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Recovering back better: building urban economic resilience during and after COVID-19 and Review of the implementation of the programmes of work 2020 and 2021:

Land administration and management

COVID-19 Recovery Action Plan for Informal Settlements in the ECE Region

Note by the Bureau of the Working Party

Summary

In response to the COVID-19 pandemic, the secretariat of the Working Party on Land Administration in cooperation with other ECE sub-programmes and other UN agencies worked on the draft "COVID-19 Recovery Action Plan for Informal Settlements in the ECE Region". This document contains the full publication and the official document ECE/HBP/2021/3 contains the Executive Summary, and sections on guiding principles and structure of the Recovery Action Plan, goals and targets for each policy area and final considerations.

The Working Party agreed on the draft "COVID-19 Recovery Action Plan for Informal Settlements in the ECE Region" at its Twelfth Session on 31 May 2021 and requested the Bureau to incorporate and address the additional comments received during and immediately after the Session until 30 June 2021. This document reflects those comments received.

The Committee will be invited to endorse the "COVID-19 Recovery Action Plan for Informal Settlements in the ECE Region".

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Executive Summary

In the UNECE region there are approximately 50 million people living in informal settlements¹, with a large percentage of them in Southern and Eastern subregions. These settlements typically have dense populations, limited services, including water supply and sanitation, inadequate transport, unregistered residents, inadequate housing with insecure tenure, and unregistered land rights. Residents have generally low incomes and often have few resources, precarious employment, limited digital connectivity, and include many of society's most vulnerable inhabitants. Overcrowding and housing conditions in informal settlements pose particular challenges to States to ensure the protection of their residents from the pandemic. In addition, residents of marginalized communities are often inadequately included in public vaccination campaigns and show frequently greater hesitancy to get vaccinated. The economic impact of the pandemic has in particularly hit their residents and further increased the many other challenges in their day to day lives.

As recently noted in a report "the pandemic has not only created new challenges, but reinforced the pre-existing obstacles to realizing the SDGs - structural inequalities, socio-economic gaps, and systemic challenges and risks and a lack of timely fundamental data and enabling technologies to measure and monitor what is happening where, when, and how." The measures proposed in this COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region (in short: Recovery Action Plan) are dealing with both – the new challenges, created by COVID-19, and the pre-existing ones.

Addressing the specific challenges created by the COVID-19 pandemic within informal settlements is urgently needed, while also addressing the achievement of the Sustainable Development Goals (SDGs). This *Recovery Action Plan*, targeted at national and local governments in the ECE region, provides an extensive list of goals, targets, and actions that can be advanced by governments, local authorities, residents, community leaders, non-governmental organizations, and other stakeholders to help mitigate and/or prevent the COVID-19 pandemic spread. It is also designed to help build back better to achieve greater resilience against future pandemic risks while simultaneously helping to achieve the Goals of the 2030 Agenda for Sustainable Development, with a particular focus on SDG 11 on sustainable cities and human settlements.

The integration and formalization of these informal communities is a key step in the longer-term resilience building process. A colour coding is used in the Regional Action Plan to visually distinguish different goals: immediate emergency focused goal; short-term emergency related

Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context https://undocs.org/A/73/310/Rev.1

UN-GGIM (2020): COVID-19: Ready to Respond. The Role of the Geospatial Community in Responding to COVID-19; available online from: http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/Covid-19_Ready-to-Respond.pdf

goal; intermediate term goal (blended resilience and emergency focus) or long term (resilience focused) goal.

The Recovery Action Plan refers to the UNECE Guidelines for the formalization of informal constructions,³ the separately prepared Policy Briefs⁴ covering a number of special topics and the Assessment Reports⁵ prepared for the cities of Tirana, Bishkek, Podgorica, and Skopje. It also relies upon principles discussed within the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security,⁶ and the UNECE Policy framework for sustainable real estate markets⁷ as well as the WHO Housing and Health Guidelines.⁸ The Recovery Action Plan is furthermore informed by the obligation of national and local Governments under international human rights law to realize progressively the right to adequate housing for all without discrimination.⁹

The format of this document is built around nine broad Policy Areas, and each of these will begin with a main Goal for that Policy Area. Under each Goal there will be a number of Targets. These are essentially secondary goals, under the main one. Each Target includes a number of individual Actions to help achieve these Targets. The nine Policy Areas are as follows:

Policy Area 1 - Geospatial, land rights, tenure, resource allocation and justice

Policy Area 2 - Involvement of local communities and local action

Policy Area 3 - Basic data needs, telecommunication and information technology

Policy Area 4 - Physical infrastructure, water, sanitation and energy services

Policy Area 5 - Social and infrastructure services

Policy Area 6 - Stay at home recommendations, culture and vulnerable groups

Policy Area 7 - Food, basic consumption & distribution

Policy Area 8 - Environmental concerns, green spaces, recreation and social events

Policy Area 9 - Buildings, construction and land planning

These Policy Areas cover a wide range of key topics related to the pandemic response and the achievement of the SDGs. The primary focus is on how to mitigate and prevent pandemic related harm to the residents of informal communities. The pandemic does not recognize legal or physical boundaries and crosses these borders easily. As such, building the resilience to pandemics within informal settlements also helps the neighboring communities too.

Pandemic prevention, resilience and, mitigation can be accomplished through key actions that local and national governments and communities. To achieve these, good governance and management of land, best use of the built environment, and comprehensive, inclusive, fair and

³ Available online from https://unece.org/housing-and-land-management/publications/guidelinesformalization-informal-constructions

⁴ Available online from: https://unece.org/housing/post-covid-19-recovery

Available online from https://unece.org/housing/post-covid-19-recovery

⁶ Available online from: http://www.fao.org/3/i2801e/i2801e.pdf

Available online from: https://unece.org/housing-and-land-management/publications/policy-framework-sustainable-real-estate-markets-0

Available online from: https://www.who.int/publications/i/item/9789241550376

See article 11 of the International Covenant on Economic, Social and Cultural Rights and relevant reports of the Special Rapporteur on the right to adequate housing on informal settlements and the COVID-19, A/73/310/Rev.1, A/75/148, available online from: https://undocs.org/A/73/310/Rev.1 and http://www.undocs.org/A/75/148

efficient supply of various services are essential. These actions also relate to how we consume and extract natural resources for the built environment, as well as how we engage with nature.

The integration of informal constructions within the economy, formal land markets, legal framework, land planning, and appropriate administrative adaptation will help achieve resilience and the SDGs. Buildings registers and the address register data were among the most useful datasets during the COVID-19 pandemic. For this purpose, it is important for each building to be included in the building register, whether it is registered or not in the cadaster. Finally, successful recovery actions will pay close attention to how best to involve local communities, make logical adjustments in social behaviours in response to a pandemic, and build individual as well as collective resilience in these difficult and unprecedented times.

The Recovery Action Plan for informal settlements and the work at community level should also be envisioned in parallel with other urban and rural community development needs and activities. In rural areas a focus on safe and sustainable agriculture and rural development and diversification of the rural economy should incorporate the concepts discussed herein.

There are several cross-cutting themes throughout the proposed actions. Those are discussed these in more detail within the section cross-cutting themes, and the relevant policy areas. The generalized cross-cutting themes relate to similar actions, considered, and applied across many of the individual Policy Areas and deserve special attention. These cross-cutting themes are very much related to the formalization of informal constructions strategy and more experience may be derived from the UNECE 2019 publication on Guidelines for Formalization of Informal Constructions¹⁰. In fact, the formalization and registration of the informal constructions into a modern cadastre may be the backbone geospatial infrastructure that will be enriched with all other necessary information for building back better these settlements. They are as follows:

- a) Data collection and management: Appropriate decision making relies upon adequate and appropriate reliable data. It is of significant importance to coordinate and plan carefully the data collection phase as to avoid overlapping, gaps, costs, delays etc.
- b) Communication and Promotional Plans: Consistent, accurate, inclusive and timely messaging is critical at every step.
- c) Participation Plans: Effective local engagement, and public willingness is necessary.
- d) Resource allocation and integration: An effective strategy should incorporate integrated solutions.
- e) Economic benefits, local and political awareness and will: Success can be achieved with sustained political and resident support.

The implementation of the Recovery Action Plan may vary greatly from country to country and from one informal settlement to another. It should therefore be based on an assessment of the local needs, on the changing nature of the pandemic, the shifting political/social will, availability of resources, and other factors on a case-by-case basis. The timing of potential interventions will be described flexibly. Priority levels should be balanced between local realities, and careful consideration of costs, benefits, and risks.

This Recovery Action Plan shows that appropriate interventions can simultaneously have health, safety and other socioeconomic benefits. The twin goals of increased pandemic resilience, and

¹⁰ https://unece.org/info/Housing-and-Land-Management/pub/2922

the achievement of the SDGs can be advanced simultaneously. Additionally, a country's disaster preparedness can make all the difference, therefore, greater integration and formalization of the informal communities within the broader formal markets is a critical step in the process of achieving greater pandemic resilience, alongside a more just, equitable, and sustainable future.

INTRODUCTION

Cities face many grave serious threats, with the COVID-19 pandemic being the most immediate one. The achievement of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals will help mitigate or prevent many of these dangers. Their achievement can also advance human society along the path toward a more sustainable, just, and inclusive future. These challenges are especially acute within informal settlements, whose living conditions brings often unnecessary suffering to their residents. Their inhabitants may be stronger exposed to pandemics and environmental risks and their social and economic exclusion may be further entrenched if national, regional and local Governments do not address those challenges swiftly and prudently in close collaboration with their residents. Governments at all levels must remedy the root causes of informality while also confronting the pandemic threat head on, in the journey toward a brighter and sustainable future.

There are an estimated one billion urban dwellers living in informal settlements worldwide, and approximately 50 million in the UNECE region. These settlements have been built outside the formal system of laws and regulations that ensure tenure, legal ownership and safe, resilient structures. The problem is particularly acute in the Southern and Eastern parts of the region, where in some countries the percentage of informal constructions mounts to 20 percent to 30 percent in some urban areas. The problem is particularly acute in the Southern and Eastern parts of the region, where in some countries the percentage of informal constructions mounts to 20 percent to 30 percent in some urban areas.

Informal development is best described as a spectrum of formality¹³. Part of the solution is for policy makers to have a deeper understanding of the nature, types, and socio-economic consequences of various types of informal constructions. The categories of informality can be described by:

- (a) Type and nature title or ownership informality and/or construction or use informality;
- (b) Extent from single dwellings to small estates, and whether these have a significant economic effect;
- (c) Type of building improvements property type such as single-family home, multi-floor apartment building or flat, retail, industrial, office or special purpose building.

UNECE (2019): Guidelines for the formalization of informal constructions. Available online from https://unece.org/housing-and-land-management/publications/guidelines-formalization-informal-constructions

Balkans Sub-regional Stakeholder Workshop: "Post COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region held on 9 December 2020. More information online at: https://unece.org/housing-and-land-management/events/balkans-local-stakeholder-workshop-post-covid-19-recovery-action

UNECE (2009): Self-made cities. Available online from https://unece.org/housing-and-land-management/publications/self-made-cities

Causes of informal development include major political changes coupled with rapid, often uncontrolled urbanization, lack of available and affordable housing, poverty, internal migration, conflicts, marginalization, natural disasters, and cumbersome authorization processes for home modernization and improvement. The list also includes the absence of good practice policies by states, and their failure to adopt pro-growth planning. Other factors include limited affordable housing policies, private-sector weakness, lack of political will to develop land policies facilitating recognition of existing tenure and private property rights to aid transition from

Formalization efforts in countries in the UNECE region

Informal development is not new for the UNECE region; several formalization projects have built experience in countries such as Greece, Italy, Portugal, Spain and Turkey but have not really managed to fully eliminate the phenomenon. However, in the early 1990s the number of informal settlements in the region has increased rapidly, as a result of the political and economic changes in Eastern Europe and former-Soviet countries.

In general, informal settlements are not registered in property registration systems, and, as a consequence, cannot not be mortgaged, formally transferred, inherited, or rented. Moreover, most of these informal settlements are not subject to taxation.

European and Central Asian land reforms and property registration projects were at risk, mainly because such large amount of dead capital is a challenge to national economies and, equally important, the missing information about properties, constructions, property rights, as well as about people who live and work in these settlements, impedes sound decision-making by governments, experts and their residents.

Therefore, many countries were encouraged to initiate formalization projects. These include:

- Privatizing occupied state-owned land to occupants and determining compensation for occupied privately-owned land;
- Providing ownership titles, and registering those in property registration systems, allowing property transactions and mortgages;
- Revising zoning and planning procedures, as well as developing regulations and standards;
 - Regularizing and upgrading informal settlements; and
 - Applying controls and upgrading individual constructions.

International research examined the causes and types of informal housing development in countries such as Albania, Cyprus, Greece, Kosovo/1244 RSC, Kyrgyzstan, Montenegro and the Republic of North Macedonia, and assessed the governments' policies to address this challenge. Despite the good efforts, it was identified that several complex reasons have delayed the formalization progress in some areas, some quite difficult to be addressed. For example, weak private-property rights due to established policies, as well as how environmental standards can be upheld in a fair and equal manner for all and how environmental protection can be included in programmes related to formalization of informal settlements. Based on this assessment, the UNECE Guidelines for the formalization of informal constructions were compiled and published in 2019.

centrally planned to market economies, and finally the failure or reluctance of state agencies to implement measures supporting economic reforms.¹⁴

Densely populated, inadequate or limited basic services, including water supply and sanitation, overcrowded or no public transport, unregistered residents, limited access to health care and educational resources, inadequate housing and insecure tenure, unregistered rights on land, are all common challenges in these informal communities. Living in informal settlements disproportionately affects certain groups. Informal settlements often sit on the periphery of urban areas, lacking access to markets and/or resources. For women, for example, this can heighten barriers they face in accessing livelihood opportunities. Home-based workers also face challenges to entrepreneurial activity (Chant, 2014).

Residents often have few resources, precarious employment, limited digital connectivity, and include many of society's most vulnerable residents, including women, girls, minorities, and people living with disabilities. There are many factors that make hotspots for pandemic spread e.g., restaurants, pubs, clubs, homes for the aged, ski resorts, family celebrations, meat processing factories, shopping centers, informal settlements could also be potential hot spots. Limited demographic, health, and geospatial data in these settlements make it difficult to understand the local dangers or apply any recovery policy in a fast and efficient manner. Informal settlements can become one of the many hot spots of the pandemic, similar like other venues: at work, within family networks etc. The lack of the informal residents' integration with the society, the mistrust that stems from such inequity, and both inadequate communication and information sharing makes these areas great potential sources of pandemic risk and social unrest.

Women in informal settlements spend more time and energy accessing basic services than other urban counterparts, limiting their ability and time to earn through paid employment (UNFPA, 2007). In addition, the prevalence of male-biased land tenure policies and restrictions on women's rights to own property decreases the likelihood of alternative housing options. Poor quality housing, or eviction and homelessness, can also increase the risk of insecurity and sexual violence (Chant, 2013; McIlwaine, 2013).

Persons with disabilities are at greater risk of contracting COVID-19. They may experience barriers to implement basic protection measures such as hand-washing and maintaining physical distancing for several reasons: lack of accessibility of water, sanitation and hygiene (WASH) facilities; a reliance on physical contact to get support; inaccessibility of public health information; or being placed in institutional settings which are often overcrowded and unsanitary. These barriers are exacerbated for those living in informal settlements and/ or affected by humanitarian emergencies. Persons with disabilities are at greater risk of developing more severe health conditions and dying from COVID-19. They have greater health requirements and poorer health outcomes.

Urgent action is needed to enable residents of informal settlements to stay safe and healthy and thus increase resilience to any future pandemic. Formalization projects can help overcome some of these resilience challenges, while also helping to achieve the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) and build back better from the COVID-19 pandemic. Informal settlements are particularly vulnerable to the impact of disease

¹⁴ See UNECE (2019): Guidelines for the formalization of informal constructions

outbreaks by the very nature of how people live within them, their general lack of planning and the common physical inadequacies in service provision, limited access to sanitation and hygiene services, density, energy efficiency, transportation networks, etc. Disease monitoring and containment can be particularly difficult due to the lack of adequate geospatial, and demographic data that could be used to inform appropriate policy response and fully understanding the risks these communities face.

This COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region (further: Regional Action Plan), complemented by the Guidelines for formalization of informal constructions, ¹⁵ addresses the dynamics of the risks faced by the residents of informal settlements. The need for the formalization of informal constructions is critical to the achievement of the Sustainable Development Goals and for pandemic resilience. Integrating these informal constructions into formal land markets provides clear ownership and security of tenure through titling, and through this, greater economic security and flexibility to residents. It can give residents of informal settlements, and in particular women, greater access to credit and mortgages and allow for more efficient use of their limited resources. It helps remove barriers to the deeper inclusion of both informal settlement residents (human capital) and land capital within the formal employment and land markets, improving resilience and growth potential growth to all of society in the process.

Formalization is therefore a tool to increase security of tenure and ownership rights ¹⁶, economic growth, and to also protect and promote human rights. After or in parallel with formalization, urban upgrading and infrastructure upgrading can simultaneously help achieve growth targets, the 2030 Agenda for Sustainable Development with its 17 Sustainable Development Goals and "Building Back Better" from the COVID-19 pandemic. This applies to both formal and informal land markets alike and ensures a more sustainable future for us all.

It is the responsibility of national, regional and local governments to improve living conditions for those marginalized through formalization, risk mitigation in relation to environmental, structural or other risks and support their residents in upgrading their housing, if possible. As this would ensure the realization of the right to adequate housing, including healthy housing for everyone and therefore also protect much better against any future pandemic. First and foremost, it would protect the people living in these communities, but in the end everyone. Formalization of these marginalized communities is also of paramount importance to "Building Back Better".

This publication received input from the members of the UNECE nexus *Sustainable and smart cities for all ages*, including experts on several policy areas, each of whom having contributed to detailed thematic policy briefs that supplement and expand various key topics discussed within this Recovery Action Plan. ¹⁷ In addition, the publication benefited from assessment

Available online from: https://unece.org/housing-and-land-management/publications/guidelinesformalization-informal-constructions

FAO (2012): Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, available online from: http://www.fao.org/3/i2801e/i2801e.pdf

Policy briefs on the topics (on Energy, Nature-based Solutions, Water and Sanitation, Urban Mobility and Innovative Financing) are available online from: https://unece.org/housing/post-covid-19-recovery

reports prepared for four cities on formalization efforts and the situation in selected informal settlements in these cities. 18

I. A PANDEMIC RESILIENT AND SUSTAINABLE VISION OF THE FUTURE

The populations living in informal settlements are somewhat forgotten, invisible and underserved. They yearn to be fully included within society. The potential of these communities can be unlocked with the implementation of proper plans and political will.

In 2015, the United Nations Member States adopted the 2030 Agenda for Sustainable Development. A sustainable future can only be achieved if leaders, professionals, and local residents work together to protect us better from the current and future pandemics and the other impending crises, including climate change, that the global community faces. The 17 Sustainable Development Goals are a framework for action to transform the world to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere. In 2020, marks the "Decade of Action" with only ten years left to achieve the Sustainable Development Goals. In this regard, any effort to recover from the COVID-19 pandemic, needs to contribute to "Building Back Better". By joining efforts, land, labour and capital can be used efficiently, and the rights and dignity of all peoples can be protected so that no one is left behind and as societies evolve throughout the twenty-first century.

Informal settlement residents have much more in common with their formal neighbors than they have differences. The integration of these informal settlements, within the formal markets can help overcome challenges and enrich lives. Some of these challenges and their related goals are obvious. These include how pandemic hot spots can be minimized, sustainability goals achieved, infrastructure upgraded, land titles awarded, tenure made more secure, housing shortages decreased, basic services made more available, water/energy issues abated, etc. Other more subtle problems and solutions may be harder to discern, risks can be minimized, greater harmony achieved, gender inequality lessened, human rights adequately respected, protected and fulfilled, integration and greater efficiency, achieved, and social tensions can be eased, etc.

Building an inclusive, just, and sustainable world for all.

Striving to reach these outcomes requires appropriate geospatial, demographic, gender sensitive, scientific, crowd-sourced, and other information to uncover and understand the problems. ¹⁹ There needs to be the political willingness to proceed in appropriate, just, and inclusive fashion. Effective leadership and communication at all levels can engage the local communities at all levels. It is for these core reasons that this *Recovery Action Plan* was compiled. Mitigation of the risks posed by COVID-19, and increased resilience within informal settlements against future pandemics and natural disasters is the goal. Simultaneously, it is proposed that a formalization program be applied with appropriate registration and titling to secure tenure and

The four Assessment reports for the project cities Tirana, Bishkek, Podgorica and Skopje are available online from: https://unece.org/housing/post-covid-19-recovery

UN-GGIM (2020): COVID-19: Ready to Respond. The Role of the Geospatial Community in Responding to COVID-19, available online from: http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/Covid-19 Ready-to-Respond.pdf

protect the human rights of informal residents. This can provide a pathway toward the greater integration of the informal settlements and residents within every other aspect of society.

II. STRUCTURE AND GUIDING PRINCIPLES

Structure

The structure of this plan identifies Goals, Targets, and Actions key to a successful pandemic response. Appropriate local implementation should and is expected to vary in timing, priority, and scope based on the physical and social realities in their communities

The Recovery Action Plan outlines nine policy areas, each of which contains one goal. These are divided into more concrete targets and, in turn, targets are divided in actions to be taken to reach those targets. Direct mention of time frames was excluded as successful implementation will vary greatly based on socio-cultural context, political/local will, (financial) resources, and the immediacy of the pandemic and other threats faced by an informal community. To note that the emergency/mitigation measures may have to be sustained for long after the emergency period has come to an end. The goals will coexist and are not necessarily in a continuum.

While specific time frames were not presented to allow for greater flexibility at the local level, the general timing ideas are as follows:

- a. Emergency goals (emergency focused)
 - Categorized targets and action points to reach and secure short-term goals; Loosely defined as those to be accomplished in less than 6 months.
- b. Short term goals (emergency related)
 - Categorized targets and action points to reach and secure short-term goals; Loosely defined as those to be accomplished in less than 1 year.
- c. Intermediate term goals (blended resilience and emergency focus)
 - Categorized targets and action points to reach and secure intermediate-term goals. The greater complexity is expected to loosely require 6 to 18 months to accomplish.
- d. Long term goals (resilience focused)

Categorized targets and action points to reach and secure long-term goals. The greater complexity and nature of the solutions are expected to loosely require more than 1 year to accomplish, often 1 to 5 years.

Individual targets/actions are colour coded according to immediacy of its components. A RED circle next to a target/action that has important emergency components; a GOLD circle next to short-term components; a GREEN circle next to those with important intermediate components; and a BLUE circle next to those with important long-term components. Many of the targets and actions will show multiple coloured circles, indicating that important aspects of a given target or goal covers a variety of emergency, short, intermediate and/or long-term components.

Guiding Principles

This Recovery Action Plan incorporates a flexible, comprehensive, and people-centered, gender sensitive approach to developing appropriate COVID-19 pandemic response. It is crucial that any successful plan and implementation program be appropriate and accepted by the local community. The character of the informality, local culture, governmental, legal, scientific, environmental and economic realities need to be balanced. Local community members, officials and other stakeholders must communicate effectively at every stage of the plan to achieve the greatest benefits.

Many United Nations publications cover topics directly related to the guiding principles of this Recovery Action Plan. Of particular note are the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and their Guiding Principles of Responsible Tenure Governance.²⁰

This Recovery Action Plan is also based on the following guiding principles:

(a) Comprehensiveness

There is no group of measures that can achieve complete protection from all pandemics (or by extension, all the myriad of threats that face humanity in the twenty-first century). The optimal outcome, therefore, is a comprehensive and integrative set of policies and behaviors that balance the dangers of a specific pandemic viral threat (COVID-19 in this instance), with the realities of our world. Specifically, we focus on those that are central to informal settlements in the UNECE region, where risks are more acute, information is limited, and oftentimes political will, social will or trust is less. There should be a balance between these realities and culture, competitive societies, the economic engines upon which they depend, science and the limitations in natural resources of the earth. The actual state of affairs, at a given moment (viral specifics, spread risks, number currently infected and hospitalized, death rate, etc.) balanced with the socioenvironmental realities, should drive our decision making at all levels.

Simultaneous cross-sectoral approaches are necessary. One-dimensional solutions may lead to undesired or unexpected results. These often address symptoms of the problem, and can miss the complexity of the blended socio-cultural, socio-economic, and related pure science nature of the myriad of threats facing us and the planet upon which we depend. This Recovery Action Plan should therefore be considered in its entirety. All goals and targets should be understood in the context of a need for targeted national and local policies, logistical solutions, appropriate resource allocation, creative scientific problem solving, a need for good leadership, and socio-cultural adaptability. This is true even if their operational implementation may (and should) differ widely across the globe. We should employ the range of tools at our disposal in differing and locally appropriate

FAO (2012): Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, available online from: http://www.fao.org/3/i2801e/i2801e.pdf

ways to reduce pandemic threat, understanding that no culture, people or informal settlement is the same.

(b) Learning and flexibility

Policies should encourage and embrace best practices and emerging innovations. They should allow for flexibility in approaching various informal settlement challenges. All pandemic threats will raise issues related to culture, society, faith, economics, and governance, and so too should the solutions. The greater the direct connection to how people lives and what they value, the more adaptive will need to be in responding to pandemic or other wide scale threats if interventions are to be successful.

Overregulation should be avoided as it can lead to unintended negative effects. Overregulation can also ignore the necessary procedures for pandemic safety due to a lack of resources and capacity, as well as "social will" and communication, especially in poorer countries. A flexible balanced set of solutions needs to be implemented, adapted to the nature of the pandemic or natural threat and local realities. This relies on appropriate, evidence-based, appropriately toned and consistent communication at all stages.

(c) People-centered and human rights-based approach²¹,²²

It is vital that pandemic response be interlinked with social policies that promote the well-being of society; respect, protect and fulfil human rights; support gender equality and the empowerment of women and girls; and help reduce social inequality that can lead to unrest and scientifically address the true nature of the threat. To consider any world scale health (or even climate change) in narrow technocratic terms is inadequate from both a social and political point of view. To view things narrowly invites opposition and failure despite the best of intentions.

There are large differences across the UNECE region with respect to levels of economic development, legislative and organizational structures, housing and the built environment, informality, leadership, culture, history, faith, resources, and climatic conditions. This is even more true for informal settlements relative to other communities. Informal settlements are at even greater risk, relative to these aforementioned factors, due to generally weaker social cohesion, lower incomes and resources, precarious employment and basic utility access, socio-cultural biases, and usually lesser access to education and necessary basic services. The Recovery Action Plan has universal relevance to the UNECE region, and it is urgent that most goals and targets be properly incorporated into policies at both the national and local levels is urgent. However, to achieve optimal outcomes, local socioeconomic, cultural, institutional, and geographical

²¹ Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context https://www.undocs.org/en/A/73/310/rev.1

²² The Human Rights in Cities Handbook Series: Volume I: The Human Rights-Based Approach to Housing and Slum Upgrading https://unhabitat.org/the-human-rights-in-cities-handbook-series-volume-i-the-human-rights-based-approach-to-housing-and-slum-upgrading

contexts must be blended into any implementers thought processes when designing and implementing locally specific measures of pandemic and threat. At the core must be the effective participation of those living in the informal settlements in the decision making on response measures and policies affecting them, from the stage of policy design, during implementation to evaluation.

III. CROSS CUTTING THEMES

Cross cutting themes permeate this Recovery Action Plan. It is useful to discuss them separately so that they are in the forefront of any implementer's mind. They should be carefully considered throughout all policy areas when determining the appropriate responses and priorities within the context of the local realities, risks, and challenges. The most obvious cross cutting concepts will be dealt with below.

Data collection and management

Throughout all Policy Areas there is a constant theme to collect data, study, analyze and plan. Without the appropriate information it can be difficult to tell the difference between the causes and symptoms of problems. A lack of sufficient and up to date data, including gender disaggregated data, and information may make it impossible to perform a cost/benefit analysis as part of the determination of implementation priorities. Compiling, maintaining, and updating databases, maps, registries, demographics, street addressing all allow for more appropriate planning and responses to various socio-economic challenges and ensure that responses are effective and differentiated, according to the needs of diverse populations. Within informal settlements, information on these factors is to a great extent missing. This greatly hampers the ability of local authorities and stakeholders to make and implement appropriate and timely plans. Therefore, it is extremely important that geospatial and demographic data collection needed for most of the policy areas be coordinated with the formalization project. Information registers should be improved using modern tools and techniques to collect the appropriate missing information. Thus, compiling the appropriate information to support effective governance and developing systems to retain and update this information over time (particularly title registers and cadastral maps and data) can provide subtle but potentially vast benefits to all of society.

The *UN Integrated Geospatial Information Framework (IGIF)*.²³ provides a wide range of strategic pathways, which should be in place, in order to ensure that the data are available at the time they are most needed. The *UN-GGIM Ready to Respond. The Role of the Geospatial Community in Responding to COVID-19*.²⁴ publication can also give useful guidance regarding relevant data management.

See https://ggim.un.org/igif

UN-GGIM (2020): COVID-19: Ready to Respond. The Role of the Geospatial Community in Responding to COVID-19; available online from: http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/Covid-19 Ready-to-Respond.pdf

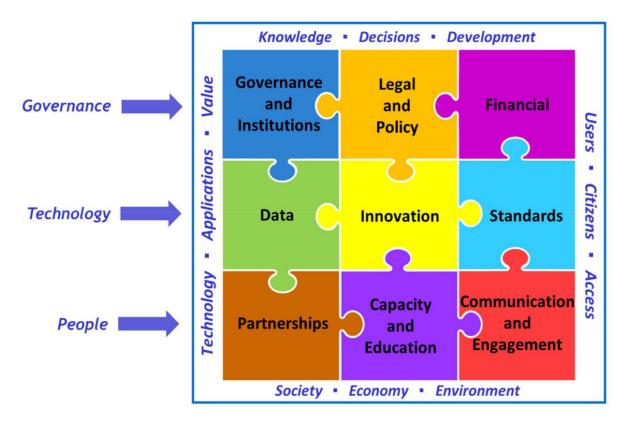


Figure 1 - The Integrated Geospatial Information Framework is anchored by nine strategic pathways and three main areas of influence.²⁵

Additionally, adequate evaluation and monitoring systems should be put in place. These will help ensure responses and resources are allocated as intended, attempted solutions applied to identified issues are evaluated for effectiveness (and adjusted if necessary) and minimizes the potential for corruption and misunderstanding. An appropriate evaluation and monitoring program can help achieve optimal outcomes for many interventions.

Communication and Promotional Plans

Messaging, gathering consensus, disseminating instructions, providing data (for example, general data, health/safety, scientific and policy information, communication of community benefits, transparent registry data which support efficient land markets, etc.), can all be thought of as part of a larger open *communication plan*. All of these are critical aspects discussed throughout the Policy Areas.

The messaging methods, tone, language and communication depth could make the difference between the success or failure of any individual component of the overall Action Plan. Effectively communicating this information, gathering consensus, and providing transparency

Source: UN-GGIM (2018): Integrated Geospatial Information Framework. Part 1: Overarching Strategic Framework, available online from: https://ggim.un.org/meetings/GGIM-committee/8th-Session/documents/Part%201-IGIF-Overarching-Strategic-Framework-24July2018.pdf

are critical components of most socioeconomic actions, and this Recovery Action Plan in particular.

Good communication strategies are also key to achieving the maximum potential benefits of the Recovery Action Plan, as well as the greatest benefits from the formalization, upgrading and integration of informality within the formal markets. Appropriate, socially sensitive, and accurate science-based messaging and the use of inclusive channels of dissemination of the messaging can minimize dissent, help retain "will and positive local perceptions" as pandemic fatigue settles in. It can decrease mistrust, increase compliance with health/safety measures, and speed the way towards the proper implementation of all plans.

Participation Plans

An effective Recovery Action Plan will require acceptance and participation from most of the residents. It will require the support (or at least a lack of obstruction) of most of the local authorities, limited political opposition and involve the professional community. It needs to *balance* social, economic, environmental, cultural, and medical priorities. This balance is likely to change over time as the population gains more information and acceptance of safety measures, which will be somewhat offset by frustration and pandemic fatigue. Gaining and retaining wide participation relies upon the other cross sectoral themes. This is especially true regarding consistent and appropriate messaging that is built upon good data and appropriate science, the appropriate resource allocation, inclusiveness, and a sustained local/political will. Engaging and understanding the needs and priorities of the local informal settlement residents, as well as the broader political realities, is critical to gaining and sustaining sufficient participation for maximum effectiveness.

Resource allocation and integration

The appropriate timing and integration of the Policy Areas should be based on local community engagement, cultural, socioeconomic, political, legal, scientific/medical, and a very realistic analysis of risks, benefits, and available resources. Unrealistic plans, even with the best of intentions, are likely to fail and may even be counterproductive. Resources are never infinite and should be utilized pragmatically where and when appropriate. This will vary greatly based on the local context, and thus priorities should be set with these in mind, to withstand the pandemic threat and achieve the SDGs timely. The achievement of some of the Goals and Targets will also build upon each other, with ever greater socioeconomic, mitigative and resilience benefits when accomplished in tandem. This means that the achievement of some goals will feed off each, accelerating benefits because some aspects are interrelated and begin a process of accelerated growth (exponential growth is not impossible).

Economic benefits, local and political awareness and will

The achievement of many of the Goals and Targets listed in the Policy Areas will have a combination of immediate benefits, as well as longer term health, safety, and economic resilience enhancements. These are often subtle and difficult to ascertain. However, the step-by-step removal of systemic governance, institutional, effectiveness and efficiency barriers can

have a profound positive effect on a community. These barriers are any aspect of law, social convention, governance structure, data insufficiency, lack of equity, discrimination, bias, prejudice, lack of knowledge both among politicians and the society, lack of ethics and other systemic factors that prevent or distort rational choices. These create inefficient or less effective resource allocation (land, labour and capital) and typically reduce economic performance. Wherever possible, these systemic barriers (inefficiency points) should be identified and minimized.

Additionally, the Goals, Targets and Actions herein touch on a wide range of technical issues, to meet the wide challenges informal settlements face. Many of these require a high degree of complexity and or niche expertise. The necessary capacities (technical, institutional, organizing) to carry out these actions may or likely may not already exist. There will likely be a need to train individuals and strengthen the capacities of institutions to meet these specific challenges.

Empowering the people legally, formalization leading to the integration of dead or inefficient land and labour capital (allowing for easier access to credit), achievement of the SDGs, and enhancing effective governance will almost assuredly provide great benefits over time. As such, obtaining, and then retaining, local communities trust and political will is critical to the success of this Recovery Action Plan and to obtaining the previously described potential benefits. How to obtain and retain such will require well informed, nimble and effective leadership at key levels within the local community, local authorities and possibly within some levels of national government too.

Gender equality, diversity and disability

The Recovery Plan for Informal Settings includes as cross-cutting issue a gender, diversity and disability approach to ensure that the specific needs of women and girls, LGBTQ, women and girls with disability - living in informal settings, are taken into account through gender analysis, gender-and-age disaggregation of data, and gender-targeted actions. Gender analysis looks at the impact of emergencies on women, girls, men and boys and verifies that the recovery response meets their distinct needs and priorities. Gender equality is integrated in the situational analysis to ensure that gender-based injustices and inequalities are not exacerbated by interventions and greater equality and justice in gender relations are promoted. Gender analysis is based on sex-disaggregated data and qualitative information with regard to disparities between men and women in each sector. Gender analysis will inform gender-specific interventions targeting women and girls, LGBTQ, women and girls with disability living in informal settings to enable them to participate in and benefit equally from recovery efforts.

IV. POLICY AREAS

Policy Area 1 - Geospatial, land rights, tenure, resource allocation and justice

Goal 1 Informal settlements are formalized and brought into the economy and formal land-markets in a just, efficient, and sustainable manner, allowing for broader socio-economic progress, justice, and the empowerment of the people, especially those in vulnerable and marginalized situations.

Rationale

The right to adequate housing is an internationally recognized human right. Adequate housing refers thereby to more than just a roof over one's head, it means as well housing that ensures security of tenure and prevention of evictions, that housing must be affordable and remain affordable, ensuring the habitability of housing and access to public services. In the developing world about 33 percent of urban dwellers live in informal settlements, and there are more than 50 million informal dwellers in twenty-member states of UNECE.²⁶ Lack of security or tenure, the frequent concentration of inadequate sub-standard housing in informal settlements, and limited or lacking public services burdens the lives of residents of such settlements and increases their vulnerability to COVID-19. At the same time their residents interact with and provide usually vital services to the population of the greater region. While working in the formal and informal job market and more frequently in professions that do not allow for digital work from home, or physical distancing on the job, residents of informal settlement have usually a greater vulnerability to the virus. In the long run not only themselves but as well the entire society is at greater pandemic related health-safety risk. Ensuring protection of residents of informal settlements benefits thus the entire society and should therefore be one element of a comprehensive COVID-19 prevention strategy that also protects the local economy.

First of all, during the COVID-19 pandemic public authorities should avoid any measures that would make the fate of residents of informal settlements worse, in particular refrain from executing any evictions in order to ensure that people can shelter from the virus in their homes, whether live in formal or informal housing.²⁷ Evictions do rather increase the risk of spread of the virus and also contribute to homelessness, making the situation of affected persons rather worse. Often evictions only relocate the problem of informal and substandard housing to another neighboring community. While occasionally relocation of some households living in informally erected housing cannot be avoided, such relocation should only take place after all alternatives to relocation have been explored. If relocation cannot be avoided it should only be implemented in full conformity of international human rights standards as set out in the UN Basic Principles and Guidelines on Development-Based Evictions and Displacement (A/HRC/4/18, Annex I), which set out procedural safeguards and international standards for community participation in the planning and execution of any eviction or relocation. They also underline the need to provide alternative housing or land, and if appropriate as well compensation for loss of property.²⁸

In general, formalization of informal housing complemented by participatory and rights-based in-situ upgrading of informally settlements is the approach that the United Nations, including UNECE, UN-HABITAT and OHCHR endorses, and this approach should underpin all core actions to be implemented under this Action Plan.²⁹

See UNECE (2019): Guidelines for the formalization of informal constructions

See Special rapporteur on the right to adequate housing: COVID-19 Guidance Note, Prohibition of evictions, 28 April 2020, available at: https://www.ohchr.org/Documents/Issues/Housing/SR_housing_COVID-19 guidance evictions.pdf

See as well OHCHR / UN-Habitat (2014): Forced evictions, Fact Sheet No. 25/Rev.1. available at: https://www.ohchr.org/Documents/Publications/FS25.Rev.1.pdf

See UN-Habitat (2017): The Human Rights-Based Approach to Housing and Slum Upgrading, available at: https://unhabitat.org/the-human-rights-in-cities-handbook-series-volume-i-the-human-rights-based-approach-to-housing-and-slum-upgrading; Special Rapporteur on the right to adequate housing, report on the right to housing and informal settlements, A/73/310/Rev.1.

The informal constructions represent "dead capital" (they usually cannot be registered, taxed, transferred, rented, upgraded, or mortgaged). These constructions are not part of the normal economic cycle, which in turn encourages more informal work arrangements. This limited integration of both land and labour markets in the broader economy has pervasive and very costly negative effects on poverty, GDP, risk, real estate values, tax revenue, human rights, and sustainability. Attention should also be paid that to the fact that women are differently affected by the limited integration of land and labour market than men as they are more likely to be employed in the informal sector³⁰ and they have less access to land than men.³¹

It is an urgent issue that these assets be transformed into more "productive" capital, and the cycle of poverty and suffering is broken. An expanded real estate tax basis and the valuation industry upon which efficient markets depend is also within reach with a successful formalization program³² This can be accomplished partially through unleashing an efficient, equitable, and just land and labor market in informal settlements, and partially through other necessary infrastructure upgrades, legal and institutional reforms, and human rights interventions.

COVID-19 and health safety risks are compounded by a general lack of geospatial data, the fragility of the residents' economic realities, and limited demographic information hampering effective responses. Access to credit, secure tenure and superior demographic and geospatial data allow for greater resources for residents, better protection of their rights to housing, more organized and effective health, and disaster response, as well as easier testing and contact tracing.

The COVID-19 crisis requires short term responses to limit pandemic spread and that begins with obtaining good demographic and geospatial data (the first step to formalization) within informal settlements. For this crowdsourcing, volunteered geographic information, volunteer work, etc. should be considered. Existing informal settlements urgently need to be formalized and integrated into the economy, affordably and inclusively, to maximize benefits, better protect the residents from pandemics and natural disasters, and ensure no one is left behind. Title provision should be highly prioritized. Formalization of informal development provides greater resilience to pandemics. Removing the incentives for new informality is a function of consistent land policies, good governance, and well-established institutions and systems.

Flexible and affordable tools to limit the creation of more future informal constructions should accompany the process of formalization. Such tools need to address the root causes of informality in parallel or after the formalization process. They should be structured in a way to encourage people to follow official regulations and laws and build affordable constructions within the existing systems. When this is not possible, social and/or affordable housing programme options should be explored. For example, the state may adopt affordable housing policies and provide state land, services and material to beneficiaries requiring compliance with regulations for these self-made constructions with supervision by the responsible agencies. This should be tested with pilot programs to align demand from residents, and the willingness and

³⁰ For more information, see

 $https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_up\ dated.pdf$

³¹ For more information, see https://www.ohchr.org/Documents/Publications/RealizingWomensRightstoLand.pdf

³² For more information, see sections 16 and 18 of the FAO (2012) Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, available online from: http://www.fao.org/3/i2801e/i2801e.pdf

flexibility of state actors. Done properly, this can help minimize future informality by addressing some of the root causes of existing informal constructions (the state is assisting in some of the costs created by a systemic imbalance in affordable and appropriately located housing by supplying land and service provision). This also limits the possibility of improper incentives to developers of informality who may try to take advantage of formalization procedures.

Many countries have not developed adequate policies, institutions, and capacities to prevent informal development, and by extension limit the harm that is related to insecurity of tenure, eviction and displacement, substandard and unhealthy housing and related higher exposure of their residents to pandemic threats or other disasters. There is a need to improve relevant land-related institutions, as well as provide professional education broadly. Wide scale improvement in institutional function, social inclusivity and protection, security of tenure and in general housing, land and property rights, and the integration of health-safety with geospatial data all assist in protecting informal settlement residents and empower them to improve their lives.

Target RED and GOLD

1.1 The land registries and geospatial databases include informal communities and ownership rights to foster greater socio-economic integration between formal and informal residents over time.

- 1.1.1 *Identify* the current coverage, quality, and scope of the available geospatial data sources and what needs to be accomplished for complete coverage with all necessary information obtained and sustained.
- 1.1.2 Map and include informal constructions in the geospatial database. All residents and their homes can then be included and considered within service provision, human rights protection, disaster preparedness, legal, health-safety, mobility logistics and infrastructure plans for the broader formal and informal communities. Consider crowd sourcing / Volunteered Geographic Information (VGI) and smartphone applications as possible low-cost sources of this data.
- 1.1.3 Effectively engage the local community along with non-governmental organization (NGOs) in the design of any questionnaire, census, survey, etc. and organizations of mapping and addressing programs to prevent that informal settlements' residents perceive these exercises as a threat to their houses and lands. Organize volunteers, team leaders, and provide simple training courses on how to use the mapping methods. A simple open-source application tool and an appropriate base map should be used (e.g., cellphone based, orthophoto, air photo, crowdsourced maps, such as OpenStreetMap, etc.).³³
- 1.1.4 *Supplement* existing demographic information with a wide variety of health statistics for residents (gender, age distributions, disabilities, pre-existing health

³³ For more information, see collection of land tools on mapping tenures in informal settlements by the Global Land Tool Network (GLTN): Access to Land and Tenure Security, available online from: https://gltn.net/access-to-land-and-tenure-security/#

conditions, urban density, health care access, etc.) as well as data for measuring housing conditions that affect health, such as insulation, heating, indoor and outdoor air-quality, safety and quality of drinking water safety ³⁴ for better planning and resource allocation. For urban upgrading programmes, additional data should be collected on housing affordability, access to water sanitation, access to health care, schooling, public transport etc.

1.1.5 *Make transparent and accessible, affordable and easy to manage* all geospatial and related socio-demographic information such that government, professionals, the business community, stakeholders, and inhabitants alike can make better informed decisions.

Target RED and GOLD and GREEN and BLUE circles

1.2 *Informal constructions are formalized* in a fair, efficient, transparent, and inclusive manner, empowering residents, supporting social and economic inclusivity and better pandemic responses.³⁵

- 1.2.1 *Identify* the extent of informal / unregistered constructions / parcels and the current weaknesses the legal and regulatory framework in terms of coverage, quality, and sustainability of registration system, tenure types, cadaster, and legal structure for the formal and informal markets.
- 1.2.2 *Concurrently build* political will for dealing with formalization and gather community information and support. Involve local experts, professionals, and community leaders.
- 1.2.3 Analyze the existing informality, classify the informal constructions, understand the causes and their effects on transportation networks and perform a cost benefit study to decide what scope, and strategy process for formalization intervention is most appropriate.
- 1.2.4 *Develop* a formalization strategy and communication plan. Evictions should be prohibited unless they cannot be avoided, an Eviction Impact Assessment³⁶ has been conducted and an appropriate, inclusive and human rights-based resettlement plan is already in place that is in conformity with the UN Basic

³⁴ See WHO (2018): Housing and Health Guidelines, available online from: https://www.who.int/publications/i/item/9789241550376

³⁵ For more information see UNECE (2019) Guidelines for the formalization of informal constructions, available online from: https://unece.org/housing-and-land-management/publications/guidelines-formalization-informalconstructions

³⁶ For more information, see UN-Habitat and OHCHR (UNHRP) (2014): Assessing the Impact of Eviction: Handbook. Available online from: https://unhabitat.org/assessing-the-impact-of-eviction-handbook and UN-Habitat (2011): Losing your Home, Assessing the impact of eviction, available online from: https://unhabitat.org/losing-your-home-assessing-the-impact-of-eviction.

Principles and Guidelines on Development-based Evictions³⁷. If no alternative to resettlement can be identified, and the resettlement takes place during the COVID19 or a future pandemic emergency period, only evictions and relocations directly aimed at preventing contagion among residents should be allowed. Furthermore, the expected benefits for affected populations and measures to mitigate the risks of contagion should be clearly and publicly outlined.

- 1.2.5 Prepare the framework for formalization (define the following: areas/zones and categories of buildings eligible for formalization as well as the protected areas, necessary legal action, appropriate actions, the registration process, title provision, necessary fees, and determine the institutions that are involved and how). Ensuring that women have equal access to the formalization process.
- 1.2.6 Prepare the legal framework and carry out a fit for purpose formalization and dispute resolution processes (processing documents, mapping all structures, titles and registering, legal actions, collecting fees if appropriate, monitoring the process). Legislation and technology need to be developed in a generally parallel fashion as each relies upon the other.

Target RED and GOLD and GREEN and BLUE circles

1.3 The legal rights and justice systems are efficient and adequate for the needs of informal residents. They should support sustainable development, foster greater efficiency and integration of labour and land markets, defend housing, land and property rights, be responsive to capital markets, be equitable, inclusive, and provide adequate protections for human rights, gender equality and dignity.

- 1.3.1 *Identify* the existing legal structures (laws, policy, procedure, fees, time to process, fairness and case backlog if appropriate). This should be viewed through the lens of human rights and gender equality related issues that apply to informal settlement residents, tenure security, emergency, and health service provision.
- 1.3.2 Determine what legal problems are likely to occur and hinder formalization and the integration of the informal and formal communities. Legal problems related to the lack of the right to adequate housing, gender-based discrimination and health service provision should also be identified, understanding that a pandemic will exacerbate any existing inequality or shortages.
- 1.3.3 Draft a legal strategy to bridge any gaps in the existing legal framework to support title provision and registration, formalization, supplement existing relevant human rights initiatives if any and ensure adequate pandemic related health services, with special regard to the needs of women and girls.

³⁷ See A/HRC/4/18, available online from:

- 1.3.4 *Engage* with local community leaders, health providers, stakeholders, professionals, and local government in workshops and round table discussions to minimize opposition, increase participation, advance human rights and gender equality protections, and invite new ideas.
- 1.3.5 *Build political will* for the legal changes needed to support the new legal strategy. Both economic and health-safety benefits should be emphasized.
- 1.3.6 *Understand and prepare* for legal and criminal challenges in informal communities as it relates to lock downs, partial or full closures, and short term economic/unemployment problems causing spikes in certain types of crimes, and unusually difficult enforcement issues.
- 1.3.7 *Draft, implement and enforce* the new legal procedures.
- 1.3.8 *Provide titles and registration services* to strengthen housing, land and property rights and empower women, men, boys, and girls.³⁸
- 1.3.9 Raise awareness and improve education on the benefits of formalization, such that formalization covers nearly all informality, and all is mapped.
- 1.3.10 *Develop* appropriate procedures that will allow smooth and regular updating of all collected geospatial and demographic data, address all structures, and keep registries current. This will foster economic progress, and integration with the formal markets, in time decreasing social tension as well.
- 1.3.11 Allow for any required structural improvements of the formalized constructions, transport network, green spaces and neighborhoods during and following formalization process, including for the specific needs of women, girls and people living with disabilities. Provide incentives for the residents such that these requirements do not impede near full coverage for formalization to be achieved. Extensive reliance on inspections, permits, fees, long wait times, general mistrust, high construction, or efficiency standards, all could threaten a formalization program severely if not carefully considered and balanced with the goal of complete coverage and integration.
- 1.3.12 Ensure that affordable and accessible judicial complaint mechanisms for residents exist. This could be embedded in a land dispute resolution mechanism and it should entail free legal aid for those residents that are directly and/indirectly affected by the formalization of tenures and who cannot afford private legal counseling. This mechanism should also be in a position to suspend evictions pending complaints from affected individuals.

³⁸ Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context, Raquel Rolnik, https://www.undocs.org/en/A/HRC/25/54

Target GOLD and GREEN and BLUE circles

1.4 The institutions underpinning land, labor and capital economics and health-safety concerns are improved to better address pandemic threats and foster economic growth, fairness, and inclusivity.

Actions

- 1.4.1 *Identify* the private and governmental institutions that form the foundation of the economy and health provision (Institutions described herein relate to; regulations for taxation and professions; health-safety, property rights and tenure security; credit and banking; effective governance and corruption; legal system and justice).
- 1.4.2 *Understand* how these institutions interact and identify barriers and choke points impeding efficient, fair, and affordable provision of these institutional services. Barriers and inefficiencies in their interaction impede empowerment, equitability, economic progress, and by extension human rights and health-safety.
- 1.4.3 *Determine* where institutional impediments are and *prepare a strategy* for addressing some of the barriers impeding economic growth (speeding processes, removing steps, lowering costs, removing corruption, inclusivity), health-safety, and human rights.
- 1.4.4 *Improve resource allocation and overcome* the challenges preventing the removal of specific institutional barriers to health-safety, and economic growth for formal and informal residents alike.

Policy Area 2 - Involvement of Local Communities and Local Action

Goal 2 Local community-based organizations, coordinated with a city-level team, respond to the pandemic in coordination with government ministries, medical, professional, and aid organizations of all kinds.

Rationale

Consistent, rational, transparent, science-based messaging is critical to any appropriate response to a pandemic challenge. Additionally, local government's engagement and recommendations should be based on the best medical science data and their available resources. Local, national, professional, faith-based, and international aid organizations may also offer crucial coordination and resources. All these sources of aid and information need to be coordinated and accepted at the local community level. To this end, local community leaders need to be informed and involved as much as is reasonably possible to achieve the highest compliance with science-based plans designed to protect both formal and informal communities.

There are many ways the local informal settlement residents can become involved in safeguarding their community. Organizing and creating local groups to address specific pandemic related challenges may well be key to limiting viral spread with the least negative impact on local society and the economy upon which they depend. Volunteer groups, trusted by

the residents, small scale home education (pods), local assistance for elderly and at-risk residents, community and faith-based food or medicine sharing programs and other similar groups can help society's most vulnerable. All of this relies upon community engagement, consistent local messaging, based on science, and good coordination between the local community, government, professional society, and global organizations.

The COVID-19 crisis requires short term responses, that require local knowledge, customs and procedures, or sometimes even contradict local customs and/or religious procedures. Therefore, good coordination between stakeholders and residents is crucial. Consistent science-based messaging, and the creation of local groups created supporting women's engagement and leadership to solve specific community-based problems are also recommended. Long-term resilience to pandemics can be enhanced by the creation of plans for empowering specific community-based organizations, plans for alternative small scale (pod) based programs as an alternative to larger public and private institutions (such as education, or larger businesses), and the creation of coordination and communication plans to enhance the speed and efficacy of pandemic responses, whenever they are needed. Strong support from the local community and faith leaders is crucial for successful pandemic response implementation measures. Identification of existing gender inequalities as well as empowerment of women and of their role to the local community to ensure easy access to goods and services for all is important.

Target RED and GOLD circles

2.1 Social and community groups are relied on or formed, if there is no active community group in an informal settlement that could be mobilized, to respond to pandemic related threats, engage residents and address the specific needs of the community.

- 2.1.1 *Identify* the existing trusted community leaders, social and faith-based groups, *understand* their level of community involvement, and their preferred approach to safeguarding the community. *Incorporate* these concepts whenever possible to mesh those with an appropriate community engagement plan that does not jeopardize overall success or create unrest.
- 2.1.2 *Encourage* the creation of local task forces to identify specific community needs, infrastructure shortages and pandemic related issues for further discussion and analysis with medical staff, professionals, and other stakeholders.
- 2.1.3 *Identify, create, or expand* the relevant local authorities and governmental ministries that are critical in pandemic health response, together with community engagement.
- 2.1.4 Develop specific local community led plans to address possible problems and shortages in infrastructure, basic goods, water, energy, food, medicine, elderly care, mental health, addiction problems, combat abuse, personal protective equipment, education pods, utility/infrastructure problems and other community specific issues.

- 2.1.5 Assist and organize the city/town-wide, and community led groups along with faith-based organizations, local authorities, and governmental ministries to address and fund these specific community challenge initiatives.
- 2.1.6 *Coordinate* these local initiatives with the relevant stakeholders where possible.

Target RED, GOLD and GREEN circles

2.2 Local charities, international NGOs, faith-based organizations, and donors coordinate where possible to respond to the pandemic threats and assist in solving community specific challenges.

Actions

- 2.2.1 *Identify* the donors, faith-organizations and charities that have an interest in assisting in local community pandemic response and *engage* them with local authorities, governmental ministries, as well as the appropriate local groups.
- 2.2.2 *Engage* international NGOs, donors, faith-based organizations and other stakeholders with local authorities and governmental ministries, as well as the appropriate local groups for effective aid programs.
- 2.2.3 *Create a plan* to link the variety of NGOs, donors, faith-based organizations, and their resources with the specific local challenges to limit viral spread, mitigate social harm, and protect human rights. The goals of these plans will be based on community specific challenges as well as issues discussed throughout the other policy areas herein, with NGOs and charities as possible funding sources.
- 2.2.4 *Initiate* charity and NGO programs with appropriate oversight protocols and proper targeting of funding and goals to minimize corruption and waste and maximize benefits.

Target RED circle

2.3 Community based information campaigns provide accurate data to informal settlements residents, disseminating such information through the most efficient channels, in a timely manner and in detail appropriate to the specific local challenges brought on by the pandemic threat.

Actions

2.3.1 *Identify* the methods most likely to reach the greatest number of informal settlements residents in specific communities. If specific segments of the population are underserved by typical communication methods, identify a way to overcome this weakness for all critical messaging.

- 2.3.2 *Carry out* the collection of comments, opinion polls, participatory mapping,³⁹ crowd-sourcing tools and use remote conferencing tools to facilitate public participation in design, monitoring and adjusting plans dealing with specific local pandemic challenges and/or other crisis situations.
- 2.3.3 Develop urgent community specific plans to assist in spreading fact based scientific information and understand where governmental and aid agency responses are addressing similar issues. These should include community leaders, community groups, social media, and other sources appropriate to the local communities.
- 2.3.4 Supply information to local communities including consistent messaging in the appropriate languages about key aspects of disease prevention as well as what residents should do if they contract the virus.
- 2.3.5 *Keep societal and political will* strong by a focus on consistent science-based problem solving to assist communities to respond appropriately.
- 2.3.6 *Minimize* unfounded governmental mistrust by making plans direct, consistent, informative and easy to understand.

Policy Area 3 - Basic Data Needs, Telecommunications, and Information Technology

Goal 3 The people are empowered to cope with a pandemic by leveraging and making the relevant information technologies easily available.

Rationale

All sectors of society thrive on having access to reliable source of information and informal settlements are no different. Enhancing access to basic data, telecommunication, information technology, and narrowing the digital divide between the informal communities and formal ones will help empower informal settlements residents, minorities, women, and society's most vulnerable groups. These technologies can be used to help move people out of poverty, increase transparency, supplement education, boost productivity and foster the open sharing of ideas so key to long term prosperity and growth.

Greater access to data also allows for a coordinated response to a pandemic as well as other disasters. It allows for accurate and current information on pandemic risks to be shared in real time with the community. Many different informational, technological, environmental, infrastructure, services and social barriers were identified during COVID-19 pandemic, such as data sharing, data quality, access to services, etc. Creating a risk register with the supporting legal framework, necessary data, technical platforms, and services is a good way to consider and weigh the risks facing society.

Public authority instructions on how to protect the people and how people can protect themselves can be easily spread. Telehealth, teleworking, tele-education, and online education options are

[&]quot;Participatory mapping" means the use of a growing toolbox of techniques that can help members of the public record and share spatial knowledge through the use of participatory methods and cartographic representations, often in a digital form.

all possible and can be effective in lock down periods. These technologies can be crucial to education when schools fully or partially close during high risk periods. In short, effective communication is critical in any coordinated response to a pandemic. It can help hold society together and functioning even under severe pandemic threats. This can help even when lock downs, and extreme social distancing are the only viable methods of controlling viral spread. The more severe the pandemic, the more important information technologies will be in keeping society functioning, people working, and society recovering more rapidly.

The COVID-19 crisis (or any future pandemic) requires short term responses appropriate to control and limit the viral threat. Accurate information on hospitalization, how and where to go, governmental support services, governmental instructions, positivity rates, death rates, where to obtain medical supplies and personal protection equipment (PPE), emergency food sources, quarantine protocols, testing, contact tracing, mental health support, education, tele-services, and even basic human contact can and should be provided by these technologies. Long term resilience to pandemic and disaster threats is enhanced by strengthening the information infrastructure and planning proactively for a wide variety of challenges. Indirect long-term resilience can also be enhanced by using information technologies to empower residents. This can be accomplished over time by removing socio-economic barriers to success, combating bias, prejudice, and discrimination, enhancing transparency and the free exchange of ideas.

Target RED and GOLD circles

3.1 *Mobile phone technologies are utilized to their potential* to fill the information gaps among residents, provide social contact and act as a tool for the dissemination of critical information and governmental instructions.

- 3.1.1 *Survey* the current state of radio and mobile phone technologies (quantity, quality, and coverage).
- 3.1.2 *Identify* if there is adequate radio and internet coverage for this technology to be central to an information dissemination effort, and if there is enough digital literacy among the population (especially the elderly and/or women) and capacity for it to have a much larger role in society and pandemic prevention efforts.
- 3.1.3 *Utilize* radio and smartphones to transmit basic and necessary pandemic medical information (infection rates, death rates, testing sites, hospitalization, and quarantine protocols, contact tracing, health instructions, mapping of communities, understanding mobility patterns for transportation improvement, etc.) and COVID-19 testing results.
- 3.1.4 *Develop* a smartphone application (or several) to provide and gather most critical information, track cases, inform residents who were in contact with infected people and make sure that any language barriers are overcome. This must ensure data privacy regulations are met.
- 3.1.5 *Enhance* radio and smartphone penetration in informal settlements to empower residents and strengthen interconnectivity with local, regional, and worldwide information sources.

- 3.1.6 *Create* a telehealth application to allow for health care providers to service informal communities from anywhere. Additionally, create a similar teleworking application to enhance employment opportunities, and an application to analyze mobility patterns to find dangerous hubs and choke points.
- 3.1.7 *Consider and explore* if radio and tele-education makes sense in these communities and if so, develop simplified cell phone-based education modules when classroom education is unavailable due to COVID-19 related safety concerns. Education is a necessity and pandemic challenges need to be overcome.
- 3.1.8 Reduce the digital divide and enhance laptop penetration in informal settlements to allow women, schoolchildren and students making use of tele-education if resources allow.

Target RED and GOLD and GREEN circles

3.2 *Viable decentralized employment and teleworking options* while expanding internet service affordably in all informal settlements.

Actions

- 3.2.1 *Survey* the current state of internet service technologies (type, quantity, quality, and coverage).
- 3.2.2 *Study* employment patterns in informal communities to determine which sectors will be most heavily impacted and *determine* how this will likely affect residents and their ability to weather a pandemic challenge.
- 3.2.3 Expand e-service provision for government and the ability of teleworking in informal communities, considering both existing community employment as well as potentially expanding new employment opportunities designed specifically with global and local teleworking in mind. An e-portal for government services should be developed where possible, which allows for more efficient processes, decreases corruption, and improves health-safety through less traffic at government offices.
- 3.2.4 *Decentralize* employment opportunities in small scale easily socially distanced occupations in the case of long term or a protracted pandemic where a rethinking of how we live and do business is required.
- 3.2.5 *Examine* workplaces within informal communities and ensure proper social distancing is possible, and when appropriate, allow for some employees to telework to limit viral spread in the workplace.
- 3.2.6 Broaden and improve internet access across informal settlements to enhance the flow of critical information into these communities, empower residents, and increase their ability for successful teleworking. A campaign for providing low cost computers (donors needed here) and smartphones may be needed to increase the viability of teleworking.

Target RED and GOLD circles

3.3 Informal settlements residents have easy access to education and communication from a variety of electronic sources.

Actions

- 3.3.1 *Survey* the available electronic information sources (radio stations, social media, applications, websites, etc.) to determine how appropriate they are for pandemic response.
- 3.3.2 *Determine* what supplementary education and communication sources need to be developed to appropriately address the pandemic medical science, community level organization, and social/local services (social media platforms can be used, radio, smartphone applications, transportation service tracking, websites etc.).
- 3.3.3 Aggressively combat false and fake information of all kinds as misinformation will undermine all other pandemic responses. These problems become more critical as pandemic fatigue sets in, or if the appropriate health-safety measures begin to cause economic and cultural distress. Consistent, logical, and science based messaging and good leadership is key to success in the dissemination of appropriate and reliable information. When combating false narratives top down and bottom up educational messaging by engaging broadly trusted people to communicate the message that makes the truth obvious to the listener.
- 3.3.4 Encourage and develop online and radio platforms that allow for societal, cultural, faith based, health and mental health information, communication, and engagement of the people. Properly designed, these can limit the negative impacts of the pandemic on society.
- 3.3.5 *Provide* online services to combat social isolation, negative mental health, and addiction pandemic effects, and new societal, cultural and relationship platforms. While this may not seem critical, if new ways for inhabitants to be social are not introduced many different types of negative patterns will arise and be difficult to eradicate.
- 3.3.6 *Provide* online alternative school / education platforms suited to the needs of the region. These can be established by NGOs and aid organizations, but local computer, radio and smartphone resources would be needed to access these programs. This is the foundation for the empowerment of society's youth and allows greater flexibility for all in this rapidly changing labor/employment landscape.
- 3.3.7 *Establish* an information center in informal settlements where people can get support and where trained staff is pro-actively approaching inhabitants with a variety of campaigns to use online resources to solve local problems and inform residents of critical information.

Policy Area 4 - Physical Infrastructure, Water, Sanitation, Hygiene and Energy Services

Goal 4 The public physical infrastructure, water and sanitation networks, and energy grids adequately, sustainably, and equitably support the informal communities.

Rationale

The public physical infrastructure and related services are critical to the health, safety, security, economic potential, societal structure, protections for basic human rights (especially society's

most vulnerable groups) and the attainment of a better, sustainable, and more resilient tomorrow. Within this policy area roads, water, sanitation, and energy grids will be primarily discussed but telecommunication, railways and public transportation are also important elements to be incorporated.

The physical road networks within informal settlements are often unplanned, too narrow, complex, and sometimes choked in places with debris and garbage. Often, they do not adequately and sufficiently allow for emergency service access, efficient public transportation usage, and more sustainable mixed modes of transportation (mass transit, bicycles, foot traffic, as well as cars). This is often due to a lack of governance, planning and a limited availability of geographic, demographic, and spatial information in these areas. Enhancements in the physical transportation infrastructure can help to prevent pandemic spread through greater social distancing, faster and easier access to employment, education, health service and shopping areas, increased economic performance of residents (thus increasing their resilience and ability to adapt to challenges), and faster access for emergency responses.

The provision of safe water, sanitation and hygienic conditions is essential for preventing and for protecting human health during all infectious disease outbreaks, including of COVID-19. However, ensuring access to safe water, adequate sanitation and hygiene services is a chronic challenge in many informal settlements, even though water and sanitation are well established human rights.

Often, informal communities are off the water and sanitation grid, or the systems are not maintained and used properly. Water supply challenges include illegal connections with an irregular unpredictable supply, leaks, low pressure, unsafe storage, or even direct supply from unimproved sources. Adequate sanitation is limited where sewerage is unavailable and challenges include the lack of maintenance of septic tanks, the use of shared or private dry pit latrines which are unsanitary and uncovered, or no latrines at all. In these contexts, informal settlements face real challenges to adopt the recommended practices of maintaining hygiene while using common facilities for water and sanitation. They usually cannot afford buying soap for handwashing and disinfectants for cleaning of the waterpoints, toilets and surrounding areas. To mitigate and prevent pandemic related harm to the residents of informal communities all these became critically essential.

Public Service providers should in particular abstain from any service cuts in the provision or water, electricity or fuels for required heating that may be provoked by inability to pay service fees, as many residents in informal settlements have lost their jobs or income during the pandemic. Such measures would be counterproductive to fight the pandemic. If needed utility service provision can be restricted to a particular volume per day depending on the size of the respective households or the entire population of an informal settlement or sections. Cutting fully electricity will exclude fully children from taking part in remote schooling or e-learning that may countries have put in place and further reinforce disadvantages and educational exclusion.

Another area that needs to be addressed within informal settlements is access to affordable and modern energy. This includes issues of energy efficiency, renewable energy (including off-grid solutions), and the very careful consideration of minimum performance standards to be imposed over the long term. All of this should be addressed when considering formalization of such

settlements and their integration with formal markets. This enhances the socio-economic recovery and promotes better residents' health, following the pandemic and contributes to urban resilience. This allows for a step by step process of improvement over time across the energy solution spectrum. It enhances resilience while balancing the resources, the socio-economic realities, political will, and a pace of upgrades that pragmatically fit the community while also combating climate change in a manner that can be sustained.

The COVID-19 crisis requires short-term responses to address key pandemic weaknesses created by inadequate road and water/sanitation/energy utility infrastructure. The provision of safe water, sanitation, and hygienic conditions is essential to protect human health during all infectious disease outbreaks. Ensuring good and consistently applied water, sanitation, and hygiene and waste management practices in communities, homes, schools, work and marketplaces, and health care facilities helps prevent human-to-human transmission of the virus.

Physical transportation paths sufficient for all necessary disaster response, addressing broader health safety issues (water and sanitation), plans for safe access to water for pandemic cleaning protocols, and easily achievable energy efficiency targets are all important and achievable short-term pandemic, human rights and health/safety responses.

Long-term resilience to pandemics can be enhanced by strengthening the physical infrastructure of the transportation networks, provisions for safe water and adequate sanitation, and sustainable energy efficiency adaptation. This is often causally linked to governance, transparency, accountability, and political will. Much of the benefits of these responses are indirect, strengthening and empowering residents over time by making them safer, healthier, more economically viable / flexible, helping achieve more societal balance, especially for women and minorities, and achieving a more equitable balance between formal and informal communities over time. The attainment of these goals increases resilience to pandemics and other disasters as well.

Target Red and GOLD circles

4.1 The physical road and transportation network is adequate and safe for emergency services (paved, necessary width for vehicles, etc.). When possible, it should be flexible enough to safely accommodate differing modes of travel (mass transit, foot traffic, bicycles, etc. as appropriate), sufficient for economic integration with the formal community and can accommodate pandemic related social distancing.

Actions

4.1.1 *Map and identify* the characteristics of the physical road and transportation network (type, adequacy and quality of roads, physical barriers, common modes of travel, time / distance relationships to home/work, take into consideration the specific needs of people living with disabilities, etc.). Global Positioning Systems (GPS) and smartphone technology can be used to gather this type of

- information22F⁴⁰ and socio-cultural barriers should also be examined when they are significant.
- 4.1.2 Determine and map where pandemic threats are highest under normal traffic flow conditions (human and vehicular). This may be at points of congested pedestrian traffic, mass transit, or public spaces. This is the first step to understanding where these mobility flows create greater risk patterns, so urban and transport planning can mitigate the danger.
- 4.1.3 Ensure best routes for evacuation and emergency services can safely and adequately reach the community and remove any physical barriers, debris, waste. Make a collaborative plan for the relocation of market stalls, tents or other, or informal land uses that may inhibit access of emergency services in consultation with the users/owners, in a manner that allows them to continue carrying out their informal business(market stalls, tents, etc.) if this is not the case. In case tents or informal structures provide housing, relocation of such tents or structures should be carried out in compliance with the UN Basic Principles Guidelines on Development-based evictions and displacement.
- 4.1.4 *Produce a fit for purpose plan* to adjust the traffic flow to remove choke points or allow for improved social distancing in their use, add additional pedestrian, cycle, or roadways to allow for more efficient access to work/home, and improve the quality of the lighting/roads/paths/surface types/connectivity with transport hubs, as applicable to their effective use for all types of mobility.
- 4.1.5 Consider the feasibility and applicability of different modes of transport to increase energy efficiency, decrease pollution, incorporate public health/safety, and increase social distancing wherever possible. These create indirect health benefits increasing resilience, as well as direct benefits through better social distancing, and where practical should be put into use. *Promote* those messages that are feasible through an effective media / communication campaign.

Target GOLD and GREEN and BLUE circles

4.2 There is *safe*, *adequate*, *affordable and equitable access to clean water*, *sanitation services*, *and hygienic infrastructure*. Over time, climate resilient water and sanitation measures as well as energy efficiency measures ones should be practically applied once economic feasibility is achieved or donor funds become available to fill resource gaps.

Actions

4.2.1 Study and map the existing water and sanitation service provision and the legislation supporting it. Determine where the systems are centralized/decentralized, adequate, affordable and equitable, the risks they face (including climate change related or natural disaster risks) and where they fail,

See for example https://digitaltransport4africa.org/ or https://junglebus.io/references/

- and why (including potential governance bottlenecks to water and sanitation provision).
- 4.2.2 *Identify* and map what groups (minorities, women, vulnerable groups, etc.) or locations are underserved with water and sanitation services. A potential tool to be used in this context is provided by the Equitable Access Score-card, ⁴¹ a self-assessment methodology developed under the UNECE-WHO Regional Office for Europe Protocol on Water and Health in order to support policy makers in establishing a baseline measure of equity and support development of action plans in order processes to achieve the human right to water and sanitation.
- 4.2.3 Develop a fit for purpose water and sanitation budgeted action plan that balances human rights, design feasibility options, affordability and available upfront and ongoing fee-based funding realities. In terms of ensuring equitable access to water and sanitation, a Guidance Note on the Development of Action Plans⁴² is available under the above mentioned UNECE Protocol on Water and Health. It should also be carefully noted that while COVID-19 is an air and animal borne virus, another pandemic threat may be waterborne. Under that scenario there may be little time to adjust to the threat, investment now may be wise on many levels.
- 4.2.4 *Develop a funding strategy* (government, donors, NGOs etc.) and consider that informal settlement residents are unlikely to be able to afford significant upfront development costs (subsidized and back loaded costs can be explored). Low, subsidized, or no upfront connection fees should be applied.
- 4.2.5 Affordably facilitate clean water and adequate/equitable sanitation services within informal settlements through infrastructure programs and consider innovative low-cost and smaller scale solutions if larger infrastructure projects are not feasible, or funding is not available. If necessary, consider installing temporary sanitation facilities (including regular desludging and cleaning services to reduce sharing of facilities).
- 4.2.6 *Expand* the hygienic infrastructure such that access to public hand washing stations are common and properly located, public high traffic spaces are cleaned and disinfected regularly, and hand washing is required in all high traffic public places and anywhere with likely high viral transmission potential.
- 4.2.7 Provide a consistent science-based communication strategy to ensure that most of the population comply with water, sanitation and hygienic provisions. Water handlining and household storage in informal settlements is a key to ensure water quality. Important considerations include the hygienic maintenance of the sanitation infrastructure and the waste management systems too.
- 4.2.8 *Increase* the frequency of solid waste disposal and management and *Identify* locations for garbage collection and supplement them if necessary.

For more information see https://www.unece.org/index.php?id=34032

⁴² Available online from: https://www.unece.org/index.php?id=44284

4.2.9 *Prohibit* service cuts of water and sanitation provision to residents of informal settlements or ensure at least that every household has based on its size a minimum amount of energy available every day by installing respective meters

Target GOLD and GREEN and BLUE circles

4.3 Adequate energy services are provided to informal settlement residents incorporating affordability, improvement of energy efficiency, (renewable energy where applicable), sustainability and performance standards practical to the specific local context and achievement of the Sustainable Development Goals as a whole. The availability of such energy services creates greater community resilience to pandemic and other threats, greater equity, stronger economic opportunity, and helps safeguard human rights for societies most vulnerable.

- 4.3.1 *Identify* the detailed characteristics of the energy services relied upon by the informal settlement residents. This should include the variety of energy types, efficiency, theft of energy and ways to prevent it, delivery and payment methods, sustainability, and what performance standards are mandated compared to what is typically in use, and what is realistically possible given the socio-economic realities in the specific informal settlement in question.4.3.2 *Prohibit* service cuts of energy provision to residents of informal settlements or ensure at least that every household has based on its size a minimum amount of energy available every day by installing respective meters.
- 4.3.3 Determine what economic, social, and health risks are posed by the current characteristics of the energy services. This should include inadequate indoor and outdoor air quality, inadequate water/waste/sanitation services, energy costs, degradation of green spaces, emissions / greenhouse gases, potential fire hazards, and any other identifiable negative factors.
- 4.3.4 Study the available opportunities for improving energy efficiency and decreased risks. This should include more efficient items, incentives (including front-end subsidies) for energy efficiency, back -end pricing models (long term recovery of front-end costs), flexible payment systems, energy cooperatives, the appropriate balance of multiple energy sources, and modern cooking fuels. The cooperative electrification model deserves special attention.
- 4.3.5 *Employ where appropriate* renewable energy sources, as well as waste to energy, and distributed generation energy options. Distributed generation (especially cleaner options) in informal settlements can be a good early step on the progression up the energy ladder as it avoids some of the major pitfalls likely faced in expanding energy infrastructure.
- 4.3.6 Assess the existing situation of local informal settlements complying with minimum energy performance standards (MEPS, set at the national level) for

buildings as mandated by national legislation, with a view to set up a process to support achieving sustainable energy performance according to the SDGs. The appropriate solutions may vary significantly depending on the local context.

- 4.3.7 Consider the possible application of MEPS in the process of formalization or in a short to medium term after formalization. Achieving MEPS requires financial resources and attracting them may not be possible without proper registration and title to a property. In this interim period, in parallel or after formalization, the necessary steps should be considered by the state and the residents. Assistance should be provided by local and national authorities responsible for energy efficiency improvements and climate change mitigation and adaptation independent of the formalization process. These can take the form of subsidies or fee waivers and such tools should be a win-win for participating parties. The process of formalization should be accompanied with flexible and affordable tools to limit the creation of more future informal constructions by addressing the root causes of informality in parallel or after the formalization process.
- 4.3.8 Develop a specific framework and plan for co-financing of energy efficiency measures, relevant infrastructure changes, and renewable energy solutions (where appropriate). These infrastructure upgrades may need to be applied over a flexible timeframe if they are to be successfully implemented. Together with education and community engagement initiatives on efficient use of heating systems and domestic appliances, this should become a core part of the post COVID-19 recovery strategy in informal settlements, especially considering aspects of critical importance of sustainable energy supply during the pandemic lockdowns and restrictions.

Policy Area 5 – Social and infrastructure services

Goal 5 Essential services are supplied to residents safely and adequately, overcoming the challenges of the pandemic threat.

Rationale

All communities rely on a wide variety of services that are crucial to modern life. They pervade all of society and the economic foundation upon which humanity depends. COVID-19 places unique burdens upon service provision and requires a rethink of how one can safely provide necessary services to the public. This service provision must be modified and expanded, often with little warning, to respond to severe health threats focused on central linkages in daily lives. It must also be able to adjust for the likely possibility of limited compliance, pandemic fatigue, mixed messaging, mistrust, political backlash, and limited resources.

The provision of services can create potential hot spots for viral spread. This is especially true within informal settlements where the limited resources of the residents, dense populations, and limited demographic and geospatial data can make service delivery more unsafe than in formal communities.

The spread of COVID-19 has vastly increased demand for some services (including emergency services, social services, healthcare, financial support, temporary quarantine facilities, vaccine

distribution). At the same time, unemployment and underemployment make it difficult for residents and governments alike to provide the necessary resources and funds to serve their people. All of this is even more severe within informal communities where residents have less developed services, fewer resources and much less economic and social flexibility than their formal resident neighbours.

It is critical for society and culture to adjust to pandemic challenges in a manner that balances social, cultural, economic, psychological, and health-safety concerns in a responsible manner. Government, community residents, and stakeholders need to come together and adjust how to live and work for the duration of the pandemic threat. In order to minimize loss of life, economic loss, and preserve as much of society's values and norms during these trying times.

This crisis requires short-term responses to the COVID-19 threat by addressing how to limit viral spread by adjusting how services are normally consumed. Vaccination distribution, planning and proper consistent messaging to support it is also critical. The service provision in areas where demand is much higher due to the pandemic and adaptively utilize available resources must be temporarily expanded. Short-term financial funding sources must be found, such as group or individual micro finance, aid agencies and/or development banks to ease financial pressures and spread risk. Expanding these into permanent changes can also be prudent.

Long-term building back better solutions to increase service provision resilience should focus on the efficient distribution of necessary utilities/services, the development of plans for a similar future pandemic where similar shortages/vaccinations may again apply, strategic stockpiling and local manufacturing for some key sectors (PPE, food, medical equipment, etc.), flexible health care capacity plans, more digitalization, centralization or decentralization of services as appropriate to limit viral spread, development of innovative micro finance, broad decreases in poverty levels, greater protections for human rights, and a rethink of how public administrative services within high traffic areas can be utilized safely.

Target RED circle

5.1 Health service provision is sufficient to meet public need⁴³ for both typical demand and has adequate expansion capacity for pandemic response capacity in place.

Actions

5.1.1 *Identify and map* the adequacy of current social protections and health care services (hospitals, clinics, medical staff, etc.), and their locations relative to formal and informal residents alike to ensure equitable care is available. This includes an analysis of the public transportation systems available to the public for such access.

FAO (2020): The contribution of social protection to economic inclusion in rural areas. Available online from: http://www.fao.org/3/cb2458en/CB2458EN.pdf

- 5.1.2 *Determine* if the currently provided social protections and health services adequately and equitably support informal communities, minorities, women, the poor, and other vulnerable groups, and if not, address the issue. This includes resolving any access problems for informal residents.
- 5.1.3 *Investigate* all possible options and available applications for the provision of emedicine instructions/diagnose, and ways to address shortfalls in social protections, etc.
- 5.1.4 Estimate what type and how much additional social protections and healthcare services will be demanded under pandemic peak periods. This includes identifying the social, cultural, communication, economic barriers or trust gaps that may make residents of informal settlements avoid or renounce formal health services. There must be an understanding of what alternatives residents are likely to turn to and what effects that will have. And digital services should be used as much as possible.
- 5.1.5 Prepare to adjust to emergency social protections and health care provision with plans in place for rapid scale up. Hospitalization, including intensive care facilities, testing and vaccination services are particularly important. This includes storing, distribution, and care that corruption and black-market activities curtailed or are very limited.
- 5.1.6 Ensure that both equitable and physical access to sufficient social protections and healthcare services is available to all formal and informal residents, and that there is limited or no bias against minorities or society's most vulnerable. Ensuring access could entail bringing small healthcare units (mobile units) where and when needed, if access to hospitals or clinics is difficult for vulnerable groups.

Target RED and GOLD circles

5.2 Emergency service provision is sufficient to meet public need and is scalable for rapid expansion capacity for pandemic threats.

- 5.2.1 *Identify* the adequacy of current emergency services (ambulances, fire rescue, paramedics, other staff, equipment, etc.).
- 5.2.2 Determine if emergency services appropriately reach informal communities and what barriers may prevent servicing these areas appropriately. This includes understanding the adequacy or lack thereof of road paving, street width and congestion of all kinds, garbage or debris, markets or informal uses in the streets, and any other physical, institutional, or social limitations preventing emergency service provision.
- 5.2.3 *Map best routes* and plan specific procedures for physical access to medical centers for informal residents. Short term specialized solutions may need to be

- employed if current routes are insufficient to handle peak periods, and mobile healthcare units may need to be mobilized.
- 5.2.4 *Create* a plan for expansion of emergency service, rapid training of new staff-protocols, conversion of vehicles and equipment to meet peak pandemic threat challenges. Identify in advance where these resources can be obtained, when needed.
- 5.2.5 *Overcome* or remove any identified institutional, physical, or social barriers preventing access of emergency service in informal settlements.
- 5.2.6 *Distribute* vaccinations and other emergency pandemic related health services rapidly with staff specifically trained for this purpose (paramedic training is likely sufficient).

Target RED and GOLD circles

5.3 *Appropriate community level health education is accepted* at the local level.

Actions

- 5.3.1 *Identify* the community leaders, respected local health care providers, influential community groups and others willing and able to communicate consistent and accurate medical information. Again, identifying social or physical barriers and any trust gaps that might make residents avoid or renounce formal health services is critical. Identifying what health service alternatives, they may turn to, and how popular/respected these are can allow for creative solutions incorporating unconventional health resources.
- 5.3.2 *Produce* simple and accurate health instructions to be distributed to all inhabitants as well as basic accurate information about the pandemic itself.
- 5.3.3 *Disseminate* the health messaging using the appropriate local channels, languages, and media.⁴⁴
- 5.3.4 *Ensure* accurate messaging overcomes false messaging and stays consistent even during periods of pandemic fatigue.

Target RED and GOLD and GREEN circles

5.4 *The financial wellbeing of the community is preserved* and the pandemic threat to stability is overcome with timely intervention and proper planning.

See for example Transformative Urban Mobility Initiative (TUMI) (2020): Using public transport to create awareness on COVID-19 – a Kenyan invention. Available online from: https://www.transformative-mobility.org/news/using-public-transport-to-create-awareness-on-covid-19-a-kenyan-invention

Actions

- 5.4.1 *Identify* the sectors of the informal community at greatest economic risk from pandemic challenge (public markets, service industries, retail, food service etc.).
- 5.4.2 *Understand* what governmental resources are realistically available for short term economic support and in what ways there is political will to offer it.
- 5.4.3 Explore creative solutions to community underemployment problems (works/infrastructure programs, expanded home occupations with small incentives, subsidized relocation for employment, training programs, small scale manufacture, phone/computer distance work plan, etc.).
- 5.4.4 *Employ* appropriate sustainable underemployment solutions and aid most likely to be successful and accepted by the local community.

Policy Area 6 - Stay at Home Recommendations, Culture, and Vulnerable Groups

Goal 6 To balance stay at home recommendations with the social and economic realities facing the local culture, diverse populations, and vulnerable groups.

Rationale

Informal settlements and the surrounding communities are populated by a rich, diverse cultural tapestry. Their human right to live and work in safety and dignity should not be compromised by their governments potentially insufficient response to pandemic challenges. The realities of their lives need to be understood so that appropriate solutions can be implemented.

The cost of a failure in pandemic response inordinately falls upon women and society's most vulnerable groups. Already extremely difficult economic choices face informal settlement residents. Stay at home orders exacerbate these challenges, and these residents often already face bias, prejudice, inconsistent justice, corruption, a lack of security of tenure, difficult economic choices, limited infrastructure and services, among a host of other difficulties. They have few financial buffers and cannot afford to stay at home from work, because they can ill afford to lose income and the loss of a job can be catastrophic. Unless appropriate action is taken, a pandemic only makes these problems worse.

Stay at home orders may be the only viable way of combating a pandemic such as COVID-19 when and where cases are spreading rapidly. However, these orders cause havoc within existing social and economic systems. Residents of informal settlements are typically at greater risk of getting infected due to their typical occupations, more likely to be severely affected due to lesser access to health services and balanced nutrition, and have much less flexibility to act prudently due to the myriad of social, cultural, and economic realities facing them, e.g. living in intergenerational households, where it might be easier for the elderly to become infected.

The COVID-19 crisis requires short term responses appropriate to both the social and economic realities of the local community, balanced against the specific risks of the pandemic. During peak spread times, normal social distancing and prevention methods may not be sufficient to get the pandemic under control. In these situations, stay at home, lock down, and expanded

quarantine policies may be the only way to prevent catastrophe. This may be especially true under the threat of a future pandemic more dangerous than COVID-19. Logical, practical, appropriate, and relatively enforceable stay at home procedures need to be devised. Local communities need to predominantly follow these orders and thus community engagement and plans appropriate to the local realities, and culture need to be central in their drafting. Societies most vulnerable groups (women, children, ethnic minorities, faith minorities, the elderly, the health compromised, indigent, the economically compromised, etc.) need to be carefully considered in any plan for it to be successful.

Target RED and GOLD and GREEN circles

6.1 The cultural and demographic characteristics in informal settlements are taken into account so that diversity and language barriers experienced by residents of informal settlements do not create an additional hazard to appropriate pandemic response.

- 6.1.1 *Understand* the demographics, diverse cultural norms and importance of various social gatherings that may cause an increase in viral spread.
- 6.1.2 Engage local community and faith leaders to discuss how to better protect informal community residents where social norms and public gatherings (weddings, funerals, faith-based ceremonies, parties, political gatherings, etc.) public assemblies not respecting physical distancing or other public health rules, etc.) are putting everyone at risk taking into consideration the right to freedom of assembly, these gatherings may be subject to restrictions in terms of number of participants, place (only in open spaces that are large enough) and measures that require physical distancing, requirements to wear masks etc.
- 6.1.3 Clarify and ensure that the same restrictions to social, religious, or public gatherings are applicable for all communities in the entire territory of the country or a particular district on a non-discriminatory manner and ensure that they are not selectively enforced against the residents living in informal settlements or particular communities or groups only. Local leaders must find a way to balance culture with public health and safety in the short term.
- 6.1.4 Analyze and communicate plans to limit viral spread by adjusting, when possible, where community and cultural habits surrounding food sales, group meals, children and at risk groups including the elderly sleeping or living together with younger family members, public/shared restrooms, etc. are putting the public at an unacceptable risk level.
- 6.1.5 *Forecast and prepare* for where opposition to social change recommendations will occur. Overcome this opposition when the benefits outweigh the costs.
- 6.1.6 Avoid social unrest and backlash for such lifestyle change recommendations by improving awareness and engaging with the community directly and making common sense decisions to ensure the safety of all. Under the threat of a long-term pandemic, culture and societal norms will adjust slowly, but in the short-

- term, encouragement may be needed to avoid potentially critical short-term harm to the community.
- 6.1.7 *Avoid* backlash against the government where possible by also closely engaging community leaders and having accurate medical science-based solutions that also respect the dignity and values of informal residents and all minority groups.
- 6.1.8 Overcome education, language and communications barriers that may prevent an appropriate pandemic response due to language, culture, faith, race, gender, education, or other minority-based prejudices and other communication barriers. Outreach and communication campaigns that take these potentially exacerbating influences into account will make the pandemic response more successful.
- 6.1.9 *Ensure* respect for public health measures by all residents, irrespectively whether they live in an informal settlement or not, as religious, social and cultural norms, habits and practices are sometimes not in line with guidelines for combating pandemics.

Target GOLD and GREEN circles

6.2 Stigma, bias, prejudice, gender-based discrimination, and human rights abuses against residents of informal settlements are eradicated and the protection of human rights is increased by governments during any health crisis.

- 6.2.1 *Identify and be mindful during pandemic response* to where to cultural stigma, bias, prejudice, gender-based discrimination, and human rights abuses against residents of informal settlements may be present that may or increase expanding due to pandemic.
- 6.2.2 Ensure that response measures, including law enforcement measures to ensure respect for public health regulations are implemented in a non-discriminatory manner and do not result in human rights violations responses in the broader community.
- 6.2.3 Establish effective and responsive protection measures for residents living in informal settlements that are subjected to threats and ensure that such threats or potential criminal actions against them are investigated by the police and other law enforcement agencies.
- 6.2.4 *Ensure* fairness in the access to health care, transportation, governmental support, food, and basic goods within informal settlements, even when broader community shortages impact everyone.
- 6.2.5 *Be vigilant* in protecting informal settlement children and youth from the potential for increased domestic abuse and increased illiteracy issues during home schooling and stay at home orders.
- 6.2.6 Assure and protect minority and vulnerable groups who may fear stigma, losing employment or be retaliated against if they access public services, healthcare or even admit to contracting COVID-19. Fear of admitting illness may cause some minority groups to deny being ill, which will constrain efforts to stop the pandemic and place the informal residents and community at a greater and avoidable risk.

- 6.2.7 Provide sufficient financial and other support to ensure that residents of when illness prevents informal settlement that fall sick can afford stop working, be tested and if tested positive can quarantine without placing their families or their work-related contacts at risk. residents from working, some of whom already have little or no economic flexibility. They need to be able to afford to stop working and quarantine without placing their families at great risk.
- 6.2.8 Consider providing no questions asked short term quarantine housing and food for residents who cannot safely quarantine at home. To avoid bias and prejudice, no questions asked policies are recommended for these responses.

Target RED and GOLD and GREEN circles

6.3 Low-income residents and vulnerable groups are adequately supported such that food and staple goods are provided and there is access to credit during peak pandemic periods and they have the support necessary to be able to comply with stay-at-home or quarantine protocols is available.

- 6.3.1 *Mobilize resources* at the appropriate public authority level and be prepared to support low income and vulnerable groups.
- 6.3.2 Design work from home programs whereby informal settlement residents can increase their ability to safely work from home. This may require some workflow redesign from employers and support programs to make at home businesses more viable.
- 6.3.3 Encourage employers to keep workers or adjust their methods of doing business such that work from home is viable and technologies to support this workplace shift is available.
- 6.3.4 *Create alternative employment* for residents that take advantage of skills of informal settlement residents but can be performed safely from home or in a more isolated manner, enhancing social distancing and decreasing viral spread. These alternative employment paths can be short or long term depending on their efficiency, profitability, and community demand.
- 6.3.5 Offer enhanced job training, unemployment protection, and support for relocation so that displaced workers can be temporarily supported, trained for new jobs, and have relocation costs also supported such that the residents can travel to where better opportunities are located. These support services will decrease poverty and have longer term benefits as labor skills are enhanced to meet the demands for it.
- 6.3.6 *Use stay-at-home orders* appropriately, for a sensible amount of time based on appropriate medical science, when they are needed to break the pandemic viral spread cycle. These orders are more challenging for informal residents due to less economic flexibility, communication barriers, a possible trust gap, among other reasons and compliance levels are unlikely to be as high as in other sections of the city.
- 6.3.7 *Make pandemic testing easily available* to informal settlement residents such that the risks and magnitude of pandemic spread is well understood. This will be

- especially important in informal communities where other viral control methods are likely to be more difficult.
- 6.3.8 Study and understand the transportation, labour and working patterns of informal settlement residents so that policy makers can understand the risks and begin to determine how to mitigate them while supporting the informal settlement residents where appropriate.
- 6.3.9 *Protect service workers* who are often women, informal settlement residents, and minorities. They often work for low salaries in the service industry, have multiple jobs, provide cleaning and elderly care, have limited safe access to transportation, and are often working in places putting themselves at risk, and placing others around them at risk if they do not have appropriate PPE, testing services, and local authority support when necessary.

Target GOLD and GREEN circles

6.4 The safety, values and culture of the informal settlement residents is preserved without preventable undue loss of life.

Actions

- 6.4.1 *Identify* the aspects of local cultural life (weddings, funerals, worship, local markets, mass transit stops, regular mobility patterns, etc.) that may place residents at greater pandemic risk.
- 6.4.2 *Adjust* local social observations to preserve both the cultural identity and protect the residents of the community.
- 6.4.3 *Overcome* objections to changes in cultural life to protect residents. This must be accomplished with cooperation between local leaders, faith leaders, community groups, ordinary residents, through proper messaging and predicated upon accurate medical science.

Policy Area 7 - Food, Basic Consumption and Distribution

Goal 7 To ensure the adequate and safe manufacture, and distribution of food, basic consumption goods, and medical supplies.

Rationale

An adequate amount of food, basic consumption goods and medical supplies need to be safely available to informal settlement residents during times of crisis. Access to food is a human right under art. 11.1 of the International Covenant on Economic, Social and Cultural Rights⁴⁵. If these products are manufactured locally, the pandemic might impact their safe production. Alternatively, if they are sources from farther away or imported, shortages might occur at the worst possible times. Additionally, the manufacture of these goods can become more difficult

⁴⁵ https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx

due to pandemic related safety issues, and new regulations may be needed. Worker shortages may limit some basic good production, food processing, and hamper distribution efforts.

An important goal for informal (as well as formal) settlements should be achieving a state of food and nutrition security. The four pillars of food security are availability, access, utilization, and stability. Pandemic challenges make obtaining and retaining these goals more problematic.⁴⁶

When these pillars are jeopardized, plans should be made to overcome the new obstacles to food and nutrition security.

Ideally, goods must be distributed safely to all informal settlement residents. A pandemic such as COVID-19 with its restrictions and lockdowns create shortages of all types of basic necessities but also surplus goods (e.g., food ordered but never need by the shut-down of the hotel, restaurant and catering (HORECA) sector). Both incidents have an impact on prices, risks, producer compensation, and the efficiency/ integrity of the supply chain logistics. The supply and distribution of these basic goods problems can also become exacerbated or hijacked by black market participants. The distribution of these necessary goods must be ensured and provided in a fair and just manner, especially to the societies' most vulnerable groups and shielded from illegal black-market participants whenever possible.

The COVID-19 crisis requires short term stockpiling of necessary goods, and improved safety measures in food processing, farmers' markets, as well as basic goods manufacture. In addition, making sure that the supply chains function adequately is of the highest priority throughout any crisis. The short-term response also requires fairness and justice in the distribution of these goods and suffers when corruption disadvantages inhabitants.

Long term resilience to pandemics in the production and distribution of food, medical supplies and basic goods must be based on the specific characteristics and patterns of the pandemic. The distribution of surplus food (drop-off centers, warehouses, food banks) and surplus medical supplies should be tracked and organized. Public, private sector, and civil society can cooperate, organize collection, storage, and distributions functions. ⁴⁸

These challenges also require greater options for social distancing in facility design, the distribution of necessary goods (foods, medicines, etc.) needs to be safe, and an emphasis on fairness and justice to offset black market activity and corruption, as well as a good understanding of where residents are located so they can be served adequately by all relevant stakeholders (aid agencies, food banks, NGO's, community programs etc.). Specifically, the size and location of the most vulnerable groups must be known so that the distribution processes can function appropriately, and adequate resources are available to meet the needs of the residents, and respect human rights

FAO Committee on World Food Security (2012): Coming to terms with terminology. Food Security, Nutrition Security, Food Security and Nutrition, Food and Nutrition Security. Thirty-ninth session (CFS 2012/39/4), Rome, Italy, 15-20 October 2012, available online from: http://www.fao.org/3/MD776E/MD776E.pdf

FAO, IFAD, UNICEF, WFP and WHO (2020): The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO, available online from: http://www.fao.org/documents/card/en/c/ca9692en

Banerhee, A. V. and Duflo, E. (2019): Good Economics for Hard Times and Banerhee, A. V. and Duflo, E. (2011): Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty

Target RED and GOLD circles

7.1 Adequate safe access to food and basic goods with appropriate social distancing measures is provided by those involved in the <u>distribution</u> food, medical supplies, and basic goods

Actions

- 7.1.1 Analyze and map the food supply chain and its main actors, the logistics of the food supply networks, and the accessibility of the road network. The geospatial and demographic data derived from the formalization process should be used for such service provision. This should also be done for the medical supplies' and basic goods <u>distribution</u> systems. These are key to the regular functions of informal settlements and the surrounding region (this includes mapping the operational flows of both supply and demand; mapping the locations where farmers' market exist, cafes, restaurants, hotels, retail outlets, etc. The goal is to identify supply and selling procedures, for identifying pandemic spread threats in the <u>distribution</u> chain.
- 7.1.2 *Identify* where the <u>distribution</u> of food, medical supplies, and basic goods supply chain logistics system are unreasonably *inefficient* due to pandemic complications, and where they create health and safety risks of viral spread.
- 7.1.3 Enhance the food, medical supplies, and basic goods <u>distribution</u> systems by removing social, institutional and physical inefficiency barriers, and by stockpiling certain key goods and organizing fast collection of surplus food. This is to ensure the demand for goods is met even with a breakdown in some aspects of the labor and production sectors.
- 7.1.4 Regulate appropriate social distancing in the process of <u>distribution</u> of all necessary goods to protect all residents, with special emphasis on the most vulnerable groups.
- 7.1.5 Consider expanding "take away" cooked food and/or "home delivery" alternative procedures for vulnerable groups, the elderly, and especially during lockdown periods as opposed to "sit-down soup kitchens".
- 7.1.6 Study and respond to children's food and nutrient shortages that become exacerbated when school closures prevent school lunches from being provided.
- 7.1.7 Ensure adequate supplies of staple and medical goods being safely distributed to all residents of informal settlements even though normal patterns of distribution in informal communities may be unsafe or compromised. Additionally, pandemic supply crisis may cause necessary products to be priced out of reach of informal settlement inhabitants, especially when unemployment problems expand. A public response supplying necessary goods, minimal and short-term price fixing, or other short-term government intervention may need to be implemented if these issues become critical.

Target RED and GOLD and GREEN circles

7.2 Adequate safe access to food and basic goods with appropriate social distancing measures is provided by those involved in the production food and basic goods

Actions

- 7.2.1 Analyze the key aspects of the food and basic goods <u>production</u> system essential to survival in informal settlements and key to the economic stability of its residents.
- 7.2.2 *Find* where the food and basic goods <u>manufacture</u> and <u>processing</u> systems are difficult to perform while also applying appropriate social distancing and other COVID-19 safety measures, so that these challenges can be overcome.
- 7.2.3 Strengthen the food (and water) and basic goods <u>manufacture</u> and <u>processing</u> systems by removing inefficiency barriers, ensuring raw materials, enhancing worker productivity, and use appropriate technologies to enhance the economic resilience of these sectors, indirectly building resilience to pandemics.
- 7.2.4 Apply appropriate technology to enhance productivity, hygiene eugenic standards and increase or control social distancing within the <u>production</u> and manufacturing processes.
- 7.2.5 *Include* expanded hand washing stations and all appropriate personal protective equipment to the labor force as appropriate for their role in food, medical supply, basic goods production, and distribution as well.
- 7.2.6 *Understand* the limits to the adaptations possible within the food and basic good manufacturing processes supporting the informal local communities, such that critical problems under a pandemic situation are expected in advance.
- 7.2.7 *Prepare* an action plan for how to overcome these community specific problems related to food production and manufacturing before they become critical.

Target RED and GOLD and GREEN circles

7.3 *Minimal corruption, black market profiteering, and critical worker shortages,* all of which could hamper both the public and private response to a pandemic

- 7.3.1 Study and be quick to respond to changes in the current level of corruption, black market activity, transportation cartels, and existing worker skill and manpower shortages.
- 7.3.2 *Gather data and information* on corruption hotspots and any other links with criminal activities profiting from the pandemic in order to inform both short-and long-term anti-corruption strategies
- 7.3.3 *Fight* against corruption of all kinds within the public and private arena. Black market and corruption will be quick to take advantage of pandemic crisis and the costs to the people will be high if not curbed quickly and efficiently.
- 7.3.4 *Improve* justice and fairness in government and police responses to the challenges of informal settlements and specifically ensure fairness for minorities, women, people of faith, and societies most vulnerable.
- 7.3.5 *Limit the scope* of black market and illegal activities and *prevent* widespread profiteering on necessary goods and medical supplies.

Target GOLD and GREEN circles

7.4 Local authorities and communities are prepared to deal with labor supply shortages in a pandemic and to support informal settlements residents

Actions

- 7.4.1 Plan for emergency measures for where critical labor shortages will put the health and safety of residents in danger as COVID-19 response changes the labor supply and public demand for various goods, placing strains on the already struggling public and private sectors and the lives of the people. Examples for this may be found in the labor pool for trained medical staff, labor intensive manufacturing, or those working in enclosed food processing facilities.
- 7.4.2 Enact emergency measures for identified critical labor shortages. This may involve rapid training, 24 hour rotating shifts to lessen worker density, and other measures targeted at specific problems.
- 7.4.3 *Establish* support centers in the informal settlements to inform residents on COVID-19 measures, and support them in with accessing aid, short-term housing or food, medical information, community aid groups, and employment opportunities (some newly created and organized).

Policy Area 8 - Environmental Concerns, Green Spaces, Recreation and Social Events

Goal 8 Provide for safer enjoyment of the environment, green spaces, recreational and social activities.

Rationale

Green spaces, sports, music, travel, tourism, and recreational social activities of all kinds are central to physical and mental well-being, a healthy culture and society. However, these activities often violate safe pandemic social distancing and can become super-spreader events when they bring large groups of people together unsafely. A pandemic can spread widely when residents return to their homes after unsafe activities. It is incumbent on local authority and community leaders to provide avenues for the residents of their communities to safely enjoy green spaces and many recreational and social activities central to society and quality of life.

Air pollution has also aggravated the course of the current pandemic. European Environmental Agency studies found that the most vulnerable groups are more likely to be exposed to the air pollution and COVID-19's respiratory symptoms are more severe in those circumstances.30F⁴⁹ Informal settlement residents can also be at greater risk of undue exposure to hazardous chemicals through weak waste management and unsafe water sources.

The COVID-19 pandemic crisis requires short term responses appropriate to limit the viral spread during the enjoyment of recreational and social activities. Social activities such as weddings, funerals, and faith-based events that according to local customs "demand" assembly

European Environment Agency (EEA) (2020): COVID-19 and Europe's environment: impacts of a global pandemic, available online from: https://www.eea.europa.eu/post-corona-planet/covid-19-and-europes-environment

of many people are especially challenging on cultural level. Tact, proper messaging, and community leader support will be needed for any reasonable level of compliance with safety measures for this type of gathering. Long term resilience to pandemics in recreational and social gatherings must be based on the specific characteristics, patterns of viral spread and lethality. In the case of COVID-19, an emphasis on improved social distancing, handwashing, and personal protective equipment (PPE) is key. In order to protect their people (and by extension the economy that fuels society and produces tax revenue), governments should prioritize a focus on safe outdoor recreation, and strict limits on indoor and mass gatherings for sporting, music, and dense social gatherings of all types.

Target RED and GOLD circles

8.1 *Outdoor recreation, sporting, music events, and social gatherings* are available and safe for everyone.

Actions

- 8.1.1 *Identify and analyze* what recreational and other public gatherings pose the greatest risk of viral spread and determine which require banning, adjustment for safe enjoyment, and what green spaces or recreational activities can be safely expanded.
- 8.1.2 Limit public sporting and music venues that unsafely gather crowds and adjust them to much more limited density, size, and consider online or televised sporting and music venues.
- 8.1.3 Adjust or ban outdoor group recreational and social gatherings that cannot be safely enjoyed in their current typical form. Local community leaders support will be key for this.
- 8.1.4 Provide or make affordably available handwashing stations, cash transfer stations (and expand digital payment methods), vending, food/drink, and adequate personal protective equipment suitable for the recreational and social gatherings commonly enjoyed in the local community.
- 8.1.5 Expand and map green spaces that can be enjoyed safely while also enhancing the quality of life and environmental sustainability within informal settlements. Promote participatory mapping 31F⁵⁰ and effective public participation, to ensure that there are paths that can safely access natural areas, playgrounds and parks while also keeping safe social distancing. Also, adopt appropriate waste management plans and keep the public informed about safe and sustainable use of watershed and green spaces.

Target GOLD and GREEN and BLUE circles

[&]quot;Participatory mapping" means the use of a growing toolbox of techniques that can help members of the public record and share spatial knowledge through the use of participatory methods and cartographic representations, often in a digital form.

8.2 *Recreational travel, hospitality and tourism* services are provided to visitors and residents in a manner that puts no one at undue risk.

Actions

- 8.2.1 Locate, map and track the density of use of the tourism related activities such as hotels, motels, rooms to let, cultural sights, transportation nodes, attractions to determine if either visitors or residents are being put at increased risk of viral spread in their current design.
- 8.2.2 Determine and regulate if full or partial closures of attractions or tourism related activities is required to ensure public safety. If so, then determine how long and in what form these closures should be imposed.
- 8.2.3 *Provide* ways to encourage (communication and local engagement) or punish (fines or other inducements) businesses who violate safety measures and place people at undue risk.
- 8.2.4 *Develop* a policy (including process, responsibilities, etc.) that ensures safe transport for recreational and social travel (taxis, mass transit, airport to hotel, shuttles; cleaning and ventilation guidelines), and encourages safer and healthier modes of transport (walking, cycling, etc.).
- 8.2.5 Redesign travel and tourism related activities to minimize the potential for public harm, which will also limit necessary closures and minimize economic harm. This redesigned plan should be very detailed when it is a core component to the economic and social function of the community. Tourism heavy areas suffer greatly and early in a pandemic and operations need to be designed to balance safety while continuing to adequately service visitors.
- 8.2.6 *Mandate* when and where recreational travel should or should not be allowed so that pandemic danger to the resident workforce, and visitors alike is minimized.

Policy Area 9 - Buildings, Construction and Land Planning

Goal 9. Viral spread risks posed by commercial, public buildings, educational facilities, informal homes, and other constructions are controlled.

Rationale

The built environment within informal settlements is usually unplanned with a wide variety of physical and legal nonconformity. Commercial, public, and educational facilities pose significant risk as focal points for viral spread. Larger facilities (such as hospitals, schools, community centers, government buildings, transport hubs like train stations, retail and grocery stores, etc.) pose greater risks due to the heavy human indoor traffic, difficulty imposing safe social distancing procedures and limited ventilation. Additionally, informal residential housing tends to be more densely spaced and populated, making quarantining and social distancing more difficult.

Governmental officials should use appropriate planning to limit viral spread at hot spots. They need to understand the normal movement patterns of people within specific informal settlements

and adjust these patterns to limit high density travel in locations that could become high viral spread junctions.

The structures and layout of the communities create many risks and inefficiencies that impedes long term economic success, health, safety, and the security of its residents. Limited planning can also create an environment more conducive to viral spread within the broader community. The COVID-19 pandemic crisis requires short term responses appropriate to its very high transmission potential as it relates risks posed by how the built environment is used. Additionally, creating long term resilience to pandemics of a variety of characteristics needs to be a priority for both formal and informal development so that appropriate steps can be rapidly taken to avoid potentially catastrophic outcomes.

Target RED and GOLD circles

9.1 Large and intensely utilized commercial, educational, and public facilities are safe (hospitals, medical centers, government buildings, schools, transport hubs, shopping centers etc.) are operated safely.

COVID-19 has shown us that in the occurrence of a crisis, societal safety and human security is about both the safety of the infrastructure and the built environment as well as the continuous provision of public goods and access to core services to the most vulnerable members of the community. Poor access to services in underprivileged neighborhoods makes compliance with lockdown orders impossible in those locations and transfers the exposure risks to other neighborhoods.

- 9.1.1 *Identify, map, and analyze* which facilities pose the greatest risk of viral spread and determine which require full or partial closure, when, and for how long. This should be studied in correlation with the formalization process and with mapping and identification of vulnerable groups and their geographic distribution so that responses are appropriate to risks. Electronic service provision should be used wherever possible.
- 9.1.2 *Identify* which buildings have frequent use and therefore require long ques. Standardize procedures, redesign queues, and initiate lists for providing services by appointment or electronically.
- 9.1.3 Carefully plan for fully or partially closed schools. Determine the appropriateness of distance learning (phone, computer, or Television-based), multiple shifts for classroom work at public schools, and consider home schooling or neighborhood small group learning.
- 9.1.4 Modify the use of the large and most intensely utilized buildings in ways that decrease the risk of viral spread (doors/windows opened without using hands, increased ventilation, wider corridors, redesigned queue systems, increase seat spacing, limited number of people inside, etc.).

9.1.5 Ensure appropriate public response to the strain of school closures as more children will be at home, disproportionately affecting vulnerable groups, and women. Schools should close last and open first for several reasons if possible. This places them at risk in the school setting (which should be managed) but limits the risks they pose when out of school as well as limiting the negative economic effect of having a parent stay with them.

Target GOLD and GREEN and BLUE circles

9.2 Sustainable adequate housing is available for all informal settlement residents.

For people to be able to follow crisis response mechanisms and adopt measures such as quarantines and lockdowns during a pandemic, is the improvement of access to public spaces in correlation with an adequate housing stock.⁵¹

- 9.2.1 *Understand* the increased risks of viral spread due to the specific physical characteristics of informal housing in the local settlements⁵².
- 9.2.2 Determine which if temporary or long-term improvements and adjustment to the housing stock or social housing would help prevent or mitigate viral transfer and ensure healthy housing conditions as set out in the WHO Housing and Health Guidelines.
- 9.2.3 *Identify, map and provide* temporary housing, or quarantine facilities (e.g. hotels that are currently empty and repurposed community assets like schools and community centres that are currently closed) to help prevent the spread among family members, at risk vulnerable groups, and the local community if the small size or density of the informal homes is a significant risk factor.
- 9.2.4 *Expand* and invest on social housing options both as short term solutions for homeless problems and longer-term action to provide greater access to affordable housing. They should be designed to limit the amount of indoor public spaces in these facilities where social distancing is impossible.
- 9.2.5 Allow for home access by external doors, and numerous staircases to limit indoor concentrations of residents and provide excellent ventilation along exterior public walkways (if the climate and density of the project permits). Elevators and indoor or centralized staircases create high traffic choke points. Decentralizing access to apartment flats by using more exterior walkways and numerous staircases can greatly decrease the concentrations of people, limiting viral spread risk.

⁵¹ This should also prevent the loss of house during the emergency period. This can be done through moratoriums on evictions due to rental and mortgage arrears; deferrals of mortgage payments; strengthening national legislation on prevention of forced eviction, particularly in informal settlements and slums; introduction of rental stabilization or reduction measures; suspension of utility costs and surcharges for the duration of the pandemic; and creation of emergency funds to reduce vulnerability to eviction for categories at risk (see also UN-Habitat. Housing and COVID-19. https://unhabitat.org/sites/default/files/2020/05/130520 - housing and covid-19 key messages.pdf)

⁵² WHO Housing and Health Guidelines as a toolkit to be used by stake and rightsholders (https://www.who.int/publications/i/item/9789241550376)

9.2.6 *Make simple adjustments* in how the buildings are used to lower risks for vulnerable residents and provide easier access for emergency services. When Informal housing includes a high percentage of elderly or vulnerable residents, consideration should be given to offer alternative housing to households with older persons relocation may be more appropriate and feasible respecting the principle to live in environments that are safe and adaptable to their personal preferences and changing capacities and allow them to be able to reside at their own home for as long as possible.⁵³

Target RED and GOLD and GREEN circles

9.3 Roads, foot paths and choke points have lower peak traffic.

Lower traffic needs to implement the principals of "Urban mixity" where retail and business are integrated in residential areas. Urban mixity is an important strategy for reducing the demand for interurban and intraurban mobility hence reducing the risk of cluster spreads in occurrence of pandemics. It is therefore important that informal housing settlements be upgraded with careful integration of retail and business. Such spatial planning strategies⁵⁴ beyond reduction of risk exposure will deploy other co-benefits such as reduction of pollutant emissions enhancing cities climate policies.

- 9.3.1 Study the movement patterns within informal settlements to identify where highdensity areas create public risk, road closures, differing methods of mobility or the addition of new access points should be considered to mitigate these risks.
- 9.3.2 Prepare mapped plans for quarantines and lockdowns in informal settlements understanding that they will be more difficult to implement, monitor, more costly for residents, and harder to enforce than in formal communities. Access points, emergency service routes, high risk areas, actual and proposed traffic flows should be incorporated in the plans/maps to limit exposure risk at hot spots.
- 9.3.3 Balance the risk of a pandemic with the existing dangers facing the community. The informal communities are often at greater risk from a variety of other threats such as fires, floods, poor air quality, chronic health issues, etc. Disaster response infrastructure should be enhanced and appropriate for each of these community specific challenges, notably through the identification of vulnerabilities and exposure to risk as part of greater integrated risk management strategy. A holistic strategy to protect residents is needed in these already at-risk communities.

⁵³ See United Nations Principles for Older Persons, GA resolution 46/91 from 16 December 1991.

⁵⁴ See for details FAO (2012): Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, available online from; http://www.fao.org/3/i2801e/i2801e.pdf

V. FINAL CONSIDERATIONS

Introduction

This chapter will discuss some final considerations revealed throughout this Recovery Action Plan. These considerations suggest broad courses of action, and some thoughts on implementation that may vary based on local context.

Informal settlements are more vulnerable to pandemics

Informal settlements in the UNECE region tend to increase the risks of pandemic spread by their very nature. The people living in these communities commonly endure inadequate living conditions, live with high population density, and have a widely dispersed service-oriented employment base (often residents have two or three jobs). They generally tend to rely on inadequate service provision (including energy, water and sanitation) and have more limited healthcare, and lesser access to education. There is a general lack of good demographic and spatial data, heavy concentrations of minorities and vulnerable groups, and generally low incomes coupled with limited resources. There is commonly a history of government mistrust, by residents of informal settlements, and social bias, and public prejudice against persons living in them. All these factors increase the risks of pandemic spread within these informal settlements and by extension, the surrounding formal communities too. There is the potential for a more sustained outbreak due to more difficult and less certain containment options.

Authorities must act to make informal settlements more resilient

The potential for suffering created by a pandemic is greater in almost every way within informal communities. The historical inability, misunderstanding or reluctance to solve the root causes of informality has created the current situation. The relevant actors should find a way to supply adequate housing to meet the changing needs of the population; gather and retain necessary information; allow for the formalization of existing informality (along with effective registry and cadaster enhancement, formalization of rights and completion of the cadaster provides the framework, the backbone for building the necessary spatial data infrastructure); provide the appropriate level of services, ensure tenure security, justice, equity, the fulfilment of the human rights, and effective governance. These refinements will limit the creation of new informal communities and prevent the expansion of some persistent social, economic, environmental and health/safety shortcomings.

The Recovery Action Plan is designed to support initiatives to meet pandemic challenges

This COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region is designed to highlight appropriate goals, targets, and actions to minimize or prevent the harm resulting from a pandemic and respond to the challenges of COVID-19, in particular. It is designed to build resilience in both the built environment and social structures of informal settlements. It is also designed to assist in achieving the 2030 Agenda for Sustainable Development and its 17 SDGs as well as the call by Antonio Guterres, the United Nations Secretary General, to build back better from the pandemic, and promote human rights, justice, equity, and transparency. It is envisioned to assist in harmonizing formal and informal communities within their cultural, environmental, and socio-economic settings, which allows for easier achievement of all SDGs.

The Recovery Action Plan aims to address the key aspects of the challenges related to fighting a pandemic. However, the structure, depth and focus of this document has left some important details undiscussed. We will touch on some of these here below.

The Guidelines on the formalization of informal constructions to support concrete positive action

Formalizing informal settlements is a key component when striving to create a more resilient and sustainable city, and flexible in its resistance to future pandemics. The guidelines provide an effective tool to start the formalization process in a structured way and should be adjusted as appropriate to meet local political, environmental, legal, physical, economic, and local realities. Cross-cutting mapping and geospatial/demographic data collection for all policy areas should be coordinated with the formalization process

Epilogue

Implementation of the Recovery Action Plan in a local context should vary greatly from country to country, region to region, and informal settlement to informal settlement. It should also vary based on the changing nature of the pandemic threat, shifting political/social will, alterations in the available resources, and other changes in the nature of the challenges facing residents and local authorities alike. For this reason, the specifics of implementation of the various goals, targets, and actions were not discussed in detail. The timing of when and how they should be applied was described assuming that these can be implemented in a flexible manner as appropriate. Priority levels should be determined based on cost/benefit studies, be inclusive of local authorities, local resident groups, faith-based groups, along with national/city governments and NGO stakeholders as appropriate. Without ensuring the active participation of those targeted by policy measures, top-down implementation plans are often less efficient and less effective. As such, we have left most of these local implementational aspects for greater discussion and consideration by the parties involved.

Implementation of the Recovery Action Plan for informal settlements needs adequate funding and investment. This aspect should be flashed out in the Plan. A clear monitoring and evaluation mechanism with two to three key performance indicators per each of the strategic areas make it easier to raise funds for the implementation. The socio-economic benefits analyses, mentioned in the study, could provide guidance on where the priorities should be put first, in case of limited funding.

This Recovery Action Plan is meant to show where appropriate interventions can simultaneously have health/safety and socioeconomic benefits. It showed where pandemic resilience, and the 2030 Agenda for Sustainable Development and the 17 SDGs can be achieved, benefiting everyone over time. The goals, targets and actions described herein, coupled with careful analysis of the specific local challenges and resources will result in more effective and appropriate interventions. Greater integration and formalization of the informal communities within the greater national landscape will potentially provide innumerable benefits for all.

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