Prospects of Saving Mobilization in Underserved Settlements of the City of Colombo

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Abstract: The urban poor in Sri Lanka have been deserted by the financial institutions of the country. They have been undervalued and excluded from the banking sector since they live in underserved settlements. However, evidence from other countries proves that the urban poor can be successfully mobilized and included in the financial sectors as valuable customers of the banking institutions. Mobilizing the savings from them is the first step in such a process. Hence, the aim of this study is to identify the saving potential of the urban poor in Sri Lanka. The study was based on primary data collected by a questionnaire survey conducted in a sample of underserved settlements within the Colombo city limits. The study used descriptive statistics for analyzing the saving potential of the people. The study revealed that some people of these settlements already have financial links with compulsory and voluntary societies. Furthermore, a number of indicators of hidden and disguised savings could be found. Finally, the study found that savings can be mobilized from the urban poor if the formal institutions can approach them in a more responsive way with effective techniques.

Keywords: Mobilization of savings, Underserved settlements, Financial institutions, The urban poor

1. Introduction

A considerable percentage of the population in Sri Lanka is still suffering from poverty. This percentage is at 15.2 percent measured by the Head Count Index (HCI) (Department of Census and Statistics, 2008). The percentage of the population earn below US$ 1 a day exceeds 5 percent while the population below US$ 2 a day is very high at 41.6 percent (UNDP, 2009). Although, poverty in the urban sector in Sri Lanka is relatively low compared to that of the rural, the problem becomes more serious due to the nexus it generates in the entire economy, society and the environment. Most of the poor, who live in slums and shanties in urban areas are separated from all other productive factors except for that of labor and are underserved with education, health, security, etc. which traps them in a vicious circle of poverty. Theory and the empirics show that this circle is breakable through the provision of capital for the poor to increase their labor productivity and income. At this attempt, mobilizing savings of the poor is one of the strategies that can be used in addition to other measures of poverty alleviation. In broad sense, voluntary savings is considered as one of the basic requisites needed for sustainable development of an economic development (Branch & Klaehn, 2002). However, in contrast to the rural sector, the banking institutions do not commonly approach urban sector in mobilizing their savings and including them in financial transactions. The urban poor have been sidestepped by most of the financial institutions undervaluing them to be included in the business circle in the capacity of valuable customers. Another reason for the lack of interest in the urban poor by the banking institutions is that the informal behavior of the urban poor is not compatible with the existing procedures and the role of the banking institutions. Evidence from India revealed that 95 percent of respondent cycle rickshaw pullers in New Delhi saved a portion of their earnings while only 1 percent of them reported using a bank account to save (Nandhi, 2011). Furthermore, it reveals that a majority of pullers keep savings with themselves or in neighborhood shopkeepers. This shows explicitly that there are savings with the urban poor. Evidence from Sri Lanka also reveals that the informal sector of financial
transactions is predominant among the poor (Chandrakumara, 2012: Central Bank of Sri Lanka, 2005, 1999, 1987, 1984, 1981, 1964). In addition, there may be hidden savings with the urban poor in a similar way that it is existent in the rural sector. Mobilization of savings, being the key step in the process of financial inclusion, determines the remaining steps which include borrowing, lending, investment and related all other financial activities. Hence, it is important to explore the potential of mobilizing savings from the urban poor in Sri Lanka. This paper analyzes the potential of mobilizing savings from the urban poor living in underserved settlements in the city of Colombo in Sri Lanka.

Theoretically, there are possibilities to create savings even from the extremely poor (Nursk, 1953). Practically also, there are attempts in many countries for mobilizing savings from both urban and the rural poor (Gardiol, 2004: Vyas, 2000). However, most of the organized-sector banking enterprises are reluctant to serve for the poor. This is specially serious when considering the urban poor who are living in slums and shanties. Nevertheless, being a country where a considerable fraction of the population is still living under poverty in its capital city, the attention of researchers should go to find a practical way to get them out of poverty. This study, being on the idea that saving mobilization is one of the prerequisites for reducing poverty, aimed to unveil whether there is a potential of mobilizing savings from the urban poor based on the basic socio-economic characteristics of the people who are living in underserved settlements. Also, the study attempted to identify the existing financial transactions and hidden or disguised savings among the urban poor.

2. Data and Methodology

2.1 Geographical area

In Sri Lanka, Colombo city is the most urbanized city where the majority of the urban poor of the country live in underserved settlements. Hence, the city limits of the Colombo district of the Western Province, which includes 3,370 hectares was selected on a judgmental basis as the geographical area of the study. It has been estimated that 363,000 people live in slums and shanties in the underserved settlements (Ministry of Urban Development Housing and Construction, 1998). The number of housing units, which are located in 1506 underserved settlements of the area was 66,021. However, these figures can be expected to have changed to some extent by the current year.

2.2 Data collection

Out of 1506 underserved settlements, the survey was conducted in 21 settlements (settlement blocks) which are given below:

1. Vauxhall street
2. Wanathamulla
3. Kirulapone
4. Kirulapura, Kirulapone
5. Dematagoda
6. Seevali Lane, Borella
7. Kota Road
8. Naranepita
9. Obesekarapura-1
10. Obesekarapura-2
11. Obesekarapura-3
12. Hunupitiya
13. Daham Pura, Kolonnava
14. Sahaspura -1
15. Sahaspura -2
16. Thotalanga-1
17. Thotalanga-2
18. Baseline Street
19. Mattakkuliya
20. Forbes Lane, Maradana
21. Mahinda Avenue, Kirulapone

Investigators involved in data collection visited all the houses and conducted interviews on spending unit basis. All the spending units, where at least one person who can adequately answer the questionnaire was available, were interviewed. Furthermore, data was gathered on spending unit basis. A spending unit can be defined as an individual or all who live together and spend for their food and other common needs as a unit. In one house there may be one or more spending units.

The main instrument used for the collection of data was the semi-structural questionnaire. The questionnaire was tested through a pilot survey fine-tuned accordingly. Answers to the structured questions were obtained through pre-coding while the answers to open-ended questions had undergone post-coding. The data was edited and entered into the data base by the same field investigators who collected the data.
3. Results

3.1 Population and family size

The survey conducted in 21 underserved settlements/settlement blocks covered a population of 11,427 in 2,468 spending units. Table 1 shows that spending units vary from one to fourteen (1-14), while the majority of spending units consist of three to five (3-5) members. The size of a spending unit becomes larger when more than one family lives in the same household and spends together for common needs. However, the percentage of spending units with more than five members is only 13.2.

Table 1: Size of spending units

| Family Size | Frequency | Percent | Cumulative Percent |
|-------------|-----------|---------|--------------------|
| 1           | 21        | .9      | .9                 |
| 2           | 170       | 7.0     | 7.8                |
| 3           | 399       | 16.4    | 24.2               |
| 4           | 612       | 25.1    | 49.3               |
| 5           | 577       | 23.7    | 73.0               |
| 6           | 338       | 13.9    | 86.8               |
| 7           | 172       | 7.1     | 93.9               |
| 8           | 82        | 3.4     | 97.3               |
| 9           | 42        | 1.7     | 99.0               |
| 10          | 15        | 0.6     | 99.6               |
| 11          | 3         | 0.1     | 99.7               |
| 12          | 5         | 0.2     | 99.9               |
| 13          | 1         | 0.0     | 100.0              |
| 14          | 1         | 0.0     | 100.0              |
| Total       | 2438      | 100.0   |                     |

Source: Author constructed.

3.2 Age Composition

Table 2 shows that the age of heads of spending units varies between 19 and 93 with an average of 48.93. However, the percentage of heads of spending units declines with the increase in age. For example, the percentage of heads above 70 seems to be negligible. However, this can also happen due to the transfer of headship to another member of the family because of an elderly father or mother.

Table 2: Age of heads of spending units

| Age of head of Spending Unit (Years) | N   | Range | Minimum | Maximum | Mean  |
|-------------------------------------|-----|-------|---------|---------|-------|
|                                     | 2438| 74    | 19      | 93      | 48.93 |

Source: Author constructed.

Table 3 shows the population by age group for all underserved settlements which were surveyed. One important feature is that 67.47 percent of the population is of the 15-64 age group, which is important from an economic point of view. The child population that falls below 15 is the second largest group in the population while the population above age 64 is only 7.32. However, it is not realistic to calculate the dependency ratio based on age since there is a substantial part of economically inactive population (the disabled, etc.,) even if they are of the age group of 15-64.
Table 3: Population by age group

| Age group (Years) | Population | Percent |
|-------------------|------------|---------|
| 14 and below      | 2879       | 25.19   |
| 15-64             | 7711       | 67.47   |
| 65+               | 837        | 7.32    |
| Total             | 11427      | 100.00  |

Source: Author constructed.

3.3 Gender Composition

Table 4 shows how the population of the settlements has been distributed between males and females. The female population is slightly higher than that of the male population. The average number of females per spending unit was 2.40 while it was 2.29 for the males. However, there are some spending units where only males or females live.

Table 4: Gender statistics

| Statistics          | Male members-on spending unit basis | Female members-on spending unit basis | Total number of spending units |
|---------------------|------------------------------------|--------------------------------------|--------------------------------|
| N                   | 2438                               | 2438                                 | 2438                           |
| Mean                | 2.29                               | 2.40                                 | 4.69                           |
| Median              | 2.00                               | 2.00                                 | 5.00                           |
| Mode                | 2                                  | 2                                    | 4                              |
| Range               | 8                                  | 8                                    | 13                             |
| Minimum             | 0                                  | 0                                    | 1                              |
| Maximum             | 8                                  | 8                                    | 14                             |
| Sum                 | 5574                               | 5860                                 | 11427                          |

Source: Author constructed.

Out of the total number of spending units, the number of units that do not have any male members is 73 (Table 5).

Table 5: Spending units by number of males

| Males per spending unit | Frequency | Percent | Cumulative Percent |
|-------------------------|-----------|---------|--------------------|
| 0                       | 73        | 3.0     | 3.0                |
| 1                       | 590       | 24.2    | 27.2               |
| 2                       | 845       | 34.7    | 61.9               |
| 3                       | 575       | 23.6    | 85.4               |
| 4                       | 248       | 10.2    | 95.6               |
| 5                       | 75        | 3.1     | 98.7               |
| 6                       | 25        | 1.0     | 99.7               |
| 7                       | 4         | .2      | 99.9               |
| 8                       | 3         | .1      | 100.0              |
| Total                   | 2438      | 100.0   |                    |

Source: Author constructed.

3.4 Ethnicity

The underserved settlements of the sample represent all three main communities of the country Sinhala, Tamil and Muslim. Nearly 60 percent of the population consists of the Sinhala community.
3.5 Marital status
A large majority of heads of the spending units are married and live with family members. However, the divorced percentage is also at 12.6 percent, despite the unmarried and separated percentages being negligible.

| Category | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|--------------------|
| Valid    |           |         |                    |
| Married  | 2062      | 84.6    | 84.7               |
| Unmarried| 34        | 1.4     | 86.1               |
| Divorced | 308       | 12.6    | 98.7               |
| Separated| 31        | 1.3     | 100.0              |
| Total    | 2435      | 99.9    |                    |
| Missing  | System    | .1      |                    |
| Total    | 2438      | 100.0   |                    |

Source: Author constructed.

3.6 Education
Varying from the general situation of the country, there are people who have never had school education in underserved settlements. The significance of this category, ‘No schooling’, is at 8 percent and most of them are now at an old age. The most significant feature is that the education level of the majority of heads of spending units is below grade-8. However, among the educated, there are graduates though their percentage is negligible and at 0.4 percent.

| Category                  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------------|-----------|---------|---------------|--------------------|
| No schooling              | 194       | 8.0     | 8.0           | 8.0                |
| Grade 1-5                 | 515       | 21.1    | 21.1          | 29.1               |
| Grade 6-9                 | 710       | 29.1    | 29.1          | 58.2               |
| Grade 10-11               | 654       | 26.8    | 26.8          | 85.0               |
| GCE (O/L) passed          | 207       | 8.5     | 8.5           | 93.5               |
| Grade 12-13               | 87        | 3.6     | 3.6           | 97.1               |
| GCE (A/L) passed          | 62        | 2.5     | 2.5           | 99.6               |
| Graduate                  | 9         | .4      | .4            | 100.0              |
| Total                     | 2438      | 100.0   | 100.0         |                    |

Source: Author constructed.
The education level of the spouse females of the head of spending units is shown in Table 8. Although there are spouses (females) belonging to the ‘No Schooling’ category, this percentage is slightly lower than that of the heads of spending units. The education level of the majority of spouses is lower than the GCE (O/L) Passed level while the percentage who has had the education beyond GCE (O/L) is at 18 percent. The percentage of graduates is negligible in the case of spouses too.

Table 8: Education level of spouse  

| Category            | Frequency | Percent | Cumulative Percent |
|---------------------|-----------|---------|--------------------|
| No schooling        | 147       | 6.0     | 6.0                |
| Grade 1-5           | 380       | 15.6    | 21.6               |
| Grade 6-9           | 715       | 29.3    | 50.9               |
| Grade 10-11         | 758       | 31.1    | 82.0               |
| GCE (O/L) passed    | 246       | 10.1    | 92.1               |
| Grade 12-13         | 96        | 3.9     | 96.0               |
| GCE (A/L) passed    | 88        | 3.6     | 99.6               |
| Graduate            | 8         | .3      | 100.0              |
| Total               | 2438      | 100.0   |                    |

Source: Author constructed.

Table 9 shows that ‘Age’ and the ‘education level of the head of the spending unit’ have a high correlation. The young heads of spending units are more educated compared to that of the elderly.

Table 9: Correlations: Age and education level of heads of spending units  

| Age of head spending unit | Education level of head of spending unit |
|---------------------------|----------------------------------------|
| Age of head spending unit | Pearson Correlation | 1 | -.270** |
| Sig. (2-tailed)           | .000 | |
| N                         | 2438 | 2438 |
| Education level of head of spending unit | Pearson Correlation | -.270** | 1 |
| Sig. (2-tailed)           | .000 | |
| N                         | 2438 | 2438 |

** Correlation is significant at the 0.01 level (2-tailed).

Source: Author constructed.

Furthermore, Table 10 shows the correlation between the education level of the head of the spending unit and his spouse. It shows that the education level of the spouse is high when the education level of the head of the spending unit is high. Due to this relationship, it is quite interesting to see that families have been formed according to the education level of the husband and wife, either both are more educated or both are less educated. However, the study further reveals that saving is positively related with the education level of individuals. This tendency causes low level of savings in families with less educated household heads and spouses and high level of savings in families with educated husbands and wives. As such, the education level of heads of household, education level of spouses and their income level have an interactive effect in determining family-level savings.
Table 10: Correlations: Education levels of head and spouse

| Education level of head of spending unit | Education level of spouse |
|----------------------------------------|--------------------------|
| Pearson Correlation                    | .427**                   |
| Sig. (2-tailed)                        | .000                     |
| N                                      | 2438                     |
| N                                      | 2438                     |

**Correlation is significant at the 0.01 level (2-tailed).**

Source: Author constructed.

### 3.7 Expenditure decision leadership of the spending unit

Expenditure decisions of the families, for their routine expenses, are significantly made by the spouses of the heads of the spending units when the head is a male (64.1 percent). Only 24.5 percent of male heads of spending units act as the decision leaders/makers of their expenditure. In addition, 11.4 percent of the decision leaders are adult children who live with the parents. Previous researchers have found that females are more saving-responsive than males. Hence, female majority in expenditure decision leadership of families in the underserved settlements is a good indicator of the saving mobilizing potential.

Table 11: Expenditure decision leadership

|          | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|--------------------|
| Wife     | 1563      | 64.1    | 64.1               |
| Husband  | 598       | 24.5    | 88.6               |
| Other member | 277   | 11.4    | 100.0              |
| Total    | 2438      | 100.0   |                    |

Source: Author constructed.

### 3.8 Family economic condition

Table 12 shows the main employment of the head of the spending units under eight employment categories that were selected based on the types of the income sources relevant to the areas. However, people are engaged in some activities other than the main income source. The unemployment and underemployment rate among the heads of spending units seem to be very high at 32 percent. However, this rate has been overestimated here, as some of the heads of spending units are not employed due to their old age or other reasons even if they are still the opinion leaders of the families. The most outstanding feature is that minor worker category accounts for 46 percent of the main employment of heads of spending units. Self-employment that accounts for 14.3 percent is the second important feature.

Third, even if there is unemployment, differently from the rural areas in Sri Lanka, the people who have joined the police service and the security forces are very low and negligible in the underserved settlements (0.6 percent). Fourth, representation of heads of spending units in the two categories, ‘Executive’ and ‘Teacher’, being respectively 1.6 and 0.2 are also negligible. Anyway, it is normal to expect a very low percentage of such jobs from an area of underserved settlements. Fifth, it seems that 2.6 percent of the heads of spending units are employed in foreign jobs. Finally, it shows that 2.8 percent of heads of spending units are those who have retired.
Self-employment, which is very important as a source of livelihood for the poor, takes different forms. Out of 800 who were self-employed, small-scale traders were the highest (Table 13 and 14). The term ‘small trader’ refers to the suppliers whose retail sales volume is very low. They are in different forms such as small boutique holders, street vendors, etc. selling or supplying within or outside their house or settlement area. In addition, carpenters, porters, auto (three-wheeler) drivers, dressmakers, cobbler, artisans, tailors, coconut-pluckers, tree-branch trimmers, collectors of re-usable and re-cycle waste, barbers, family-based sellers, etc. are the traditional jobs among the self-employed in the underserved settlements. Preparation of food, to supply regularly to tea-huts and restaurants, is also a very common job mostly among women.

### Table 12: Main employment of head of spending unit

| Category                  | Frequency | Percent | Cumulative Percent |
|---------------------------|-----------|---------|--------------------|
| 1. Self-employed          | 348       | 14.3    | 14.3               |
| 2. Executive              | 39        | 1.6     | 15.9               |
| 3. Minor worker           | 1123      | 46.0    | 61.9               |
| 4. Police/forces          | 15        | .6      | 62.5               |
| 5. Teacher                | 4         | .2      | 62.7               |
| 6. Retired                | 68        | 2.8     | 65.5               |
| 7. Foreign employment     | 64        | 2.6     | 68.1               |
| 8. Unemployed or underemployed | 777 | 31.9    | 100.0              |
| **Total**                 | **2438**  | **100.0**|                    |

**Source:** Author constructed.

### Table 13: Spending units with self-employed members

| Whether self-employed member/s is/are available | Frequency | Percent | Cumulative Percent |
|--------------------------------------------------|-----------|---------|--------------------|
| No                                               | 1638      | 67.2    | 67.2               |
| Yes                                              | 800       | 32.8    | 100.0              |
| **Total**                                        | **2438**  | **100.0**|                    |

**Source:** Author constructed.

### Table 14: Type of self-employment

| Self-employment category                | Frequency | Percent | Cumulative Percent |
|-----------------------------------------|-----------|---------|--------------------|
| 1. Food preparation or processing       | 163       | 20.4    | 20.4               |
| 2. Handicraft                           | 136       | 17.0    | 37.4               |
| 3. Animal husbandry or products         | 8         | 1.0     | 38.4               |
| 4. Small-scale trade                    | 285       | 35.6    | 74.0               |
| 5. Hired cart or porter service         | 5         | .6      | 74.6               |
| 6. Taxi or auto service                 | 74        | 9.2     | 83.9               |
| 7. Other                                | 129       | 16.1    | 100.0              |
| **Total**                               | **800**   | **100.0**|                    |

**Source:** Author constructed.
Another special feature of these areas is that a substantial part of the self-employees are marginalized individuals resulting from various physical or social factors. Especially, less educated women engage in home-based small businesses due to the lack of demand for them to work for a wage. They have been marginalized either because of the physical weakness of being women or the social stratification of being dwellers in slums.

Table 15 shows that the significance of the spending units with foreign employees is 11 percent, which is not negligible when compared to the overall foreign employment rate of the country, which is at 23.8 percent of the labor force\(^1\). Furthermore, it shows that the number of spending units with at least one member employed abroad accounts for 9.6 percent.

| No. of foreign employees in a family | No of spending units | Percent | Cumulative Percent |
|-------------------------------------|----------------------|---------|-------------------|
| 0                                   | 2170                 | 89.0    | 89.0              |
| 1                                   | 235                  | 9.6     | 98.6              |
| 2                                   | 27                   | 1.1     | 99.8              |
| 3                                   | 3                    | .1      | 99.9              |
| 4                                   | 3                    | .1      | 100.0             |
| Total                               | 2438                 | 100.0   |                   |

**Source:** Author constructed.

Table 16 shows that 57 spending units have no members who earn an income at all. They are totally dependent on income from government welfare programs and assistance from neighbors, relatives, friends and others. However, 70.1 percent of spending units have at least two (02) income earners while some of the units are affluent with 9 members. This is also an indicator of potential savings in underserved settlements.

| No. of members | Frequency | Percent | Cumulative Percent |
|----------------|-----------|---------|--------------------|
| 0              | 57        | 2.3     | 2.3                |
| 1              | 672       | 27.6    | 29.9               |
| 2              | 879       | 36.1    | 66.0               |
| 3              | 416       | 17.1    | 83.0               |
| 4              | 235       | 9.6     | 92.7               |
| 5              | 108       | 4.4     | 97.1               |
| 6              | 51        | 2.1     | 99.2               |
| 7              | 7         | .3      | 99.5               |
| 8              | 9         | .4      | 99.8               |
| 9              | 4         | .2      | 100.0              |
| Total          | 2438      | 100.0   |                    |

**Source:** Author constructed.

Income is a difficult variable to measure since people try to hide their income details due to many reasons. However, they are more responsive to reveal their expenditure data. Table 17 shows the total monthly expenditure and the amount allocated for food on spending unit basis. It shows that there are large discrepancies among the spending units when comparing their income levels. It ranges from Rs. 100.00 to Rs. 90,000.00 per month throughout the sampling population. However, very low level of expenditure does not mean that they survive from a small amount of expenditure. They are mostly fed by neighbors, relatives or friends owing to traditional, cultural or social obligations (old age or physical disability, etc.).

\(^1\)Central Bank of Sri Lanka (2011). *Sri Lanka Socio-economy Data*. Colombo.
The most outlandish feature is that there are some spending units that allocate a large amount of money, i.e. Rs. 90,000.00 for food per month, nearly 70 percent of the total expenditure on consumption. This reveals that underserved settlements do not consist only of the poor who survive by micro-enterprises. It consists of a variety of people who earn money from various sources. Therefore, saving generation capacity of the people in these areas should not be undermined.

Table 17: Monthly expenditure of spending units

| Statistics | Amount of Food Expenditure | Amount of Total Expenditure |
|------------|---------------------------|----------------------------|
| N Valid    | 2438                      | 2438                       |
| Missing    | 0                         | 0                          |
| Mean       | 17305.69                  | 26219.06                   |
| Median     | 15000.00                  | 23675.00                   |
| Mode       | 15000                     | 18000                      |
| Range      | 89900                     | 130550                     |
| Minimum    | 100                       | 350                        |
| Maximum    | 90000                     | 130900                     |

Source: Author constructed.

House condition is another indicator that exhibits the economic situation of people. Table 18 to 22 show that even if the people are living in underserved settlements, with no legal ownership, most of them have built their houses that does not differ much from the appearance of houses of low-income earners outside the slums. This is an indicator to show that they can earn in excess of their family consumption expenditure. These hidden savings can be materialized into bank deposits if proper strategies are implemented for that purpose.

Table 18: Type of house

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Normal low-income house | 2097 | 86.0 | 86.0 |
| Shanty in a slum | 174 | 7.1 | 93.2 |
| Shanty(separate) | 167 | 6.8 | 100.0 |
| Total | 2438 | 100.0 |

Source: Author constructed.

Nearly 86 percent of walls are of the permanent type since they were made of materials such as burnt or cement bricks while the houses with temporary walls accounted only for 14 percent.

Table 19: Wall type of the house

| Wall type | Frequency | Percent | Cumulative Percent |
|-----------|-----------|---------|--------------------|
| Permanent | 2098      | 86.1    | 86.1               |
| Temporary | 340       | 13.9    | 100.0              |
| Total     | 2438      | 100.0   |

Source: Author constructed.

Nearly 82 percent of roofs are of the permanent type since they were made of materials such as asbestos sheets, metal or tiles while the houses with temporary roofs accounted for only 14 percent.
Furthermore, in nearly 91 percent of houses, the floor is permanent since they have been made of materials such as cement or tiles while the houses with temporary floor accounted only for only 9 percent.

Similarly, the consumption of public utilities such as electricity, telephones, etc. by the people is also used as indicators of their economic wellbeing. Table 22 shows that houses with no electricity are only 10.4 percent. However, the availability of land lines for the houses shows a very low percentage (15.8) while the mobile phone usage accounts for 53.1 percent. This is also indicative of their hidden savings.

### Table 20: Roof type of house

| Roof type | Frequency | Percent | Cumulative Percent |
|-----------|-----------|---------|--------------------|
| Valid     |           |         |                    |
| Permanent | 1997      | 81.9    | 82.1               |
| Temporary | 435       | 17.8    | 100.0              |
| Total     | 2432      | 99.8    |                    |
| Missing   |           | .2      |                    |
| System    | 6         |         | 100.0              |
| Total     | 2438      | 100.0   |                    |

**Source:** Author constructed.

### Table 21: Floor type of house

| Floor type | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| Valid      |           |         |                    |
| Permanent  | 2220      | 91.1    | 91.1               |
| Temporary  | 216       | 8.9     | 100.0              |
| Total      | 2436      | 99.9    |                    |
| Missing    |           | .1      |                    |
| System     | 2         |         | 100.0              |
| Total      | 2438      | 100.0   |                    |

**Source:** Author constructed.

### Table 22: Availability of electricity

|                  | Frequency | Percent | Cumulative Percent |
|------------------|-----------|---------|--------------------|
| Available        | 2184      | 89.6    | 89.6               |
| Not available    | 254       | 10.4    | 100.0              |
| Total            | 2438      | 100.0   |                    |

**Source:** Author constructed.

### Table 23: Telephone facility

|                | Frequency | Percent | Cumulative Percent |
|----------------|-----------|---------|--------------------|
| Land lines     | 384       | 15.8    | 15.8               |
| Mobile         | 1294      | 53.1    | 68.8               |
| Both land and mobiles | 300       | 12.3    | 81.1               |
| Not available  | 460       | 18.9    | 100.0              |
| Total          | 2438      | 100.0   |                    |

**Source:** Author constructed.

### 3.9 Evidence for financial savings and credit transactions:

Data suggests that the people in underserviced settlements have some links with formal saving and credit associations. In addition to the mandatory savings of the Samurdhi Program, some members of these families are also the members...
of Sanasa Societies, Khanta (Women’s) Banks, Cooperative Societies, Welfare Societies and Rural Banks. In addition, they either pay or have agreed to pay a membership fee for most of the associations listed in Table 24. This implies that the savings of the people in the settlements can be mobilized if these links are strengthened and expanded in a more people-friendly way.

**Table 24: A list of social organizations**

| No. | Name of the Institution/Association         | No. | Name of the Institution/Association         |
|-----|--------------------------------------------|-----|--------------------------------------------|
| 1   | Samurdhi Bank                               | 11  | Muslim Association                         |
| 2   | Sanasa Society                              | 12  | Religious Society                          |
| 3   | Kantha (Women’s) Bank                       | 13  | Youth Society                              |
| 4   | Cooperative Society                         | 14  | Mahal Niwasa Society                       |
| 5   | Community Development Society               | 15  | Three-wheeler Society                      |
| 6   | Welfare Society                             | 16  | Settlement Society (e.g. 50 Watta)         |
| 7   | Rural Bank                                  | 17  | Sports Society                             |
| 8   | Rural Development Bank                      | 18  | Adult Association                          |
| 9   | Funeral Society                             | 19  | Mothers’ Society                           |
| 10  | Church Association                          |     |                                            |

*Source: Author constructed.*

Voluntary financial savings of people in the settlements remain poor. Table 25 shows the strongest reason for the poor financial savings of 869 heads of spending units. The highest percentage, which is at 84.12, has not made any savings due to their poor economic condition. However, this is contradictory with their statistics regarding the consumption expenditure. The second important reason is that they do not have such a saving habit or practice in their general behavior. Furthermore, it can be expected that all these reasons may have an interactive effect to determine the savings at a very low level.

**Table 25: The strongest reason for not having savings**

| Reason                              | No. of heads declared as the strongest reason | Percent |
|-------------------------------------|----------------------------------------------|---------|
| Poor economic situation             | 531                                          | 51.10   |
| No such practice in the behavior    | 245                                          | 28.19   |
| Indebtedness to the informal lenders| 9                                            | 1.04    |
| No interest to save                 | 42                                           | 4.83    |
| Total                               | 869                                          | 100.00  |

*Source: Author constructed.*

Table 26 shows that 94.5 percent of heads of spending units have not obtained loans either from formal or informal sources. Moreover, the people seem to have been more dependent on the informal sources for their transactions. This indicates that there is a hidden market for the organized sector to mobilize savings along with other financial transactions needed for a better financial inclusion of the poor.

**Table 26: Source of loan**

| Source of loan     | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| Not obtained       | 2303      | 94.5    | 94.5               |
| Formal sector loans| 57        | 2.3     | 96.8               |
| Informal sector loans | 74   | 3.0     | 99.8               |
| Both               | 4         | .2      | 100.0              |
| Total              | 2438      | 100.0   |                     |

*Source: Author constructed.*
In addition to the good housing condition and the access to sophisticated services, the people in Sri Lanka possess jewelry and expensive equipment in their houses. They use these assets in times of financial difficulties. However, Table 26 shows the significance of such families negligible. This fact is closely associated with the finding of a higher consumption expenditure of the people.

### 4. Conclusion

Dominican Energy Sector is affected by high dependence on petroleum for electricity generation, financial crisis of distribution companies, lack of investment, non-payment of the purchase of energy, unmet distribution demand, higher tariffs and subsidies, electricity non-payment culture, and high losses in commercial energy, among others. Although significant progress has been made about it, those factors are, still, an impediment for economy growth. We can note the similarity of the consumer responsiveness in the variation of price for different countries (from 0.40 – 0.60 in log run) [12]. We observe that, even different conditions does not represent a higher gap of discrepancy. It may allow saying that while the market framework tends to have a low level of price elasticity — because high cost of substitutes — no necessarily is a perfectly inelastic market. Furthermore, this responsiveness can be an important indicator for energy suppliers, especially for the generation sector rather than transmission and distribution.

When the customers do not react to market prices, all pricing mechanisms are left in the hands of the market suppliers. In the presence of competition, the suppliers will, on their own, be unable to raise prices above the production cost of the least efficient unit in operation. In this competitive situation the market price will adequately reflect the production costs. The reacting of customers to pricing signals (demand response) in the electricity marketplace can promote efficient investment (in the long-run term), help mitigate short-run market power by generators and transmission owners, reduce price spikes, lower price volatility and reduce customers’ bills.

Lack of demand response also increases the ability of electricity suppliers to exercise market power and raise prices. In order to achieve efficiency in the marketplace, prices should reflect the cost of the good. Market power contributes to price volatility and price spikes observed in today’s electricity markets, including Dominican Republic. Likewise, an investment in improving generation capacity, efficiency and electricity transmission and distribution network is imperative to meet the growing energy demand [13]. A substitute may be the transition to Renewable Energy, such as solar PV grid, wind, biomass, etc.; that will reduce the oil import dependence, green house gas emission and promote environment conservation. This will require acutely study to determine whether what may be the best alternative, relatively to cost investment on Dominican economy, and when is the appropriated implementation time.

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