Garbage separation

as a livelihood option for poor women and men

The Focus City Research Initiative (FCRI) is a series of eight action research projects funded by the International Development Research Centre (IDRC) in Canada. In the “Focus Cities” approach, multistakeholder city teams worked in partnership over four years, to research and test innovative solutions to alleviate poverty. The participating researchers worked in the following cities: Lima (Peru), Cochabamba (Bolivia), Moreno (Argentina), La Soukra (Tunisia), Dakar (Senegal), Kampala (Uganda), Colombo (Sri Lanka) and Jakarta (Indonesia).
The general objective of this research is to understand the living conditions and social and economic characteristics of garbage separators around the Kjara-Kjara municipal garbage dump and in the urban centre of the city of Cochabamba. The specific goals are as follows:

To identify the situation of poverty deriving from their living conditions and the income they generate as garbage separators.

To identify the conditions that adversely affect these communities, turning them into a vulnerable population group.

As a technique for the collection of primary quantitative data, a survey was applied to a representative sample of the garbage separator population. Forty-one questionnaires were applied to the population of the garbage dump using the household as a unit of study and 158 to the garbage separators in the urban centre of Cochabamba, taking the individual garbage separator as the study unit.

The study shows a different sex and age structure in the surveyed population for the garbage separators in the city and those in the garbage dump. In the city the majority are women in a ratio of 87 men to 100 women, while in the garbage dump by contrast, the ratio is 104 men to 100 women. The age distribution of the population is also different. For the city, the age structure is atypical, with only 32% being under 15 years of age, which means that the population is relatively old. The group between 15 and 64 years of age, the “population of working age,” accounts for 60%; and, internally, the great majority is between 15 and 34 years of age, with the elderly accounting for 8%. In the garbage dump the population is young: 50% is under 15 years of age; 45% are between 15 and 64 years of age; and the elderly account for 5%.

1 Also known as recyclers, recoverers, apalladores, tawis, palliris, or collectors.

2 EMSA- Empresa Municipal de Servicios de Aseo, the company responsible for waste management in the municipality.

### Objectives

The general objective of this research is to understand the living conditions and social and economic characteristics of garbage separators around the Kjara-Kjara municipal garbage dump and in the urban centre of the city of Cochabamba. The specific goals are as follows:

- To identify the situation of poverty deriving from their living conditions and the income they generate as garbage separators.
- To identify the conditions that adversely affect these communities, turning them into a vulnerable population group.

### Methodology

As a technique for the collection of primary quantitative data, a survey was applied to a representative sample of the garbage separator population. Forty-one questionnaires were applied to the population of the garbage dump using the household as a unit of study and 158 to the garbage separators in the urban centre of Cochabamba, taking the individual garbage separator as the study unit.

The study shows a different sex and age structure in the surveyed population for the garbage separators in the city and those in the garbage dump. In the city the majority are women in a ratio of 87 men to 100 women, while in the garbage dump by contrast, the ratio is 104 men to 100 women. The age distribution of the population is also different. For the city, the age structure is atypical, with only 32% being under 15 years of age, which means that the population is relatively old. The group between 15 and 64 years of age, the “population of working age,” accounts for 60%; and, internally, the great majority is between 15 and 34 years of age, with the elderly accounting for 8%. In the garbage dump the population is young: 50% is under 15 years of age; 45% are between 15 and 64 years of age; and the elderly account for 5%.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>City</th>
<th>Garbage dump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 15 years and under</td>
<td>32 %</td>
<td>50 %</td>
</tr>
<tr>
<td>15-64 years</td>
<td>60 %</td>
<td>45 %</td>
</tr>
<tr>
<td>65++</td>
<td>8 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>
The percentage of heads of households in the sample who do not read or write is 21% in the city and 13% in the garbage dump. Analysis by gender shows relevant differences in the ratio of illiterate people in both populations: illiterate women account for one third of women-headed households, which is a higher ratio than the 27% given in national rural registries.

The level of education among women is lower than that found among men: women without formal education in the city and in the garbage dump account for 34% and 31%, respectively, contrasted with 9% and 0% for their male counterparts. Also, the percentage of women with secondary and post-secondary education is 7% and 12%, while that of males is 22% and 26%. These data confirm the unequal access of women to education, which in many cases has cultural roots.

### Level of formal education for heads of households by gender and place of work

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>Garbage dump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The predominant activity undertaken by women heads of households, in both the city and the garbage dump is garbage separation (93% and 72%, respectively); men have more diversified occupations, particularly those in the garbage dump, although the jobs they perform are menial. In both contexts, the mother has been identified as head of household in a significant proportion of the cases (42% in the garbage dump and 36% in the city), thus confirming the hypothesis that women assume the responsibility for the family in the absence of a husband, i.e., when they are single mothers, separated, divorced, or widows. This shows the high level of vulnerability in these households because the women are responsible for supporting the family, which they do by working twice or even three times as many hours as those of a normal working day.

The average age structure for women-headed households, as shown by the study, is 49 years of age for the city, and 48 years of age for the garbage dump. There are, however, a significant number of women who are heads of households who are between 55 and 60, respectively. In all probability, these are grandmothers who have taken on the responsibility of caring for their grandchildren when their children are absent. The families, many of whom are rural migrants, have disadvantaged backgrounds, and show traits of disfunction or instability that have produced permanent feelings of lack of affection, reinforced by conditions of economic poverty. In these circumstances, many of the household members turn to informal activities (garbage separation, cleaning, construction work, etc.) as their most viable options for generating incomes.

Information concerning surveyed households in the garbage dump shows that 68% own the place they live in, but their houses were built on land owned by the university, where they settled illegally; 7% live in places loaned to them (a small percentage pay rent); and almost 20% fall into a different category, that of having no fixed abode. By contrast, only 6% of those in the city own the place they live in, while the remaining 94% either rent or take care of the place they live in or make other arrangements.

![Household tenure for the city and garbage dump](chart)

Although a majority in the garbage dump said that they owned the place they live in, the quality of the construction is poor. Among the garbage dump separators, 46% of the families live in houses of average quality with bricks or adobe walls and cement floors, and 49% in houses of poor quality, having a combination of walls made of bricks or adobe and earthen floors. In the city, the percentage of houses with earthen floors is lower, which shows that, judging by the materials used for walls and floors, those in the city live in higher quality places. As for the number of people per household (5 members per household) in relation to the number of rooms in the house, 44% of households in the garbage dump live in overcrowded conditions as opposed to 80% in the city.

Only 2% of the households of those working in the garbage dump are connected to the public water system, and the remaining houses have no adequate water supply. As for those in the city, 50% of their houses are connected to the public water network, which means that the risk of contracting diseases by drinking contaminated water is lower among this group. Over 50% of houses of the separators in both the city and the garbage dump have no toilet facilities, therefore they need to relieve themselves outside. Concerning electricity, the coverage is average: 66% of the houses of the workers in the garbage dump have electric energy, while the remaining 34% lack the means to pay to be connected to the system. In the city, the coverage is higher—92%—because most of the garbage separators surveyed rent the places they live in, and the owners had paid to have their houses connected to the system.
Data gathered on the family incomes shows that the garbage separators in the garbage dump have an average monthly income of 800 BOB (113 USD) versus 717 BOB (101 USD) for those in the city. This means that each member of the household has less than one dollar available per day (5.6 BOB)\(^1\), which is inadequate to meet the minimum needs for food. The low income generated by the household members surveyed, confirms the condition of poverty derived from the data on housing and access to utilities, which allows us to say that the poverty in this group is structural in nature, a situation that seems to have been a constant in their lives.

A gender-based viewpoint shows the differences between men and women: irrespective of their social group, women are discriminated against, and they find themselves in a position of disadvantage in relation to their male counterparts. The study showed that only 7% of women-headed households among the garbage separators in the urban centre have a monthly income of over 1000 BOB/month compared to 18% of the men headed households. In the garbage dump, 30% of the men and 22% of the women fall into that category. At the other extreme, 35% of women garbage separators in the urban centre are in the category of those having incomes under 500 BOB per month, as opposed to only 23% of men garbage separators. In the urban centre and in the garbage dump the proportions are 13% of the men compared to 33% of the women.

\(^1\) The current exchange rate is 1 USD = 7 BOB

### Conclusions

The set of demographic and family structure characteristics, such as the age of women heads of households, the absence of spouses in the households, the condition of migration (mainly from rural areas), the low level of education, and their working in jobs with no prestige are factors that place this population in situations of vulnerability and social disadvantage.

The very low level of education of the population under study contributes to the inter-generational transmission of poverty. Children born in households with low-income parents develop in conditions that are unfavorable for nutrition, health care, and education. When they reach adulthood, they tend to repeat their parents’ conditions and end up replicating their situation of poverty.

Low incomes are a determining factor for the perpetuation of poverty and make it impossible for people to access education, health care, and basic public utilities. This means that poverty in these cases is structural in nature and becomes a lifelong condition.

Since garbage separation is an informal activity for which no education is required, the poorest sector can engage in it to earn their livelihood. It is, however, an invisible activity from the standpoint of the government, as well as for the rest of the society, and its value remains unknown for the local economy despite the cheap raw materials, the financial savings, and protection of the environment that it provides.

Because the separation of waste is linked to garbage, the people who engage in this activity are perceived by society as part of the garbage, and they are discriminated against. They inspire compassion as being “poor” but also “dirty.”

In the search for options that may improve their quality of life, the Cochabamba Focus Cities project is helping the groups of garbage separators to identify options for income generation. Among these options is the creation of multi-functional centres for storage, training, and holding craft workshops for creating items from recycled materials, such as bags made from discarded cloth and cards made from recycled paper. These craft activities, which have been welcomed by several firms and institutions, have allowed the participants to experience their creativity and derive pleasure from their productivity, thus improving their self-esteem and generating value added incomes.