Why an Integrated Approach?

- Development interventions by government, I/NGOs, and development partners in slums and low income communities (LICs) often address issues in isolation.
- This has resulted in improvements of one challenge while often, unknowingly, making other aspects of life worse.
- A major contributing factor appears to be the inability to address the interrelated problems being faced by the slum dwellers simultaneously.

In Bangladesh, a significant portion of the city dwellers live in slums and LICs. In the six major cities of the country (Dhaka, Chittagong, Khulna, Rajshahi, Sylhet and Barisal), slum population accounts for about 35% of the total population. Between 1996 and 2005, the total population living in slums of Dhaka more than doubled; Dhaka city alone is estimated to have between 3,500 to 4,000 slums of different sizes (Rahman, 2013).

Although there have been significant interventions by both government and NGOs to improve access to basic facilities in slums, most of these have limited focus. The Local Government Institutions (LGIs) are primarily responsible for delivery and management of basic services in slums/LICs, however there is no guideline or approach for systematic development of slums/LICs, and no “authority” is taking the responsibility of guiding and coordinating development interventions in slums/LICs.

Challenges

The slums/LICs are characterized by poor housing, water shortages, poor sanitation, inadequate drainage and waste management facilities, inadequate electricity supply, unplanned/poor construction, inadequate access and indoor air pollution (Ali et al., 2016). Furthermore they often suffer from frequent natural and human-made disasters such as flooding, water logging, fires, etc.

Slum dwellers are also in need of proper healthcare, education, and recreational facilities and experience a higher prevalence of crime compared to non-slum dwellers (Ali et al., 2016; WB, 2007)

POLICY MESSAGES:

- Absence of clear slum development policy and unresolved land tenure issues should not deter intervention for sustainable development of slums/LICs.
- Water supply-sanitation, drainage and SWM issues are interrelated; the interrelationships need to be understood clearly before designing development interventions.
- Energy, fuel and fire safety need to be addressed in an integrated manner to ensure the desired positive outcome.
- Along with basic facilities, improved housing, access, healthcare, education and recreational facilities would greatly enhance quality of life in slums/LICs.

This policy brief presents the foundations for an integrated multi-stakeholder approach to improve the facilities and services in slums and LICs. The “integrated approach” involves identifying and addressing the key “interrelated challenges” simultaneously and in a systematic manner.
Challenges are Interrelated

Many of the challenges slums and LICs experience are interrelated. Thus, while making improvements is well intentioned, it often comes at an unforeseen cost. For example, improvement of water supply often leads to exacerbation of the drainage problem, as seen in Vashantek slum in Dhaka (Oxfam-ITN, 2015). Expansion of sanitation facilities without proper fecal sludge management (FSM) does not bring about projected health and environmental benefits. Sanitation facilities without special provisions for women, people with disability, old and very young deprive these groups from enjoying the benefits of improved sanitation systems, as was reported for four slums in Dhaka (Oxfam-ITN, 2015); 8% families of these four slums reported having a family member with some form of disability.

Lack of suitable sanitation facilities for children and people with disability along with unhygienic latrines were found in Badda (92%) and Vawalbagh (74%) slums.

Poor power supply infrastructure and poor cooking environments often lead to increased fire hazards and indoor air pollution (from cooking), particularly affecting women and young children (Ali et al., 2016). Poor quality housing and narrow roads increase the vulnerability of people living in slums/LICs to natural disasters and fire hazards.

The majority of interventions by government and non-government organizations in slums and LICs appear to focus on water supply, sanitation and hygiene (WASH). Over the years, this has led to a significant bias in slum/LIC interventions. As a result, there appears to be a lack of expertise and experienced human resources for working in other important community development areas such as energy, fuel, indoor air pollution, housing, and roads to name a few.

In Vashantek slum, 96% residents have access to sanitary latrines, but absence of FSM services is causing environmental pollution; over 60% of slum residents are willing to pay for FSM services.

Taking Action: A Proposed “Integrated Approach” for Development of Slums and LICs

Four broad categories of challenges facing slums and LICs have been identified. Each category has a set of interrelated issues and challenges, which need to be addressed systematically and in an integrated manner involving all stakeholders. The four broad categories are:

1. WASH, drainage and solid waste management;
2. Energy, fuel and fire safety;
3. Housing and access; and

Considering the diverse nature of slums and LICs, it is important to identify the issues and challenges in each slum/LIC separately following an inclusive participatory approach. The LGIs (i.e. City Corporations and Paurashavas) should be the custodian of these prioritized lists for all slums/LICs under their jurisdictions, and should coordinate and facilitate the gradual and systematic development of slums/LICs following the “integrated” approach.

The Integrated Approach

The proposed “integrated approach” aims at simultaneously addressing all interrelated issues and challenges being faced by residents of slums and LICs. For each of the four categories, the associated interrelated issues are described below.

WASH, Drainage and Solid Waste Management

The following issues need to be considered holistically when designing interventions in the area of WASH, drainage and SWM:

1. Legal Water Supply and Tariff: Efforts should be made to ensure “legal” water supply to slums/LICs. In this regard, the model that has been successfully implemented by Dhaka WASA may be adopted. Water supply charges/fees should be, at the most, at par with regular water fees charged by the supply authority.

People of Vawalbagh Rail Line slum pay (to water vendors) up to 30 times more for water than what Dhaka WASA charges against legal water connections; the situation is similar in many slums without access to legal water connections.
(2) Number of Users for each Community Water Point: For community water supply, a minimum standard should be set for the maximum number of users for each community water point, and efforts should be made to gradually approach this standard. This standard should also apply to privately owned slums/LICs.

In privately owned Badda slum in Dhaka, up to 30 families share one water point.

(3) Integration of Drainage with Water Supply: Along with water supply, drainage systems of water and sullage should be developed, integrating it with the storm drainage systems of the slum/LIC.

(4) Number of Users for each Community Sanitation Facility: For community sanitation facilities, a standard should be set for the maximum number of users for each community sanitation facility, and efforts should be made to gradually approach this standard. This standard should also apply to privately owned slums/LICs.

(5) Addressing Special Sanitation Needs: Efforts should be made to facilitate installation of separate sanitation facilities for men and women (with menstrual hygiene facilities). The sanitation facilities should have provisions for easy access by people with disabilities, children and the elderly.

(6) Facilitating FSM: The location of sanitation facilities should be easily accessible by fecal sludge desludging tanks/vehicles. Periodic/routine mechanical desludging of pits and septic tanks should be integrated into the design and management of the sanitation facilities.

(7) Wastewater Disposal: If septic tanks are installed, effluent from these tanks should be disposed of in properly designed soakage pits or should be piped away to a suitable place for treatment and disposal.

(8) Wastewater Treatment: In slums with very high population density or with poor soil infiltration capacity, construction of decentralized wastewater treatment systems (DEWATS) should be considered for treatment of liquid waste generated from sanitation facilities.

(9) Solid Waste Management (SWM): Water supply and drainage interventions must be accompanied by development of a SWM system, which will ensure that solid waste does not clog drainage lines.

(10) Training and Awareness: Training and awareness campaigns on health and hygiene, particularly targeting women and children, should be an integral part of interventions in this category of issues.

**Energy, Fuel and Fire Safety**

The following issues are to be considered holistically while designing interventions in the area of energy and fuel:

(1) Legal Power Supply: Efforts should be made to provide legal power connections in slums/LICs in consultation with the appropriate authority.

(2) Safety of Power Lines: Existing power lines should be checked for safety and replaced and/or repaired as required. New power lines should have adequate safety measures against accidents and short-circuiting. This initiative should also apply to privately owned slums/LICs.

(3) Improved Cooking Stoves (ICS): In line with the Government’s initiatives of promoting ICS, the LGIs should work with relevant I/NGOs and development partners in providing and popularizing ICS in slums/ LICs. Where feasible, the LGIs should facilitate use of LNG for cooking in slums/LICs (including privately owned slums/LICs).

(4) Safety Campaign: LGIs, in association with relevant I/NGOs, should organize safety campaigns in slums/LICs on fire safety, indoor air pollution (IAP), and proper use of electrical equipment with expert support from the Bangladesh Fire Service and Civil Defense.

**Housing and Access**

The following activities should be undertaken holistically by LGIs for overall improvement in the slums/LICs.

(1) Guideline/Standard for Low-cost Housing: Guidelines/ standards for construction of low-cost housing in slums/LICs (including privately owned slums) should be developed. Advantage should be taken of the significant work/research already done in this area by relevant experts. The guidelines/standards should

Figure 4: A Poorly built house in Aminbazar LIC.

Figure 5: Cooking in traditional inefficient stove in Kallyanpur slum causes indoor air pollution and increases risk of fire outbreaks.
be developed under the leadership of the Ministry of Local Government Rural Development of Cooperatives (MLGRDC), so that the same guideline/standard could be applied/implemented in all urban centers.

(2) Awareness about Housing Construction: LGIs should organize campaigns for raising awareness regarding construction of houses in slums/LICs following the guidelines/standards developed for this purpose.

(3) Improving Physical Access: LGIs should facilitate construction/expansion/renovation of roads and lanes for ensuring easy access into and out of the slums/LICs (e.g. by fecal sludge desludging equipment/tanks, fire fighting trucks/engines).

(4) Access to Information/Communication: Slum dwellers should also have adequate access to information/communication for improving their quality of life. LGIs should facilitate such access through collaboration with relevant service providers.

Healthcare, Education and Recreational Facilities
Access to quality healthcare and educational facilities as well as recreational facilities (e.g. clubs, parks, playgrounds) is vital for improving the quality of life in slums/LICs. In this context, the following issues/activities should be addressed in a holistic manner.

(1) Schools: LGIs should initiate discussion with the Government and relevant I/NGOs (e.g. BRAC) for establishing schools close to slums/LICs. The LGIs may support these initiatives by identifying appropriate land/space, with easy access, for such schools.

(2) Healthcare Facilities: LGIs should initiate discussion with government and relevant I/NGOs for establishing healthcare centers (with maternal healthcare facilities) such that slum populations have easy access to these facilities.

(3) Recreational Facilities: LGIs in association with CBOs and local leaders should take initiative in ensuring that children living in slums/LICs have access to nearby parks and playgrounds. At the same time, LGIs and I/NGOs working in slums/LICs should promote and support the establishment of small clubs/recreational centers within slums/LICs.

Next Steps: Implementation
The integrated approach has been developed in consultation with all stakeholders including LGIs, development partners, I/NGOs and others. The next step should be to implement this “integrated approach” in selected slums/LICs under the leadership of LGIs. For this purpose, LGIs should identify locations that may be most suitable for piloting the new integrated approach to development, as part of their ongoing or planned development activities. The LGIs should take the responsibility of coordinating activities of different stakeholders (e.g., CBOs, I/NGOs, Development Partners) so that entities with different expertise and interests can work in a coordinated manner addressing all interrelated issues holistically.

It is hoped that the demonstrated impacts of an integrated approach will lead to the formulation of an appropriate slum development policy for sustainable and inclusive development of slums and the LICs.

Further Reading:

Oxfam-ITN (2015), WASH challenges in urban slums in Dhaka city, Report of joint research of Oxfam and International Training Network Center (ITN), Bangladesh University of Engineering and Technology (BUET), Dhaka.


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