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Exploring the meaning "Sanitation Well-being" in Tha Khlong, Thailand ⁺

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Abstract:

OECD defined well-being indicators regarding sanitation, as the presence of toilet/bathroom inside the houses shared among a family. This drew on Sen's Capability Approach, to evaluate sanitation well-being through people's perception on: current sanitation practices, improvement and changes that these practices brought to their daily lives and their surrounding environment. Findings from this research showed that the sanitation system involved multiple actors and the community members also applied different approaches to ensure the proper functioning of the sanitation system which was highly influenced by the socio/economic status. Anxiety, Odour, privacy, safety, health and comfort were few themes directly related to sanitation and well-being whereas residence insecurities led people more strained then absence of proper sanitation.

Keywords: sanitation; well-being; decision making; freedom of choice; power-relation

1. Introduction

Since the 1980s a significant amount of literature has been developing worldwide on the interpretation and importance of well-being. Much effort has been devoted by international organizations, research centers and national institutes to identify the right statistical methodologies to define and measure well-being [8]. Some of these initiatives led by the European Union and similar organizations like the Economic Co-operation and Development (OECD) define and measure wellbeing in terms of traditional economic standards; relating it directly to national indicators such as, public debt, gross domestic product (GDP), ratio deficit to GDP ratio, growth rate and unemployment rate [30].

On the midst of this ardent interest in well-being, a link between access to sanitation and well-being has being established and studied [26]. The United Nations General Assembly adopted Resolution 64/292 in 2010, which recognizes water and sanitation as human rights, "essential for full enjoyment and well-being of human life". Simultaneously, the World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity" [51]. The implementation of the SDGs have yielded debates that go well beyond health impacts and address the impact of sanitation in contributing to well-being [51].

However, OECD and WHO/UNICEF definitions of well-being and the link they draw between sanitation and well-being are ambiguous and prescriptive [22]. They tend to focus on how things should or shouldn't be, instead of documenting the way in which sanitation actually unfolds on an everyday basis. It is assumed that sanitation and well-being are synonymous. This research therefore addressed on Amartya Sen argument that the "quality of life, a person enjoys is not merely a matter of what he/she achieves, but also what options the person has had the opportunity to choose from" [41]. Drawing on Sen's capability approach, this study focused on people's everyday life routines, possibilities, and decisions around sanitation in Tha klong, Thailand. This research studied what sanitation entails for two different groups of people along the sanitation chain i.e. users and emptiers. It also observed with details like: Which are the sanitation activities in which these individuals engage? How do they connect these sanitation practices with their well-being? By understanding and observing the daily sanitation routines and the connection with well-being, this study explored the common/contrasting threads of well-being within the different actors involved.

2. Methodology

The theoretical framework of Capability Approach (CA) was the base for this research which included aspects of human development. It is a comprehensive, appropriate and contextual approach on well-being [41]. In this research Capability Approach is the underlying lens which has been used throughout the data collection process. All kinds of physical and non-physical inputs, circumstances and outcomes has been categorized as commodity. The core of the CA is the "functioning" which is defined as the actions done by people. Similarly, "capabilities" is defined as the "available functioning" which are either perceived or experienced and therefore is the perceptions of the people [43].

For the mentioned proposition, Sen's three main aspects of capability approach. Parameters like; access/coverage/ownership of sanitation, affordability, physical characteristics of toilets/superstructure, hand washing facilities and loan uptake/full payment of sanitation purchases under **Commodity** aspect were covered. Similarly, under **Functioning** aspect, parameters like; cleanliness of latrine, maintenance of sanitation, disposal or reuse of sludge and hygiene practices and under **Capability** aspect were covered, likewise parameters like; attitude towards sanitation, convenience to use, satisfaction, financial costs, odour, personal cleanliness, pride/prestige, privacy / safety/relief, decision making around sanitation and social relation were covered [3,4].

These classification of aspects of sanitation and well-being was thoroughly analysed through indepth interviews, focus group discussion and participation observation in the community of Tha khlong, Moo 18 [18, 44]. These methods are flexible, opportunistic and open ended which permits redefining the subject matter constantly according to the observation and field observation [24]. To find the meaning this method aims to experience and observe the perspective of the participants being an insider of the community [12]. The collected data was analyzed using thematic coding. The collected data was categorized into themes and a cluster of data was formed within the themes [7]. The data identification and classification was then done according to its importance and into different categories of well-being components. The categorized data was further explored by identifying the repetition of the words within the theme and formulate the relationship between well-being and sanitation [5].

3. City context: Tha khlong Municipality

Tha khlong Municipality lies in the central province i.e. Pathumthani province of Thailand, which is in the north of Bangkok. Tha Khlong sub-district was established on July 21st 1996 and later on October 9th 2001 it was changed from sub-district to municipality by the Royal Thai Government. The municipality is divided into two sub-district Khlong Nueng and Khlong Song with the total population of 77,806 with 53,581 households. According to the local registration office the total male population is 34,907 and female population is 42,899 [23, 29]. The total land area is 63 square km. The city has three distinct land use; residential area occupies 41% of land, industrial area occupies 38% and institutional area occupies 10% of the land [1, 20].

Mostly, in all the urban areas of Thailand, the residence types are either detached house, flats or apartments [20]. According to the Building Control Act 1979, all houses should have on-site sanitation system. Therefore, almost all the houses in the urban areas have either cesspool or septic tanks as the on-site sanitation technology [28, 48]. These systems receives only black water. In Tha khlong 20% of the household is connected with cesspool but without soak pits, 50% are connected with cesspool and soak pits and remaining 30% is connected with septic tanks [2, 19]. Mostly the private collectors collect the faecal sludge in this municipality. The trucks either work with or without license. An official request must be submitted at city office of Public Health and Environment for the collection of faecal sludge. The collection fee is about 250 THB per cubic meter and the monthly collection of faecal sludge is about 30-40 cubic metre [25, 33, 46]. The sludge is typically collected by vacuum trucks and is discharged either into the canals, fish farm or buried on public land [15, 21, 34 and 36].

4. Result and Discussion

In the vein of understanding the sanitation practices and well-being among users and emptier, it was determined that sanitation and well-beings are very relative. Similarly there was also a strong correlation between decision making process, ability to choose and freedom to choose. With the opportunity and freedom to choose the type of sanitation, affected their well-being in terms of comfort, safety, privacy and affordability [6]. Simultaneously, age and availability of water also played an important role in choice of sanitation infrastructure. The enforced policies on sanitation infrastructure to choose made the decision making process among the users very redundant.

This research was inspired by wanting to understand and explore sanitation on the ground of Tha Khlong area. Amartya Sen's Capability Approach was adopted as a theoretical framework to foreground this research. This framework allowed to understand the "beings" and "doings" i.e. capabilities and functioning of the community members of Khlong Nueng community [8].

Capability Approach was used to answer the everyday sanitation practices of users/emptiers and their interlink age with well-being [9]. The participatory evaluation method used helped this study to evaluate sanitation well-being through people's perception on current sanitation practices, improvement and progress that was brought in their practices and the surrounding environment.

Everyday life of users and emptiers was documented in terms of sanitation namely, access of infrastructure, cleanliness, maintenance, decision making and preference [49]. These collected empirical data showed that daily aspects such as decision making, freedom of choice and ability to choose around sanitation systems had a correlation between each other. The information from the owners of the newly built houses stating that they had to install the commercial cesspool containment and had no freedom to choose their sanitation containment showed magnitude of decision making freedom. Similarly, people living in the rented house had to depend on their owners for all the decision making processes which included maintaining and emptying of sanitation infrastructure. This information indicated lack of freedom for decision making processes among the tenant group [11].

The empirical data collected during the field work reflected on the perception and understanding of sanitation well-being which was influenced by several factors in each individual. It showed that wellbeing is relative to time (people evaluated their well-being based on the changes they felt over a period of time). They highlighted the correlation that was happening in the community was with respect to the past events; the experiences they saw changing with time. This finding was perceived from the fact that most of the participants' answers began by comparing their present sanitation situation. These individuals mentioned it has been better than before. On the other hand, many community members had stated that after the establishment of industrial state, the canals were getting polluted as the wastewater from upstream was flowing down to the community. They also underscored that the environmental conditions were degrading than the previous situation.

Secondly, analysing the everyday sanitation practices of users and emptier, it also showed a strong relation with the current accessibility and availability of sanitation infrastructure, and opportunities arising from the governmental acts, policies and regulations. The question of power and rights articulated by community members showed a huge influence on decision making process. Accessibility or availability of sanitation infrastructure was not just a matter of rights but was also the matter of power [35]. The individuals' ability to benefit from the available sanitation also depended on the capability and capacity of people and the power relation that existed in the society [39]. The information that the industrial estate was playing a huge role influencing the decision making process of the community and the municipality, showed the asymmetrical power relations. The difference in economic status between families living in traditional houses, newly built houses, renters, company owners and workers also affected the asymmetrical power relations. The fact that people living in rented houses were earning 2000-3000 THB per month and people living in newly built houses earning 18,000-20,000 THB per month caused difference in economic status leading to asymmetrical power relation among the community members. Similarly, the migrant workers who were working as an emptier had daily wages of 300 THB which made them vulnerable to risks like uncertainty, unemployment, lack of respect and inequality [14]. Likewise, women were mostly responsible for the daily household works like cleaning and maintenance. These differences and imbalances in the community regarding income, gender and ethnicity showed the asymmetrical power relations existing within community.

Similarly, the fact that the tenants were not able to take any decisions regarding their infrastructure also showed that accessibility and availability of sanitation infrastructure is also a matter of power and dependency on others [45]. As discussed in chapter two, OECD defined well-being indicator in terms of sanitation as the presence of toilet/bathroom inside the houses shared among a family (OECD, 2011a). But if this continues to be interpreted as an indicator of well-being rather than other factors like the level of freedom, ability to choose and capacity to foster these factors will always be neglected [39]. As a result, the development initiatives will always be measured and accessed according to the capacity to meet the minimal needs [31]. As per the findings from Khlong Neung community, it is clear that there is a need to deviate from current approach of providing only existing access to water and sanitation infrastructure, to making every option available. Therefore, the ability of people to access these basic services and enjoy it without any hindrance plays an important role in sanitation well-being. Hence, this signals us to overcome the asymmetrical power relationships, and addresses well-being as capabilities of individual to live the form of life they value [16].

On the other hand, the reality of well-being for many low income population is related to a sense of uncertainty [17]. The fact that they did not care about the condition of sanitation products or preferences and concerns were more directed towards tenant security showed that there was a strong dependence on formal or informal power holders [47, 53]. Similarly, their choices were also restricted. The major problem faced by low income population were, firstly, the sense of uncertainty, secondly, the vulnerability to series of risk as a result of the lack of accountability of landlords [32].

Lastly, with these outcomes of uncertainty, it can be said that the levels of well-being were greatly influenced by the existing power relations within the community [6]. These power relations were not only related to income and to the fact that tenants were migrants coming from rural Thailand, but they were also related to ethnicity and international migration. The migrants from Myanmar and Cambodia therefore had to work as emptiers because they did not have much bargaining position and had no choice and freedom of choice their line of work. These people who survive under severe inequality have weak entitlement to welfare and rights which again draws attention to asymmetries of power [13]. These people were constantly reminded of inferiority, lack of work, lack of respect which was the cause for shame, fear and anxiety and suffering from ill-being [16].

Sen argues there are two ways through which people make their choices and preferences. The first one involves the personal process, this concerns individual making preferences over their process occurring in their own lives [42]. This process of making choices with personal preferences was clearly seen with the choices made with the sanitation interface in Khlong Nueng community. The type of interface was chosen according to age, comfort, affordability and availability of water. The second one is the systematic process concerns where individuals make preferences according to the processes that function with the rules and regulation of the society [40]. This process of making choices was seen especially among the residents of the new building houses where the residents had to install the commercial cesspool packages in their houses. The enforcement of governmental act but not facilitating house loans or any other financial schemes showed the preferences made according to the general rule of working society. Similarly, the decisions made with peer pressure in the community also supported this process of freedom. Nevertheless, Sen also argued that opportunities and freedom should always be considered in this process and systemic process and social concerns should also be considered and included.

Findings from this research also showed that sanitation influences ill-being as it can be a source of stress, anxiety, anxious, uncertainty, insecurity and frustration. The sanitation system involved multiple actors and the community members also applied different approaches to ensure the proper functioning of the sanitation system which was highly influenced by the socio-economic status [50]. Also, the changing environmental condition and water pollution bothered the community members which were a major cause for fear and anxiety. However, the level of well-being in the community was determined by the opportunities and freedom of choice with respect to sanitation.

5. Conclusion

Firstly, the everyday life of users and emptiers in terms of sanitation (access of infrastructure, cleanliness, maintenance, decision making and preferences), was documented. Empirical data showed that daily aspects such as decision making, freedom of choice and ability to choose around sanitation systems had a correlation between each other [27].

Secondly, it showed strong relation between the current accessibility and availability of sanitation infrastructure, and opportunities arising from the governmental acts, policies and regulations [10]. Accessibility or availability of sanitation infrastructure was not just a matter of legal rights but was also the matter of power relations surrounding income and was consecutively affecting their sanitation well-being.

Thirdly, well-being for low income community is associated with uncertainty. The major problem faced by marginalised people were, the sense of uncertainty, the vulnerability to series of risk (in the case of users, regarding the possibility of eviction and in the case of emptiers, regarding the very poor labour conditions) causing anxiety and stress. And with these outcomes of uncertainty, the feelings of well-being were greatly influenced by the existing power relations within the community and between different groups. People who survived under severe inequality such as migrant emptiers and renters have weak entitlement to welfare and rights [54]. As a result, these people were constantly reminded of inferiority, lack of work, lack of respect which was the cause for shame, fear and anxiety.

Lastly, findings from this research also showed that the sanitation system involved multiple actors and the community members also applied different approaches to ensure the proper functioning of the sanitation system which was highly influenced by the socio/economic status [35]. To conclude, the level of well-being in the community was determined by the opportunities and freedom of choice with respect to sanitation. Sanitation and well-being both are relative terms and are interconnected with respect to the time span [37]. The interconnection of decision making processes and power relations played an immense role in the type of sanitation infrastructure used. Anxiety, Odour, privacy, safety, health and comfort were few themes directly related to sanitation and well-being whereas residence insecurities led people more strained then absence of proper sanitation [38, 52]. Author Contributions: "conceptualization, Jayshree Rajbhandary, and Margreet Zwarteveen .; methodology, Jayshree Rajbhadary; software, Jayshree Rajbhandary.; validation, Jayshree Rajbhandary, Margreet Zwarteveen and Tatiana Acevedo.; formal analysis, Jayshree Rajbhandary; writing—original draft preparation, Jayshree Rajbhandary and Tatiana Acevedo; writing—review and editing, Jayshree Rajbhandary and Tatiana Acevedo; supervision, Margreet Zwarteveen and Tatiana Acevedo.

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