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# Resources Conservation & Recycling

# Full length article Livelihoods and health status of informal recyclers in Mongolia



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### ABSTRACT

Informal recycling has emerged as livelihood strategy and poverty alleviation in the absence of an official recycling system. Millions of informal recyclers (or waste pickers) are not recognized by the government and little has been done to improve their livelihoods and health status; Mongolia is not the exception. Today there is very little information on the assets and vulnerabilities of informal recyclers in Mongolia. This research seeks to fill this gap. We apply a rapid livelihood assessment using a mixed methods approach (structured questionnaire survey, key informant interviews, focus group discussions) in Ulaanbaatar, Mongolia. Beyond assessing the social, economic and environmental situation of local informal recyclers, the research seeks to also provide some recommendations for improving their lives. The results have shown that the majority of this population in Mongolia is challenged by several factors such as homelessness, extreme cold weather and no official identity document (ID card). Unemployment and lack of external support for recycling activities, social isolation, discrimination and alcohol addiction are additional frequent predicaments of this population. Two-thirds of the informal recyclers experience various occupational health hazards including stomach diseases, skin diseases, kidney and liver problems, back pain, cuts, burns, and fractured bones. We recommend that public policies address the livelihood issues of these informal recyclers and further stimulate their organization, maybe into recycling groups, associations or co-operatives, for the purpose of collective empowerment. This can have positive spin-offs to reduce occupational health hazards and to conduct the work more effectively, ultimately benefiting the city environment.

#### 1. Introduction: informal waste picking in Mongolia

Recently Mongolia, has become one of the world's fastest growing economies in the world (The Economist, 2013; The Diplomat, 2013; BBC, 2014), and particularly Ulaanbaatar, it's capital, is rapidly expanding with the continuous influx of rural migrants into the city (MNEC, 2011). This urban growth has resulted in a range of social and environmental waste related challenges. Change in lifestyle and urban consumption habits have further resulted in increased solid waste generation and demand for waste management (Uddin et al., 2014a, 2014b). Over half of the urban population resides at the fringe of the city in the traditional yurt/felt tents, called *Ger*, due to high cost of living in the city center. The *Ger* is one of the oldest types of residences in Mongolian culture. It is constructed with poles and felt covers, which can easily be rebuilt. As an adaptation to the cold winter season the *Ger* residents add a number of additional felt covers surrounding the tent to block the cold (Terbish and Rawsthorne, 2016).

There is formal waste collection in parts of Ulaanbaatar, however, it is collected with varying frequency and efficiency and does not service all residents. Particularly the inhabitants in the *Ger* areas do not have regular waste collection. In the formal city waste is disposed in community bins, which often overflow causing sever odor and health problems. The formally collected waste is deposited at one of the three open dumps in the periphery of the city. In these peri-urban neighborhoods illegal dumping is common. Some open fields have become 'unplanned disposal sites', with hundreds of waste pickers working and living near these areas (World Bank, 2010; Altantuya et al., 2012). Ulaanbaatar is facing serious environmental and health problems, due to an inefficient solid waste management system. In 2004, a World Bank study has estimated approximately 5,000 to 7,000 informal recyclers or waste pickers in this city (World Bank, 2004). Since then, there is no updated information about the state of the art of informal recycling in Ulaanbaatar, nor in the country.

The International Labor Organization (ILO) refers to the informal sector as to employment and production that takes place in unincorporated small or unregistered enterprises (e.g. less than five employees) (ILO, 1993). In Mongolia, the informal sector has been defined as "a sector consisting of small scale, usually family-based, economic activities that may be undercounted by official statistics, and may not be subject, in practice, to the same set of regulations and taxation as formal

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*enterprises*" (Morris, 2001). An informal recycler or waste-picker is described as a person whose livelihood depends on collecting recyclable materials from households and markets, in the streets, at dumpsites or landfills (Rouse and Ali, 2001; Moreno-Sánchez and Maldonado, 2006; Gutberlet et al., 2009). Worldwide, lack of jobs and poverty are the main reasons for the growth of the informal recycling sector (Serrona et al., 2010).

Generally, waste pickers belong to marginalized social groups, are poor and thus often vulnerable to various occupational health risks and diseases (Wilson et al., 2006; Gutberlet and Baeder, 2008; Gutberlet, 2013). They are considered the informal grassroots of the waste recycling process and are mostly excluded from policies and programs in the broader waste management system (Gunsilius, 2012; Hayami et al., 2006; Moreno-Sánchez and Maldonado, 2006; Ruiz-Restrepo and Barnes, 2010). It has been demonstrated that increased waste collection, material recovery, resource conservation, litter control, and income generation is possible with informal waste recycling (Ezeah et al., 2013; Gutberlet, 2012; Schluep, 2014). Their contribution to the environment and to the local economy is not recognized and they are also not remunerated for the service they provide to the city. Yet, waste pickers are co-producers of waste collection and recycling services within the city. Examples demonstrate that a government cannot be efficient and equitable without significant contribution from its citizens, as suggested by Ostrom (1996). Urban mining, the process of recovering resources and reclaiming materials and products from urban waste and buildings is, in fact, what many informal recyclers regularly do in the city (Cossu et al., 2012; Gutberlet, 2015).

So far, little has been documented on the Mongolian informal recycling sector which could potentially contribute to policy formulation for the betterment of the lives of informal recyclers, while addressing the common yet major solid waste predicaments as they are present in most cities in Mongolia, like in other parts of the world. A recent study by Terbish and Rawsthorne (2016) describes the lack of quality of life and the level of exclusion that characterizes the Ger residents' everyday life. This study also highlights the policy requirements tackling social exclusion. The focus of our paper is to assess the current situation of informal waste pickers in the peri-urban informal settlements in Ulaanbaatar City, to learn about the overall socio-economic aspects of informal recycling, as well as the specific livelihood conditions of these workers in Ulaanbaatar and which can apply also to other places in Mongolia. We hope that our findings can support the development of policies that include waste pickers in waste management, that improve their living and working conditions, and that help protect them from waste-borne health risks and hazards. The information produced from this study can potentially support other actors involved in the recycling chain, in developing better waste management strategies for resource recovery in Mongolia.

#### 2. The Sustainable Livelihoods Approach

The Sustainable Livelihood Approach (SLA) was developed in the early 90s, mostly for rural livelihood appraisals, and has been since applied in many fields related to uncovering livelihoods issues and particularly strategies for poverty reduction (Chambers and Conway, 1991; Krantz, 2001; Sati et al., 2014; Sati and Vangchhia, 2017). Initially targeted to rural populations (Scoones, 1998), particularly in the global South, the concept has been used in urban settings, also in the global North (Gutberlet et al., 2009). To end poverty is the goal number one declared by the United Nations in order to transform our world and achieve the *Sustainable Development Agenda* by 2030 (United Nations, 2015). Poverty means more than the lack of income and resources and it manifests not only through hunger or malnutrition, but has many facets, including limited access to education and other basic services, social exclusion, discrimination or lack of participation in decisionmaking.

The sustainable livelihoods approach serves as a general

interdisciplinary methodology that seeks to capture the many everyday life aspects that shape a livelihood. The research results will allow for policies to simultaneously address development, resource management and poverty reduction aspects (Mensah, 2012; Morse and McNamara, 2013). According to Chambers and Conway "a livelihood comprises the capabilities, assets ... and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term" (1991). One of the benefits of this analytical framework is the possibility to identify strengths and bottlenecks, for which locally available resources can be employed. To develop resiliency, which means to have the ability to cope with and recover from stress and shocks, maintain, or enhance the capabilities and assets is central in the generation of sustainable livelihoods. Identifying opportunities to address current and very localized everyday challenges of these workers is a step forward towards addressing this millennium development goal.

"A livelihood is considered sustainable when it can respond and recover from abrupt shocks, and can maintain or improve its capacities and capital without undermining the natural resource base" (Sati and Vangchhia, 2017). This definition can be applied to the urban context of waste pickers, who rely on waste as resource. People need to increase their capacity to influence and control their future on a long-term basis, a goal that can be achieved by building capacity, empowerment and by supporting equity. A livelihood analysis comprises the capabilities, material and social assets and the activities required for a dignified living. The framework identifies deficiencies, vulnerabilities or missing parts as well as the strengths and successes within livelihoods. Few studies involving informal recyclers have adopted the sustainable livelihoods framework, to point out the fragilities in their everyday life experiences (CHINTAN, 2011; Gutberlet et al., 2009; Parizeau, 2015).

#### 3. Methodology and research epistemology

#### 3.1. Study area

The empirical study was conducted in Ulaanbaatar city, specifically in the extensive informal neighborhoods, where residents live in traditional felt tents, called *Ger* (see Fig. 1).

Approximately 60% of the total population of Ulaanbaatar lives in the rapidly expanding Ger area. The map differentiates between the central, the mid-tier and the fringe Ger. The fringe and mid-tier Ger districts are informal settlements, with no connections to the heating system and without regular waste collection service and disposal facilities. The central parts are close to the formal city with apartment housing (Terbish, 2015). Informal Ger settlements are very different compared to what is described as 'urban slums' usually situated in large cities in poor countries in the global South, as the Ger "embody a delicate balance of nomadic history and identity with an uncertain cultural, social and economic future" (Terbish and Rawsthorne, 2016). Unlike their urban neighbors that live in apartments and homes built in the formal part of the city, Ger areas still lack adequate services (e.g. waste collection) and infrastructure (e.g. heating supply), despite recent housing and basic infrastructure developments in part of these areas (Byambadorj et al., 2011; Choi, 2014; Uddin et al., 2014a,b).

#### 3.2. Primary data collection methods

This study used a mixed methods approach to collect primary data. A questionnaire was applied, through 'snowballing', to get quantitative baseline information on diverse livelihood facets of the informal recyclers, including on their income and health status. Additionally, some qualitative tools were used to complement the data set, including focus group discussions, key informant interviews and participant observation. These methods helped us validate the scenarios gathered from the Download English Version:

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