well as skills such as technical, business management, and marketing skills.

Of the contextual factors that can affect business success, entrepreneurs emphasised operational aspects to be the most challenging, including high cost of raw materials and high fixed expenses. Significant emphasis was also given to other challenges. The most commonly reported included: lack of demand and lack of access to information about the market; lack of access to finance for customers and lack of alternative sources of finance other than banks; lack of business skills, knowledge and training opportunities; and unofficial retributions or taxes.

Gender dimensions: It was found that female entrepreneurs achieved lower levels of success than male entrepreneurs, however there were far few female entrepreneurs in the study. Entrepreneurial self-perceptions and perceptions of the business environment provided some insight into this. Compared

to male entrepreneurs, female entrepreneurs demonstrated more risk-averse attitudes and less innovative outlook than male entrepreneurs. Further, they demonstrated a lower commitment to continuing the business in the future and less confidence in the future success of the business.

LEVELS OF SUCCESS AND TRAITS OF SANITATION ENTREPRENEURS

Level of success	14% achieved high success, 63% achieved some success, and 23% were unsuccessful. 76% increased or remained stable after 3 years of operation, and 23% didn't grow and declined after establishment. 42% reported a monthly revenue up to to IDR1 million (USD 75), 13% between IDR1 million (USD 75) and IDR5 million (USD 376), 18% between IDR5 million (USD 376) and IDR 10 million (USD 753), and 29% more than IDR 10 million (USD 753). Of the 45 respondents who reported on the business annual average accumulated assets, 60% reported amounts below IDR10 million (USD 753), and 12% reported amounts above IDR50 million (USD 3,675).
Entrepreneurial traits and their influence	75% demonstrated 'proactiveness', 63% demonstrated a 'need for achievement', 48% demonstrated innovativeness, 45% 'need for independence', and 30% propensity for 'risk-taking'. More successful entrepreneurs demonstrated a larger number of entrepreneurial traits than less successful entrepreneurs, particular they demonstrated greater presence of a proactive approach, innovativeness and risk-taking traits.
Pro-social traits	36% demonstrated strong pro-social traits, 50% demonstrated medium levels of pro-social traits, and 15% demonstrated weak pro-social traits. The level of pro-social traits did not appear to influence the level of success, with those with strong pro-social traits being both unsuccessful and successful.
Services for the poor	69% reported that they served the poor, and 68% reported they offered payment in instalments, and of these, 31% reported that more than half of their customers paid in instalments.

KEY FINDINGS ABOUT WATER ENTERPRISES

Entrepreneurial traits: All five typical entrepreneurial traits were found amongst the water enterprise leaders and the most dominant were proactiveness, risk taking behaviour, and need for achievement. Higher numbers of traits were found amongst higher levels of success. Further, leaders of highly successful enterprises demonstrated a strong presence of proactiveness, risk-taking propensity, and innovativeness, whereas the only enterprise classified as unsuccessful only demonstrated proactiveness and need for achievement.

Pro-social traits: A strong sense of social responsibility was found amongst the water enterprise leaders, but no clear connection was found between success and the presence of pro-social traits. Most leaders, of both successful and unsuccessful enterprises, demonstrated medium to strong pro-social traits.

Various motivations were found to be driving pro-social behaviour. In some cases participants were intrinsically motivated by religious beliefs and a desire to be “rewarded by religiously” or self-satisfaction in helping the poor. Some mentioned that their commitment was not due to financial return: “the salary for this business is low so [I do] not [do it] because of financial concerns”. In other cases however, a sense of social responsibility appeared to be related to the leader’s past or current side job if this aligned with the objectives of the water enterprise. This was the case for two leaders who worked at the village office, which has a role in addressing community needs and promoting healthy communities. Other motivations

“

[I get a] good feeling from serving the society.

– Water enterprise leader

“

Because they need help, the very poor families will be given the service free.

– Water enterprise leader

and benefits related to contributing to the enterprise objectives were also mentioned, including extended social networks, new skills, knowledge and experience, increased recognition and status, and a desire to access clean and affordable water.

Levels of success: The majority of the enterprises (95%) were considered successful, with 24% as highly successful. Only one enterprise was considered to be unsuccessful. In most cases (86%) the enterprise profits had either remained stable after three years of operation or increased, and only one didn’t grow and declined right after establishment. Most enterprises (91%) earned a monthly revenue lower than IDR 40 million (USD 3,012).

There were no clear patterns of success in relation to the formal management structure of each enterprise (for example cooperative, villages owned enterprise etc.). However it’s interesting to note that the only unsuccessful enterprise was an association, although this was also the only association within

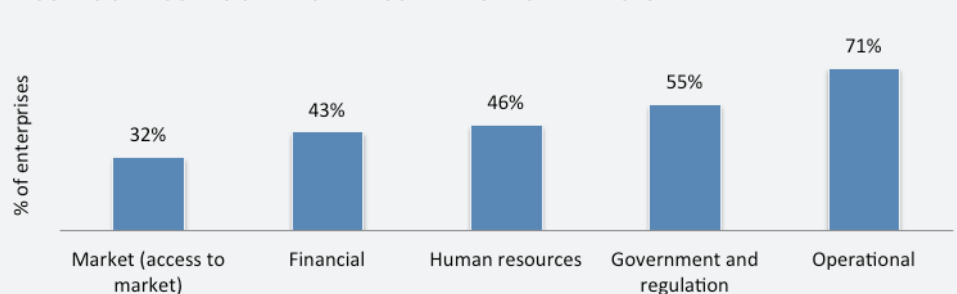
the sample. Further, although a significant proportion of the remaining enterprises (55%) were village-owned enterprises, challenges associated with this model were mentioned. For example, in one case interference from village administrators had caused major challenges: “Village government ruins the management, taking over the organisation but they are not doing the mandates. HIPPAM [water provider organisation] funds are [used] for [personal] reasons by village administrators”. This respondent also noted that the support from an association of HIPPAMs had helped promote success, and it had also had the effect of bringing together consumer representatives.

The majority of the enterprises considered to have achieved some level of success (60%) were village-owned enterprises (BUMDES), followed by cooperatives (33%) and informal (7%). Of the five highly successful enterprises two were village-owned enterprises, and the remaining three were a cooperative, a foundation and a limited liability company.

Factors affecting success: Respondents’ perceptions of what characterised a leader of a successful water enterprise included personality traits such as flexibility and tolerance, honesty, innovativeness and creativity, smartness, as well as persistence and patience. Skills were also emphasised, although to a lesser degree. These included business management, financial management and technical skills. Leaders also mentioned the importance of government support as a key success factor.

Of the challenges that can affect success, leaders mentioned, in order of importance: operational aspects; government and regulations; human resources; financial considerations; and access to markets (Figure 3). The most commonly reported challenges were: high cost of materials and high fixed expenses (operational challenges); unclear or lack of government legislation (government and regulations); lack of business skills and knowledge and difficulty in finding staff with the right skills (human resources challenges);

FIGURE 3 CATEGORIES OF REPORTED CONTEXTUAL CHALLENGES



high interest rates for bank loans, lack of sources of finance other than banks, and official taxes (financial challenges); lack of social and business networks and lack of business partnerships (market challenges).



[An important issue affecting success is] society's understanding that [water provider organisations] need operational support and support from government.

– Water enterprise leader

Gender dimensions: All the interviewed leaders of water enterprises were male, and one respondent suggested that engagement in water enterprises involves higher risk for women than men and therefore women tend to be limited to administrative positions. Half of the respondents perceived that it easy for women to become entrepreneurs within the respondents' local communities and more broadly in Indonesia, and half perceived the opposite. The former believed that gender equity issues had reduced greatly over time and that the growing number of female entrepreneurs has occurred because: "gender bias has faded away. Indonesia has a lot of business women". The latter believed that women are less capable than men and that women lack a willingness to be involved in business activities: "women are unlikely to succeed, [they are] difficult to rely on, and being the people who help others ... women are difficult to work with, women prefer to manage the family".

WATER ENTERPRISES LEADERS SUCCESS AND TRAITS	
Level of success	<p>24% achieved high success, 71% achieved some success, and only one was unsuccessful.</p> <p>86% remained stable or increased after three years of operation, and only one water enterprise, didn't grow and declined right after establishment.</p> <p>29% reported monthly revenue below IDR 4 million (USD 301), 62% reported between IDR 4 million (USD 301) and IDR 40 million (USD 3,012), and 10% reported this to be IDR 40 million (USD 3,012) or above.</p> <p>Of the 20 respondents who reported on business-accumulated assets, 60% reported an annual average below IDR 100 million (USD 7,667), 30% between IDR 100 million (USD 7,667) and IDR 400 million (USD 29,622), and 10% above IDR 400 million (USD 29,622).</p>
Entrepreneurial traits and their influence	<p>86% demonstrated 'proactiveness', 71% demonstrated 'risk taking behaviour', 48% demonstrated 'need for achievement', 24% demonstrated need for independence, and 19% demonstrated innovativeness.</p> <p>Higher numbers of traits were found amongst higher levels of success.</p> <p>Leaders of highly successful enterprises demonstrated a strong presence of proactiveness, risk-taking propensity, and innovativeness, whereas the only enterprise classified as unsuccessful only demonstrated proactiveness and need for achievement.</p>
Pro-social traits	<p>38% demonstrated strong pro-social traits, 38% demonstrated medium levels of pro-social traits, and 24% demonstrated weak pro-social traits.</p> <p>The level of pro-social traits did not appear to influence the level of success, with medium to strong pro-social traits being present across different levels of success in significant proportions (50% or more).</p>
Services for the poor	<p>For 43% of the enterprises low-income households were 25%-50% of their customers and for 28% of the enterprises, low-income households comprised more than 50% of their customers.</p> <p>24% of the enterprises offered services to informal settlements, and 76% did not.</p> <p>38% of the enterprises offered instalment payment of water connections and 5% offered offered instalment payment of water tariffs.</p>

KEY FINDINGS ABOUT SLUDGE REMOVAL ENTERPRISES

Entrepreneurial traits: All five types of entrepreneurial traits were present amongst sludge removal entrepreneurs although some were found in higher percentages than others. These included risk-taking behaviour, adopting a proactive approach and need for achievement. More successful entrepreneurs demonstrated a larger number of entrepreneurial traits than less successful entrepreneurs (Figure 3). Highly successful leaders demonstrated a strong presence of proactiveness, risk-taking and need for achievement. However, amongst the entrepreneurial traits in question, only differing percentages for the need for independence trait clearly differentiated between the high success enterprises and the less successful ones. This trait was higher amongst highly successful enterprises than those with some success and unsuccessful enterprises.

Pro-social traits: A weak sense of social responsibility was evident amongst entrepreneurs. Most entrepreneurs, both successful and unsuccessful, were classified as having weak pro-social traits, although a higher proportion of successful entrepreneurs had strong or medium pro-social traits than unsuccessful entrepreneurs. The small proportion of enterprises that offered instalment payments supports this finding. Amongst entrepreneurs that demonstrated pro-social traits, a sense of empathy and compassion with the poor and satisfaction in helping the poor, as well as religious beliefs, were found to be present.

The findings also revealed a broad range of motivations and benefits from engaging in the sanitation business beyond pro-social goals. These included extended social networks, increased knowledge and experience, and sense of pride.



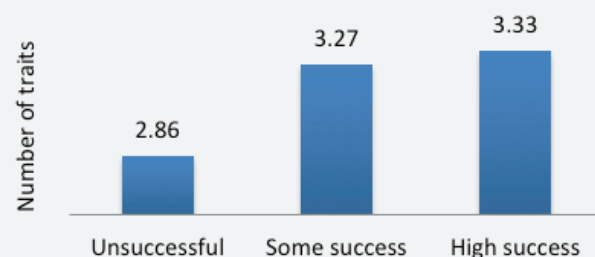
I'm proud because consumers are satisfied so we are getting closer to them, helping each other.

– Sludge removal entrepreneur

Levels of success: The majority of the sludge removal enterprises (71%) were considered to be successful, with 25% as highly successful. The majority (95%) were still in operation and their profits had either remained stable after three years of operation or increased, and only a minority (8%) didn't grow or declined right after establishment. More than half of the enterprises (52%) reported a monthly revenue of between IDR1 million (USD 75) and IDR5 million (USD 376), and 42% reported this to be above IDR5 million (USD 376).

Relationship between success and enterprise characteristics: Relationships between success and a number of characteristics of the entrepreneur were found. These included the age of the entrepreneur, whether he had a concurrent job to the sludge removal business as well as previous working experience. A significantly higher percentage of entrepreneurs in the 20 to 35 age bracket was found amongst highly successful entrepreneurs than amongst entrepreneurs that had achieved some success and unsuccessful entrepreneurs. Likewise, the

FIGURE 4 NUMBER OF ENTREPRENEURIAL TRAITS AND LEVELS OF SUCCESS OF THE SLUDGE REMOVAL ENTERPRISES



majority of the highly successful entrepreneurs had a side job compared to a smaller percentage amongst unsuccessful enterprises. Further, the percentage of entrepreneurs with side jobs found amongst enterprises that had achieved some success was higher than amongst unsuccessful enterprises. Previous experience was revealed to be an important factor for success, as amongst the entrepreneurs who had previous experience, there was a higher proportion of successful businesses than unsuccessful businesses.

Relationships between success and a number of characteristics of the enterprise were also found. These included the age of the enterprise, its initial investment, and association membership. A significantly higher proportion of enterprises with five years of operation or less was found amongst highly successful enterprises than amongst enterprises with lower levels of success. Similarly, higher levels of initial investment were also found amongst

successful businesses than unsuccessful businesses. Membership of associations was also highlighted as an important factor in success as no unsuccessful entrepreneurs were members of a sector-related association, whereas more than 30% of enterprises with some success and highly successful enterprises had memberships. Common benefits of association membership reported by successful entrepreneurs included peer-to-peer learning and camaraderie.

Factors affecting success: Respondents' perceptions of what characterises a successful sanitation entrepreneur emphasised personality traits and skills, such as diligence, hard-working, honesty, as well as customer service, marketing, and technical skills. Entrepreneurs suggested that market-related factors were significant in influencing business success, including competition and demand. An additional success factor equally highlighted was family support.

Relationships between success and a number of

characteristics of the entrepreneur were found. These included the age of the entrepreneur, whether he had a concurrent job to the sludge removal business as well as previous working experience. A significantly higher percentage of entrepreneurs in the 20 to 35 age bracket was found amongst highly successful entrepreneurs than amongst entrepreneurs that had achieved some success and unsuccessful entrepreneurs. Likewise, the majority of the highly successful entrepreneurs had a side job compared to a smaller percentage amongst unsuccessful enterprises. Further, the percentage of entrepreneurs with side jobs found amongst enterprises that had achieved some success was higher than amongst unsuccessful enterprises. Previous experience was revealed to be an important factor for success, as amongst the entrepreneurs who had previous experience, there was a higher proportion of successful businesses than unsuccessful businesses.

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Of the contextual factors that can affect success, the findings emphasised operational aspects as the most challenging, including high cost of materials and high fixed expenses. Significant emphasis was also given to other types of challenges such as access to market, human resources, government and regulations, and financial aspects. Amongst these, the most commonly reported included: high level of competition and market saturation; lack of access to finance for customers, high interest rates for bank loans, and lack of alternatives to banks as sources of finance; lack of time and marketing skills; and unclear or lack of government legislation. Lack of availability of sludge disposal sites was also highlighted as key challenge.



[the biggest challenge is] lack of government attention towards the limited availability of disposal sites.

– Sludge removal entrepreneur

Gender dimensions: The findings revealed a predominant perception that it easy for women to become entrepreneurs in Indonesia and in the respondents' local communities. 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

SLUDGE REMOVAL ENTREPRENEURS SUCCESS AND TRAITS

Level of success

25% achieved high success, 46% achieved some success, and 29% were unsuccessful.

95% remained stable or increased after three years of operation, and only 8% did not grow and declined right after establishment.

52% reported monthly revenue of between IDR 1 million (USD 75) and IDR 5 million (USD 376), and 42% reported this to be above IDR 5 million (USD 376).

63% reported an annual average of accumulated assets of IDR 20 million (USD 1,506) or below, 13% reported this to be between IDR 20 million (USD 1,506) and IDR 40 million (USD 3,012), and 26% reported this to be above IDR 40 million (USD 3,012).

Entrepreneurial traits and their influence

88% demonstrated risk-taking propensity traits, 79% demonstrated proactiveness, 71% demonstrated need for achievement, 42% demonstrated need for independence, and 38% demonstrated innovativeness.

More successful entrepreneurs demonstrated a larger number of entrepreneurial traits than less successful entrepreneurs.

Highly successful leaders demonstrated a strong presence of proactiveness, risk-taking and need for achievement, however only the presence of the need for independence trait clearly differentiated between the high success enterprises and the less successful ones.

Pro-social traits

4% demonstrated strong pro-social traits, 29% demonstrated medium level of pro-social traits, and 67% demonstrated weak pro-social traits.

Strong pro-social traits were only demonstrated by entrepreneurs classified as having achieved some success, and the proportion of entrepreneurs with medium pro-social traits was more than half higher amongst successful entrepreneurs than amongst unsuccessful entrepreneurs.

Services for the poor

92% claimed that they provided services to the poor, and only 25% claimed that they offered payments by instalments.

it's easy for women to become entrepreneurs in Indonesia or within the entrepreneurs' communities, the most common was based on the belief that women are as capable as men and are experienced in businesses other than sanitation. Other reasons presented were associated with the perception that women's skills and/or personalities are better suited to business activities than men, that gender equity is no longer an issue, and that the sludge removal business was easy enough to be carried out by anyone.

In turn, amongst the reasons given for why it's difficult for women to become entrepreneurs, the most dominant was based on the belief that women's natural qualities and abilities aren't suited to business activities. Other reasons presented were associated to perceptions that a woman's role is to take care of domestic activities, that women generally don't want to get involved in businesses and prefer to be housewives, and that gender inequality issues which limit women's ability to engage in business activities are still present in society.

CULTURAL INFLUENCES ON ENTERPRISES

The literature suggests that the status and level of support for self-employment and entrepreneurial behaviour within the entrepreneur's family, community and wider country context are important in determining entrepreneurial success.

Family involvement in small-enterprises is common in Indonesia, and was evident amongst sanitation entrepreneurs and sludge removal entrepreneurs. Just under half of the sanitation entrepreneurs (46%) involved other family members in their businesses, with the

majority of these (73%) citing benefits such as supporting family income, trust and reliability, lower wages. Only three respondents pointed out challenges including the need for more tolerance and patience. Many sludge removal entrepreneurs (62%) also involved family members, with more than half (53%) reporting this to be a positive experience. Reported advantages included easier access to assistance and financial support, and easier communication. However, the potential to harm family relationships, as well as pressure to perform well and avoid mistakes was also mentioned by a small proportion of respondents (13%).

Amongst sanitation entrepreneurs, more than half (54% - 61%) perceived self-employment and innovation to be valued within Indonesia's society, and business risk-taking to be valued within their families. In contrast, less than half of the respondents (30% - 49%) perceived business innovators and business risk-taking to be valued within their communities. Likewise, less than half of the respondents (45%) perceived business risk-taking to be valued within Indonesia as a whole. Cultural perceptions around business prosperity were also evident in responses to an open-ended question. One respondent said that society had a "bad image" of people who tried to expand their businesses and that this was the biggest challenge businesses faced.

A different set of perceptions was evident in water enterprise leaders. The majority of the respondents (67% to 76%) perceived business innovation to be valued within Indonesia's society as well as within their communities.

The majority (57% to 67%) also perceived business risk-taking to be valued within their communities and within their families. In contrast, less than half (33% to 48%) perceived business risk-taking and self-employment to be valued in Indonesia as a whole.

Amongst sludge removal entrepreneurs, the perceptions were different again. Only a small proportion (25% - 33%) felt that business risk-taking was valued within their families or

communities (33%). The majority (58%) did believe, however, that business risk-taking was valued in Indonesia. The majority (67%) also perceived that business innovators had high status within their local communities and in Indonesia as a whole. Concerning values around self-employment, half perceived this to be valued within in Indonesia.

CULTURAL VALUES ON ENTREPRENEURSHIP PERCEIVED BY ENTREPRENEURS

■ Sanitation entrepreneurs ■ Water enterprise leaders ■ Sludge removal entrepreneurs



CONCLUSIONS

This study has revealed the diversity in entrepreneurs and enterprises present in Indonesia and carrying out important roles to support water and sanitation services. The key focus of the study was to understand the motivations of such enterprises, including social motivations, and to gain a deeper understanding of what factors influence business success or failure.

The study revealed a high sense of social responsibility amongst sanitation entrepreneurs and leaders of water enterprises, but not amongst sludge removal entrepreneurs. This orientation was reflected in the services offered. The first two had practical ways of supporting the poor to access services, including through payment in instalments, whereas most sludge removal enterprises did not offer such arrangements.

Key entrepreneurial traits were evident, particularly in successful enterprises of all types. In the case of sanitation entrepreneurs, successful entrepreneurs demonstrated a stronger presence of proactiveness, innovativeness and risk-taking propensity than less successful ones. Amongst leaders of highly successful water enterprises, a strong presence of proactiveness, risk-taking propensity, and innovativeness was evident whereas the only enterprise classified as unsuccessful only demonstrated proactiveness and need for achievement. In turn, amongst leaders of sludge removal enterprises, need for independence was the trait that clearly differentiated between the high success enterprises and the less successful ones.

There were similarities and differences amongst the key challenges faced by different enterprise types. All three types of enterprises reported operational challenges associated with high costs of materials and high fixed expenses, which may reflect the challenge of pricing their services to cover such costs, given the 'social good' nature of these businesses and the need to remain affordable. Beyond this, for sanitation entrepreneurs, the other most significant challenges were lack of consumer demand and market information, lack of access to finance for customers, lack of business skills and training opportunities and unofficial retributions or taxes. Beyond operational aspects, leaders of water enterprises cited a different set of challenges, including the effect of unclear government legislation or a lack of legislation; a lack of business skills and knowledge and difficulty in finding staff with the right skills; high interest rates for bank loans; lack of alternatives to banks as sources of finance; taxes; a lack of social and business networks; and a lack of business partnerships. Lastly, for sludge removal companies, the key challenges were the high level of competition and market saturation, lack of access to finance for customers, a lack of time and a lack of marketing skills. They also reported some challenges in common with water enterprise leaders in relation to high interest rates for bank loans, lack of alternatives to banks as sources of finance and unclear or absent government legislation.

A range of other factors also influenced enterprise operations and success. It was clear that sanitation enterprises operating in

urban or suburban areas had a greater chance of achieving success. Further, sanitation enterprises with higher levels of success tended to be in operation for more than ten years, have a higher number of staff, and be more proactive in product and service development. In contrast, more successful sludge removal enterprises tended to have five years of operation or less. Previous working experience of the entrepreneur and the business initial investment also appeared to be important factors for success. Amongst sanitation entrepreneurs, greater experience in government was evident amongst highly successful entrepreneurs than others. In turn, a higher proportion of successful businesses was found amongst sludge removal entrepreneurs who had previous experience than those who didn't. Further, membership of associations supported business success. Side jobs were common, and could be mutually supporting and reinforcing (in the case of sanitarians and sanitation entrepreneurs, and water enterprise leaders and villages officers) but could also result in inadequate time spent on the business and a corresponding reduction in success. Women were found to be much less prominent amongst enterprises than men, with highly mixed views presented by different respondents in relation to the appropriate roles of women in such businesses, and their relative aptitude to achieve success if they were involved. Regardless of these perspectives, it was clear that women were significantly under-represented and this points to an area for further investigation and support, given women's prominent roles in water and sanitation generally.

The findings of this study can usefully support improved policy and practice in relation to the roles of enterprises in contributing to water and sanitation services. Knowledge of the most important entrepreneurial traits can assist organisations to target appropriate candidates when providing training and support. Equally, understanding the strong pro-social motivations of many entrepreneurs opens up a wider range of possible business models and forms of support for enterprises. Knowledge of the key barriers affecting different enterprise types demonstrates where both government and external agencies should direct attention to reduce such barriers and facilitate enterprise roles.

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This summary draws from the following research report: Murta, J., Indarti, N., Rostiani, R., and Willetts, J. (2015) *Motivators and barriers for water and sanitation enterprises in Indonesia*, Enterprise in WASH - Research Report 3, Institute for Sustainable Futures, University of Technology Sydney
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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

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