Extended Abstract

Exploring the level of pro-social traits among water and sanitation entrepreneurs in Indonesia*

Nurul Indarti[1]* & Rokhima Rostiani[2]

[1]*Department of Management, Faculty of Economics and Business*
Universitas Gadjah Mada, Indonesia
**Author contact: nurulindarti@ugm.ac.id*

[2]*Doctoral student in Marketing, Strathclyde Business School*
University of Strathclyde, Glasgow, UK

Social capital has been considered as an important concept that may induce social movement to solve social problems, particularly problems related to inadequacy of access to sanitation and clean water (World Bank Report, 2013). As one of its form, social entrepreneurs in this sector are now emerging, especially in rural areas in several developing countries such as Bangladesh, Peru, Tanzania, and Indonesia where only few supports from even local government to survive sanitation and clean water problem for the poor (World Bank Report, 2013). Many approaches have been actively conducted to solve such problem but lacking sustainability so that the poor living in rural areas are still having difficulty for accessing their proper sanitation (Murta and Willets, 2014a).

In Indonesia, water, sanitation and hygiene (WASH) have also become a never-ending problem that needs an immediate solution. Most problems arise due to government inability to suffice these basic needs into remote area. Government tends to prioritise their investment on high-visibility infrastructure (education, roads, bridges, public facilities) and overlooked the sanitation infrastructure (Murta and Willets, 2014a). In addition, long and bureaucratic systems seem to worse the condition for the poor in rural areas.

Moreover, problems in sanitation sector mostly relate to the weak demand, uncoordinated supply chain, attitude toward investment for the poor, and inappropriate business model (World Bank Report, 2013). Many of the poor prefer to spend more on other durable consumer needs rather than allocate their expenditure for sanitation. Additionally, the poor feels no necessity to have proper sanitation due to limited understanding on the importance of sanitation for their health.

With diverse problems faced by water and sanitation entrepreneurs, the concept of social entrepreneurs is brought to 'professionalise' service delivery and strengthen supply chains. Specifically the role of social entrepreneurs, carrying social goals to address societal needs (Certo and Miller, 2008) is particularly important. In other words, entrepreneurs within micro, small and medium private and social enterprises are emerging as important players in the provision of water and sanitation services for the poor. Previous research revealed that amongst water and sanitation entrepreneurs, a broad range of incentives exist which extend beyond profit (Gero and Willetts 2014; Murta and Willetts 2014a; Murta and Willetts 2014b). According to Clark and Wilson (1961) and Wilson (1989), these can include intangible rewards, such as contributing to a social purpose or mission, prestige and recognition, and socialising and camaraderie.

The main objective of this study is to explore the level of success, the presence of social entrepreneurial traits among water and sanitation entrepreneurs in Indonesia, and its impact to the business success. We expect the outputs of the current study is beneficial to add literatures on social entrepreneurship and to provide suggestion to policy makers and relevant stakeholders. The current study deploys literatures on social entrepreneurial traits particularly pro-social tendency and social capital as a starting point to understand the field and to develop framework and research instrument.

The concept of social capital has long been regarded as related to trust, concern with others (relatives, acquaintances, neighbours), and readiness to live in certain norms in community along with the penalty for not doing so (Bowles and Gintis, 2002). Living in a community means that we are bounded by norms to achieve shared benefits. Researchers in the field believed that relationship and network in community might be a powerful force for a social movement. The aggregate individual relationship in a community that has power to change and links them with those outside the community is called social capital. With the power, a leader in community may punish their member for not obeying group's norms for the sake of cooperation to achieve common goals.

Furthermore, Burt (2000) stated that better-connected people enjoy higher returns. The phenomena can best explained by the network in social capital. In a network, logically, all flows (knowledge, information, communication) will need time to spread over. It is more likely that the flow will circulate more in-group than between group and due to time needed to spread and the quality of the content will deteriorate on every network chain. The in-group aspect called as a network closure (Coleman, 1988 in Sobel, 2002) will create effective cooperative group behaviour by enabling shared knowledge and information as well as enforcement to reach equilibrium of cooperation. Such system will enable members of in-group to trust each other. Trust will act as glue that ties the network together closer. Putnam (2000) as cited in Sobel (2002) stated that social capital functions as a society bonding (that creates a denser society, see Coleman, 1998) and a society bridging (that creates a broader network). While bonding works in a group, bridging connects each group in a society to achieve certain shared objectives that benefit all members.

The current study used a structured survey for 101 water and sanitation entrepreneurs (that is 56 sanitation business; 24 sludge removal business; and 21 water provider) in Indonesia. The instrument was developed based on an extensive literature review of

characteristics of success entrepreneurs and social entrepreneurs. The instrument consists of questions on demographics of the owner and the enterprises include length of business operations, amount of accumulated assets, profit growth, average monthly revenue, and future outlook of the business, also questions cover pro-social traits. The questionnaire was distributed by the mean of face-to-face interview with the help of well-trained enumerators in various locations mainly in the Provinces of Yogyakarta, Central Java, West Java, East Java, and Nusa Tenggara Timur. To ensure validity of the study and increase the response rate, we used purposive sampling (based on age, size and location of the enterprises) and snowballing technique.

The current study finds that the level of success varies among three sectors (that is sanitation, sludge removal, and water provider business). We classified the level of success into high success, some success, and unsuccessful. Some enterprises were classified as high success (that is 14 percent of sanitation, 25 percent of sludge removal, and 10 percent of water provider business). Due to high amount of accumulated assets to start the business, the majority of water providers (56 percent) were unsuccessful (see Figure 1a). In term of location, the majority of the businesses were located in sub-urban and rural areas (see Figure 1b).

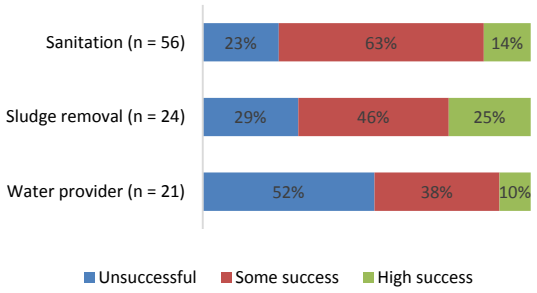

Figure 1a. Level of Success

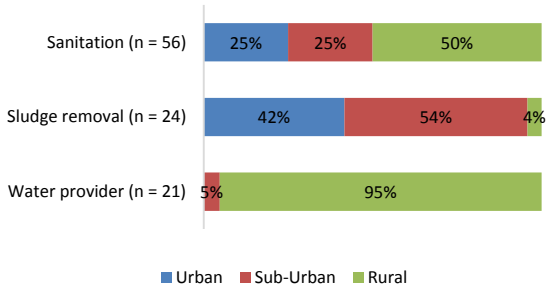

Figure 1b. Location and Success

This study also explored the social behaviour of the respondents. We characterized the level of pro-social tendency into four categories: no, weak, medium, and strong pro-social

trait. As presented in Figure 2a, not surprisingly, the vast majority of the respondents have their pro-social tendency (except two respondents from sanitation sector) ranging from weak to strong. In more detail, in the sludge removal sector, many respondents (67 percent) have weak pro-social traits (see Figure 2a), meaning the orientation for social is considered not high. However, the intention for the poor is low, interestingly, the majority of sludge removal sectors provides the most service for the poor compared to two other sectors (water provider and sanitation business). One main reason why they served for the poor is humanitarian concern. According to Lindenberg (2006), this is called as 'normative' reason which social support for stability is very important. Several supporting quotations from the respondents are presented below:

> *"[I] have been through a rough condition, so I [position myself to] help them"* (SR12)
> *"I am still considered in middle-low income, so I feel like I have to help other person as well"* (SR16)
> *"I can have a great relationship with the poor. [We] feel like a family. Sometimes I can count on my friend or neighbour and we help each other on financial problem"* (SR18)

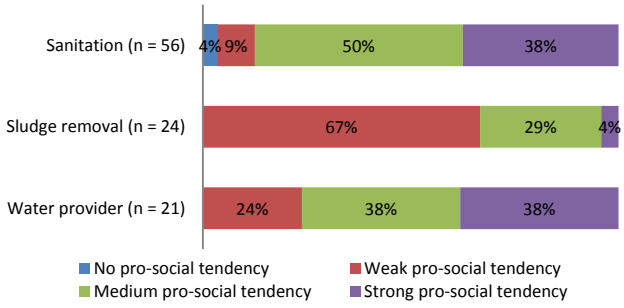

Figure 2a. Level of Pro-social Traits

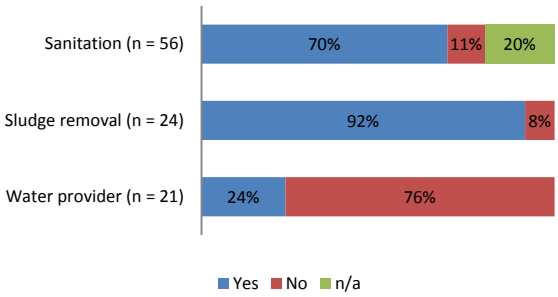

Figure 2b. Proportion of service to the poor

In this study, we explored the perceived goals in running the business include purely for profit, purely for social, and both, as depicted in Figure 3a. We found that the vast majority of sanitation entrepreneurs (73 percent) and sludge removal ones (79 percent) have both profit and social. Meanwhile, in the context of water service provider, the majority (52 percent) is only for social purpose. The current findings indicate that two most common goals in running

the business are for "normative or sustainability" and "gain or profit" purposes. From the interviews with entrepreneurs supported this finding:

> *"Both [purposes], because also helping people who do not have toilets and latrines to understand the importance of health."* (SE10)
> *"Both [purposes], because it does not have to be a material advantage but can also be in the form of satisfaction of being able to help others. Good deeds."* (SR1)
> *"Both, social entrepreneurship. [Profit is for the] needs of business sustainability and social sustainability [is with] low price and affordable for the poor."* (WP16)

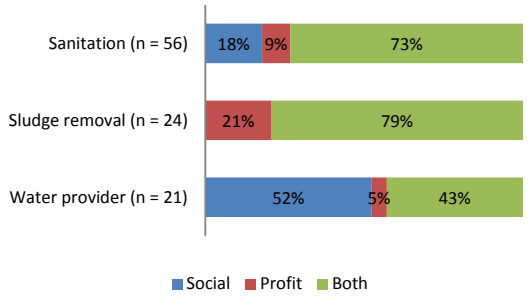

Figure 3a. Perceived Goals of the Business

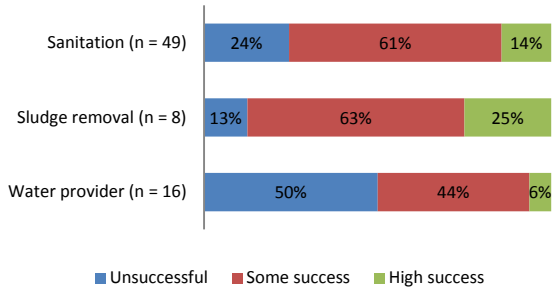

Figure 3b. Pro-social Tendency and Success

Interestingly, we also found that family background includes religious values may affect the behaviour of an entrepreneur to serve more on social. When an individual helping others is mostly due to personal feeling of obligation towards others, that was not the case for people who volunteers for charity or organizations since family and religious affiliation have an important role for the first volunteering decision (Penner, Dovidio, Piliavin, and Schroeder, 2005). For instance, when family usually the volunteers, then it is more likely for an individual to be a volunteer. Previous studies (Lam, 2002; Reed and Selbee, 2000; Uslaner 2002 in Penner et al., 2005) showed a positive relationship between religious affiliation and volunteering action for youths and adults. The following quotations supported this finding.

> *"[This business is] inherited from parents. I already know the job since childhood so I decided to follow what my parents had done."* (SR3)
> *"Related to being clean, one religious value states that cleanliness is one way of practicing it. Not everyone wants to run sanitation business. Since there is a correlation that the business is dirty, so it is not considered."* (SE43)

In addition to service for the poor and business orientation, the study examined the presence of pro-social tendency and the business' success. Findings from Figure 3b showed that the more successful entrepreneurs, the higher the level of pro-social traits (strong and medium pro-social. This is the case for 75 percent of successful sanitation enterprises and 88 percent of sludge removal business. However, this does not apply for water provider sector, where the proportion of successful and unsuccessful business is relatively the same.

The study also explored the role of network as a representative of social capital used by entrepreneurs. We found that the vast majority of the sanitation (75 percent, see Figure 4a) and water service providers (71 percent, see Figure 4c) join business association such as APPSANI[1] and PAPSIGRO[2] for sanitation business, and WSLIC[3], PAMSIMAS[4], HIPPAM[5] for water service business. Different finding showed from sludge removal business such as PATSY[6]. Only 25 percent of them joined business-related association (see Figure 4b). This may be due to the fact that the common form of sludge removal business is informal.

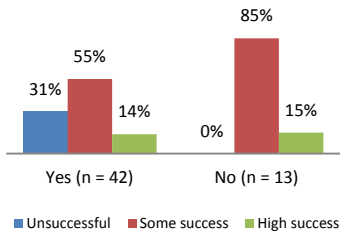

Figure 4a. Sanitation membership

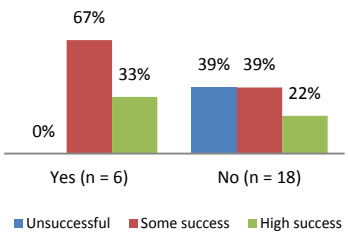

Figure 4b. Sludge Removal membership

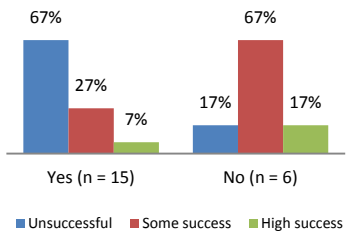

Figure 4c. Water Provider membership

[1] APPSANI is the acronym for *Asosiasi Pengelola dan Pemberdayaan Sanitasi Indonesia* (Association of Indonesian Sanitation Business and Empowerment), an example of association for sanitation entrepreneurs in Indonesia.
[2] PAPSIGRO is the acronym for *Paguyuban Pengusaha Sanitasi Grobogan* (Association of Grobogan Sanitation Entrepreneurs), an example of association for sanitation entrepreneurs in Central Java.
[3] WSLIC is the acronym for Water and Sanitation for Low Income Communities, a program initiated by World Bank
[4] PAMSIMAS is the acronym for *Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat* (Community Based Water Supply and Sanitation Project), a program also initiated by World Bank. See pamsimas.org for detailed activities.
[5] HIPPAM is the acronym for *Himpunan Penduduk Pemakai Air Minum* (Association of Water User), consists of many different HIPPAM for different locations, usually in rural areas.
[6] PATSY is the acronym for *Paguyuban Pengusaha Sedot Tinja Yogyakarta* (Association of Sludge Removal Entrepreneurs Yogyakarta), consists of around 30 entrepreneurs running their sludge removal services in Yogyakarta area.

The findings support the argument of Burt (2000) stated that individuals must work together to gain higher returns, particularly for the long run. Moreover, entrepreneurs who join business-related association have a higher degree of business successful compared to those who do not. Many respondents also reported various benefit of joining business-related associations such as opportunities for training, updated information and other supports. The following are supporting quotations of the findings.

> *"[We receive] many information from other districts related [to] developments of sanitary, networking, capital access and link to banks and other SMEs."* (SE9)
> *"Exchanging experience became so much easier … easier to borrow capital to the bank cooperative."* (SR1)
> *"Get coaching in terms of field and technical aspects, administrations, association management, and able to consult."* (WP15)

Based on the abovementioned, the study tried to understand social entrepreneurs' effort as an individual to solve problems and linked it to organization's success. We can conclude that the pro-social traits exist among sanitation and sludge removal business. The business also provides special service for the poor. The level of pro-social traits contributed to different level of success, except for water service providers. This may be due different characteristics of business among three sectors. Business-related association is considered as a business network used by many entrepreneurs to support the business. Findings suggest that even with successful individual as social entrepreneurs, more cooperative effort as a big entity, for example joining an association, is imperative.

The current study adds literatures on social enterprises with special reference to water and sanitation business in the context of emerging market economies. The finding from this study can be used a starting point for public policy and related stakeholders to support such business.

Acknowledgement
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