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1. PURPOSE

This technical note provides additional information to support water, sanitation and hygiene (WASH) interventions as part of the ongoing COVID-19 response at national and sub-national levels. The note supports both formal and informal WASH institutions (including public and private) to address the water, sanitation and hygiene needs of the most marginalized populations in informal settlements. It promotes partnerships and recognition of all relevant institutions including water and sanitation utilities, municipalities, small-scale and informal service providers as well as deliberate strategies to address the WASH needs of populations in slums and informal urban settlements.

The note acknowledges the need for phased interventions with provision for immediate and intermediate actions that will support WASH response, strengthening systems and resilience to build back better, and increase access to WASH services for all. It complements and aligns with all the existing WASH guidance and other programmatic guidance for COVID-19 response. Reference should be made to these other resources for more detailed information (see section 6 of this note for more resources). This is an interim note that will be updated regularly with evolving evidence and lessons learnt from implementation.

2. INTRODUCTION

The global COVID-19 pandemic is severely impacting approximately 1 billion urban dwellers that live in informal settlements¹. The health and survival of these people are at risk due to the ongoing pandemic, which is exacerbated by high population density, poor quality of housing, insecure residential status and inadequate access to basic services and vital infrastructure such as water, sanitation and hygiene (WASH).

¹ Social Science in Humanitarian Action Platform, *Key Considerations: COVID-19 in Informal Settlements*, 2020. Available at: <https://www.socialscienceinaction.org/resources/key-considerations-covid-19-informal-urban-settlements-march-2020/>

In many cities of low- and medium-income countries, between 30 to 70% of all urban dwellers reside in slums or other forms of informal settlements² that fall outside the city's water and sanitation service coverage areas. The WASH services where available are frequently intermittent, of poor quality, and not affordable in the quantities required for good health.

3. WHY FOCUS ON INFORMAL SETTLEMENTS DURING THE COVID-19 OUTBREAK?

Most of the COVID-19 guidelines are almost impossible to implement in these areas, where overcrowding, housing design and lack of access to water, sanitation and waste management facilities, make any form of physical/social distancing and simple interventions, such as regular washing of hands, extremely difficult.

- In informal urban settlements, most of the population may have existing health conditions (respiratory infections, water-borne diseases, chronic malaria and other vector-borne diseases), aggravated by the harsh living conditions and, increasingly, some life-style diseases associated with poor nutrition and substance abuse. They also have limited access and ability to pay for health care.
- Most households rely on day-to-day work to meet their living costs and do not have any saving or financial buffer to rely on to pay for basic services such as WASH. Balancing the need to control the public health emergency with the economic livelihood impacts on the poor, particularly women and children, will be critical to the success of any intervention strategy, in the response and recovery phases.
- The lack of adequate data and information on informal settlements makes the planning and response to COVID-19 interventions difficult. The current use of citywide data for access to WASH facilities, masks the inequities present.
- The population profile in many informal settlements may not be the same as the rest of the urban agglomeration and inequalities in access to basic water, sanitation and hygiene services also exist among this population. Access to such services can be less than 10% for many of the slum population³.
- Slums and informal settlements may be cut from service provision in the event of quarantine without proper consultations, despite WASH services being essential and basic services, which should not to be discontinued, under any circumstances.

4. GUIDING PRINCIPLES

When addressing the needs of the most vulnerable population in informal settlements, the following guiding principles should be followed:

Understand governance, community dynamics and coordination issues to maximise the impact of interventions

- Unifying and coordinating responses needed to build on inclusive partnerships to enhance effective liaison between government-led coordination and all relevant service providers (formal and informal) including local municipal authorities, water and sanitation utilities, humanitarian and development partners, the private sector, Community Based Organizations (CBOs), women's groups and landlords.
- Giving ownership, by identifying, mobilising and enhancing critical community-level WASH actors is essential. This will mean understanding the complex dynamics that exist including local administrations, trusted leaders, heads of youth groups, faith-based groups, women's groups, landlords' associations and business leaders. Local authorities, utilities and other community-level service providers should be empowered to take leadership in the response.

² Ibid

³ UNESCO World Assessment Programme, *The United Nations world water development report 2019: leaving no one behind*, UNESCO, 2019. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000367306?posInSet=3&queryId=32fe5631-4129-42a8-83f3-c938400c2190>

Gather spatial information in real time to inform WASH interventions

- Mapping inequities: Informal settlements and slums are not homogeneous. Many low-income areas become established on the periphery of cities and are inextricably linked with cities. Understanding the inequities in provision of water, sanitation and hygiene services will be critical in delivering interventions to those most in need. Comprehensive assessment tools are needed to map these inequities and monitor services disruptions⁴.
- Mapping risk factor and health conditions: Efforts should be made to collect spatially referenced information (as much as is needed for decision making). This information should be displayed on such platforms that allow decision makers real-time access. In order to maximise the benefit of WASH services, information on the spread of the disease, its clusters and which communities are affected will enable local authorities and settlement leaders and influencers to take actions.

Address challenges and opportunities of supplying water, sanitation, hygiene and waste management facilities

- Focus interventions on ensuring WASH service continuity with emphasis on meeting the needs of the most vulnerable population through leveraging and cooperation with urban safety net programmes where they exist.
- WASH service provision should take into consideration the special features of informal settlements with local mechanisms put in place to promote and enforce the physical and social distance between users.
- Efforts should be made to ensure that new WASH facilities and services do not constitute or further deteriorate the existing poor environmental sanitation in informal settlements. This can be achieved by promoting appropriate and innovative solutions to take care of additional grey water from increased handwashing and other types of wastes that might be generated.
- Promote inclusive WASH services focusing on meeting the needs of women, girls and persons with disabilities. Safety and accessibility should be given serious consideration to reduce the risks of gender-based violence and encourage usage by women and girls, and persons with disabilities⁵. For example, any new communal sanitation facilities to be provided should incorporate female-friendly design⁶.

5. PROPOSED RECOMMENDED ACTIONS

The immediate and intermediate actions should be focused on supporting provision and scale-up of WASH services to informal urban settlements and slums targeting the most vulnerable and marginalized populations, with special focus on elderly, persons with disabilities, women and children. In addition, efforts should be made to strengthen systems that will support continuity of essential WASH services and product supply chains.

The actions should also align with the overall existing government plans and strategies to:

- prevent and control the transmission of COVID-19
- mitigate socio-economic impacts of the response
- prevent other WASH emergencies, such as water-borne infectious diseases outbreaks

⁴ Some of the tools that could be adopted/adapted for WASH rapid assessment include: UNHCR WASH Rapid Assessment Forms: <https://wash.unhcr.org/download/unhcr-rapid-assessment-wash/>

More information of WASH assessment tools available at: <https://sswm.info/humanitarian-crises/rural-settings/planning-process-tools/preparedness-immediate-response/wash-needs-assessment>

⁵ Refer to the IASC guidance on GBV risk mitigation for the COVID-response. <https://gbvguidelines.org/wp/wp-content/uploads/2020/04/interagency-GBV-risk-mitigation-and-Covid-tipsheet.pdf>

⁶ Refer to the WaterAid, WSUP and UNICEF Female-friendly public and community toilets: a guide for planners and decision makers: <https://washmatters.wateraid.org/publications/female-friendly-public-and-community-toilets-a-guide-for-planners-and-decision-makers>

- build resilience against future outbreaks

5.1 Planning and coordination

As countries and cities are at different stages of responding to COVID-19 pandemic, it's important to have a well-coordinated plan that will address the immediate and future needs of the affected population. This should be done in close collaboration with all relevant stakeholders. The response to the COVID-19 pandemic is multisectoral and multi-stakeholder. All WASH plans and actions for informal settlements should be fully integrated in the national COVID-19 plan and coordination mechanism set up by government, World Health Organization (WHO) and Ministry of Health. Regarding slums and informal settlements, the following immediate actions can be considered;

National level:

- Ensure inclusion of provision of basic WASH services in informal urban settlements and slums in the overall COVID-19 national response plan.

City level:

- Provide technical assistance to City government, municipalities and water and sanitation utilities to develop an inclusive response plan including provision of WASH services to informal urban settlements and coordinate service delivery to ensure that services are extended to the most vulnerable population in urban settings.
- Support development of standard planning and response protocols for informal settlements, based on national and international experiences, starting by identifying and registering contacts (cellphone numbers) of key informants and leaders to ensure their involvement in all WASH planning and decision-making process.
- As part of the city level coordination, ensure that the constitution of the coordination committees has representatives from informal settlements and Community Based Organizations (CBOs) with adequate representation of women, men, and persons with disabilities.
- Identify high-risk spatial clusters based on overcrowding and high habitat density, water and sanitation deficits, lack of health facilities or health data, marginalized and vulnerable groups (homeless, migrants, people with disabilities) and collective sites (nursing homes, transit places, schools).
- For planning purpose, in collaboration with local representatives and CBOs, develop a community-mapping in a georeferenced system of high-risk areas including: socio-economic data per block, WASH infrastructure and service availability and functionality, access to media and internet.
- In collaboration with communities' representatives, utilities/municipalities, Ministry of Health and other partners, support rapid assessment to determine areas and public spaces most likely to be exposed to the disease. This should also include assessment of hygiene knowledge gap and facilities for solid waste management.
- Develop (or use an existing) GIS tool to communicate the above to decision makers and local community-management structures. This information should be compatible or combined with relevant data on hotspots for COVID-19 confirmed or suspected cases in urban areas.
- Develop community-based monitoring and reporting systems to provide feedback on functionality and adequacy of WASH services. Mechanisms for real-time monitoring and service interruption using digital platforms can be put in place to strengthen community's voice, increase transparency and accountability. For example, the large youth population in urban areas especially those living in slums can be explored by engaging them as 'U-Reporters' to monitor WASH services in informal settlements⁷.

5.2. Hygiene programming to prevent human to human transmission

In designing and adapting communication strategies and campaigns, the diversity of informal urban settlements communities requires careful consideration. Many of the slum communities are not homogeneous, with people of different ethnicity, faiths and social customs, within the same municipality.

⁷ More information on U Report available at: <https://www.unicefusa.org/stories/unicefs-u-report-playing-key-role-global-covid-19-response/37142>

Due to likely detrimental impacts of the crisis on the livelihood of households in informal settlements, communities' barriers to safe hygiene practices need to be understood and addressed appropriately for adaptation and sustainability of behaviour change. This can be done as part of the rapid assessment of WASH situation in informal settlement to provide adequate information for developing appropriate messages.

Existing WASH structures (such as WASH committees, community hygiene promoters, sanitation workers, water caretakers) can be used to disseminate preventive messages. This can be achieved by building their capacity on COVID-19 preventive hygiene practices. In addition, local formal and informal service providers and CBOs can be mobilized and empowered to support hygiene promotion activities, ideally through digital systems where possible, or organizing small sessions to avoid gathering of too many people.

5.2.1. Immediate actions

- Identify and support local actors' initiatives aiming to promote hand hygiene, with the provision of handwashing facilities and soap in public places and institutions. Building on existing initiatives in informal settlements assures coherence with community's coping strategies.
- Identify and train all established groups in informal settlement on basic infection prevention and control (IPC) in coordination with Ministry of Health, municipalities and other relevant agencies. These groups might include residents' associations, vendors' associations, cultural associations, users' committees, women's associations, faith-based groups and youth leaders. Special considerations should be given to the engagement of women and youths to support the hygiene promotion activities.
- In consultation with informal settlements and slums representatives, identify key locations for immediate installation of handwashing stations and develop mechanisms for operating these facilities which could be located strategically within the settlements at:
 - ✓ Entrance and exit thoroughfares
 - ✓ Transportation hubs and all gathering points
 - ✓ Key community facilities, including health centres
 - ✓ All water and sanitation facilities
 - ✓ Schools and training centres
 - ✓ Places of worship
 - ✓ Markets
 - ✓ Health care facilities
 - ✓ Isolation centres

Part of the mechanisms for operation and management of the handwashing facilities could include working with the local CBOs to empower and assign the youths and other residents of the informal settlements for these tasks with special arrangements made for remuneration (either in kind or cash). These locations can also be used for hygiene promotion activities by the trained community representatives.

5.2.2 Intermediate actions

- Engage local private sector actors who are the major service providers in informal settlements to promote appropriate local design and production of handwashing stations and sustained access to soap (either in bars or liquid, or hand sanitizers).
- Promote public-private-partnership with multinational companies for support in provision of soap and other hygiene materials to the most vulnerable populations in informal settlements. This could be through contribution

in kind or other mechanisms that will support access to regular supply of hygiene materials to informal settlements.

5.3. Water, sanitation and hygiene services and Infection prevention and control (IPC) in informal settlements

Following the identification of high-risk areas, mapping of infrastructures and services and identifying areas of low-service provision, provide necessary water and sanitation infrastructures and services to effectively contribute to reducing both the COVID-19 risks and secondary impacts of the control measures. This could be done in phases where needed:

5.3.1. Immediate actions

Secure access to water and sanitation services:

- Through the identified and mapped formal and informal service providers in informal settlements, support timely response to septic tank and toilet pit emptying; solid waste disposal and management; leakages in sewerage system; and extension of services to areas with no sanitation facilities.
- Support strategies to restore or maintain access to piped water for defaulting consumers. This might include advocacy and sensitization of water utilities to ban cutting off water supply services, immediate reconnection of all households previously disconnected, reduction in water tariff to consumers in informal settlements to encourage effective hand hygiene and other hygiene practices.
- Mitigate any economic emergency through cash transfers for access to WASH services by the poorest and most vulnerable households with focus on cash transfers for female headed households and persons with disabilities or subsidizing utilities directly for continuity of service provision.
- Engage and empower small private vendors providing WASH services in informal settlements to ensure service continuity and support provision of personal protective equipment where needed for safe delivery of services. This might include grants, materials or any other forms of incentives that will boost the operations of the small private vendors in these areas.
- Water utilities and other service providers should put mechanisms in place to address peak demands, allowing sufficient storage for multiple use and distancing between users as appropriate. Additional emergency storage might be needed for this purpose, with locations chosen in collaboration with community representatives from various groups and settlement blocks.
- Set up a rapid response specialist team within the local authority/utility to make any critical emergency repairs to WASH infrastructure for continuity of services, in collaboration with local expertise from the area. Mechanisms should be put in place for constant reviewing of existing infrastructure, identify piped sections with most water losses and provide quick repairs/ where possible to restore services or reduce intermittent and unreliable supplies to informal settlements.
- Supporting emergency alternative approaches to water supply such as water trucking to areas with no piped connection and public places with special attention to vulnerable groups and homeless people. Close coordination with the water informal sector is required to avoid conflict.
- On the basis of rapid assessment results, where toilets sharing is high in COVID-19 affected areas, consider the installation of temporary sanitation facilities (including regular desludging and cleaning services), to reduce sharing, as practicable.
- As part of the overall efforts of ensuring safe delivery of services, identified sanitation workers, both formal and informal, must be protected, especially those working with untreated faecal sludge or solid waste.

WASH assistance in informal settlements with clusters of cases:

Cluster of COVID-19 cases may be identified by surveillance systems, increased incidence of acute respiratory infections associated with unusual mortality or increased mortality in persons with underlying health conditions which may suggest a high transmission of the disease in some informal settlements overlooked by surveillance systems. Some immediate actions for consideration should include;

- Provide IPC kits (soap/hand-sanitizer, handwashing facility items, information leaflet, medical or cloth masks based on local Health authority policy) to all vulnerable households where we have well delimited micro-cluster of cases either through in-kind distribution, or cash-transfer/social safety net where market is working.
- Informal settlements are often characterized by unclear external and internal boundaries, which make it difficult to select beneficiaries and areas for distribution of supplies. The distribution of supplies or cash transfer should be based on adequate knowledge of the local administrative structure and geographical boundaries of the settlements. This will require working closely with local chiefs, women representatives, other CBOs and local urban planners to ensure that the right beneficiaries are identified and supported.

WASH assistance to households and isolation centres in informal settlements:

Where COVID-19 cases are still limited, and sick persons can be tracked to reduce potential spread of the disease in high population density areas such as informal settlements, consider WASH and infection prevention and control activities to support households in self-isolation at home or for isolation centres. This support should be provided under the leadership of local health authorities and upon agreement and engagement of local representatives in accordance with national guidelines;

- Identify and train community volunteers (community health workers, social workers, CBOs personnel) at the local level to enable them to provide targeted infection prevention and control assistance to suspected and confirmed COVID-19 cases, including:
 - where possible, support households in establishing self-isolation procedure at home.
 - demonstrate how to clean and disinfect often-touched surfaces.
 - provide at least (in-kind or cash approach) soap, bucket with tap (if no running water) or hand-sanitizers, commercial detergent or bleach, IEC materials.
 - where relevant, under local health orientations and in coordination with other partners, facilitate access to adequate cloth masks to the families with instructions on use, washing and safe disposal.
- The activities should build on adequate knowledge of social norms, rules and beliefs within informal settlements to avoid conflict and stigma that is often associated with households with suspected cases of COVID-19. Local institutions such as women groups, youths, CBOs and recognized community health workers within the informal settlements should be engaged for identification of at-risk households such as elderly, persons with underlying health conditions, large families with poor living conditions, and persons with disabilities for prioritized interventions.
- As housing is often precarious and overcrowded in urban informal settlements, suspected cases with mild symptoms not requiring hospitalization may be referred to a community isolation space in collaboration with community representatives and local health authorities. Where this is the case, support provision of adequate safe water, sanitation services, hand washing commodities and IPC materials as well as training of isolation centre's personnel.

Considerations for WASH in functioning schools of informal settlements:

Schools in informal settlements are often outside national public education systems, which implies they are most probably not recipient of any types of government-led support.

- Target the largest schools (both private and public) in key vulnerable areas and support their personnel in the application of safe schools' protocols, including the provision of hand washing facilities, soap and cleaning materials.
- Provide adequate and functional WASH facilities where needed, including, but not limited to, increasing onsite water storage capacity (to deal with unreliable water distribution) to enable frequent handwashing of students and teachers with additional tanks where service interruptions are frequent.

5.3.2. Intermediate actions

Improve access to water, sanitation and hygiene supplies and services:

- Consider developing partnerships with local private actors, government or NGOs through social safety net programmes to implement cash-based approach to secure access to water and sanitation services and hygiene supplies for most vulnerable groups of slums and informal settlements, with particular attention to meeting the needs of girls, women and persons with disabilities.
- Develop partnerships with the private sector including small businesses and retail suppliers to strengthen supply chain for essential WASH products to ensure continuity of services and availability of products in informal settlements.
- Extend water service lines from adjacent areas by service providers (water utilities) or support the extension of small-scale providers' services to areas of low-service provision.
- Consider the provision of low-cost networked water supply and sanitation systems (e.g., overhead pipes and conduits, low-cost sewerage and combined drainage-greywater disposal)
- Based on the detailed assessment of water supply networks within the informal settlements and in consultation with the residents, increase per capita daily water supply to account for the additional needs during this emergency period. This will require supporting water utilities to increase their capacities to meet up with the additional demand as well as financial support to the residents through cash-based programming.
- Increase municipal solid waste and faecal waste management services to informal settlements and where this is not feasible, identify and empower private small service providers (formal and informal) to provide these services, supported by provision of protective equipment for the workers.
- Based on detailed assessment and in collaboration with water and sanitation utilities, municipalities, local chiefs, landlords' association, women groups, support planning and implementation of more holistic and inclusive sanitation services in the settlements. This might require provision of more communal and shared toilet facilities with adequate arrangements made for sustained operation and maintenance.

5.4. Sector level support on continuity of essential WASH services in informal settlements

- Support city government, municipalities, water and sanitation utilities to ensure business continuity and quality of water and sanitation services including sewerage, pits/septic tanks emptying and solid waste management, in slums and informal settlements and other densely populated areas⁸. Focus should be on avoiding deterioration or collapse of essential WASH services as a secondary impact of COVID-19⁹.
- Sustain advocacy to national and city governments to provide additional financial support to water and sanitation utilities to meet up with the increased demand and sustain their operations during this emergency period. Arrangements can also be made to reduce the debt burden on utilities through debt rescheduling, relief and cancellation to ensure continuity of services and effective operation and maintenance. Support should also be

⁸ Example of what water and sanitation utilities can do to prepare for, respond to and recover from a pandemic is available at:

https://www.epa.gov/sites/production/files/2020-03/documents/pandemic_iac_final_032620_508_fillable.pdf

⁹ Example of business continuity planning for water utilities available at:

<https://www.watersac.org/system/files/Business%20Continuity%20Planning%20for%20Water%20Utilities.pdf>

extended to small and informal WASH service providers that often fill the gaps in service provision in informal settlement to ensure continuity and quality of services.

- At country, regional and global levels, support peer to peer learning, virtual technical exchange and capacity support among water and sanitation utilities as part of the efforts of minimizing the impact of COVID-19 on WASH services, using the existing utility networks such as the International Water Association (IWA), Regional Water Associations (such as African Water Association- AfWA), Global Water Operators' Partnership Alliance (GWOPA) etc. UN HABITAT and GWOPA have already launched a campaign for water and sanitation utilities to share their experiences on COVID-19 which can be replicated by other networks¹⁰. The Stockholm International Water Institute (SIWI), UNICEF and UNDP have documented some WASH sector experiences on COVID-19 response in Latin America and the Caribbean with focus on reaching the most vulnerable urban populations. These experiences could be adopted/adapted by other countries or regions to extend WASH services to informal urban settlements¹¹. In addition, utilities can be supported in strengthening data collection systems through utility benchmarking platforms such as World Bank's IBNET¹².
- Support specialized and recognized institutions (such as network of NGOs¹³, financial institutions, development partners etc.) working in informal settlements to strengthen their operations on data and evidence generation that could be used for sustained advocacy, planning and provision of WASH services as part of the overall masterplan for city development.
- Those who are front-line service providers must be protected at all costs as continuity of services is critical. Records of such providers, often informal in urban, low income settings, and their health status should be maintained. Efforts must be made to protect the health of key workers both in the formal and informal sector (public and private utilities) including operators of treatment plants, and small-scale water, sanitation and solid waste management providers. They must be provided with adequate personal protective equipment (PPE) based on national or local recommendations.

6. SOME ADDITIONAL RESOURCES

- IASC Interim guidance on public health and social measures for COVID-19 in low capacity and humanitarian settings [Link]
- WHO guidance on COVID-19 preparedness in cities and urban settings [Link]
- WHO/UNICEF Interim guidance on WASH and waste management for COVID-19 [Link]
- UN Habitat COVID-19 response plan [Link]
- World Bank resources on WASH and COVID-19 [Link]
- UNICEF WASH guidance on COVID-19 preparedness and response [Link]
- Science in Humanitarian Action Platform (SSHAP) key-considerations-covid-19-informal-urban-settlements (March 2020) [link]
- WHO Strategic Preparedness and Response Plan (SPRP) [Link]
- UNICEF COVID-19 resources for practitioners [Link]
- WaterAid, WSUP and UNICEF Female-friendly public and community toilets: a guide for planners and decision makers [Link]
- IASC guidance on GBV risk mitigation for the COVID-response [Link]
- Global WASH Cluster COVID-19 resources [Link]
- UNICEF Guidance on hygiene programming in the context of COVID-19 [Link]
- GIZ-UNICEF Hand washing facilities compendium [Link]
- WHO Interim recommendations on hand hygiene against transmission of COVID-19 [Link]
- UNICEF COVID-19 guidance note on considerations for persons with disabilities [Link]

¹⁰ More information available at: https://mcusercontent.com/967c04a5461df9143f3520751/files/84d0581c-b2bf-48b7-8706-b57e7c5b965e/GWOPA_UilitiesFightCOVID.pdf

¹¹ More details available at: <https://www.siwi.org/publications/the-water-sanitation-and-hygiene-sector-and-its-response-to-covid-19-initiatives-in-latin-america-and-the-caribbean/>

¹² More information available at: <https://www.ib-net.org/>

¹³ Example of network of CBOs specialized in informal settlements is Shack/Slum Dwellers International (SDI) with presence in 32 countries and hundreds of cities and towns across Africa, Asia, Latin America. More information available at: <https://knowyourcity.info/who-is-sdi/about-us/>

- UNICEF Factsheet on Handwashing stations and supplies for the COVID-19 response [[Link](#)]
- WASH and infection prevention and control measures in schools [[Link](#)]
- Monitoring and mitigating the secondary impacts of COVID-19 on WASH services [[Link](#)]
- Mitigating the impacts of COVID-19 on menstrual health and hygiene [[Link](#)]

FOR MORE INFORMATION

Kelly Ann Naylor | Associate Director Water, Sanitation and Hygiene | New York UNICEF | kanaylor@unicef.org

Graham Alabaster | Head of Geneva Office (OIC) | Office of the Executive Director UN Habitat, Geneva, Switzerland | graham.alabaster@un.org