UNECE

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

UNITED NATIONS

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

NOTE

ACKNOWLEDGEMENTS

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ABBREVIATIONS

COVID-19	coronavirus disease 2019
CFS	Committee on World Food Security
EEA	European Environment Agency
FAO	Food and Agriculture Organization of the United Nations
FIG	International Federation of Surveyors
HORECA	food service and hotel industries; hotel/restaurant/café
IASC	Inter-Agency Standing Committee
IFAD	International Fund for Agricultural Development
IGIF	United Nations Integrated Geospatial Information Framework
MEPS	minimum energy performance standards
NGO	non-governmental organization
OHCHR	Office of the High Commissioner for Human Rights
PPE	personal protective equipment
Recovery Action Plan	COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region
SDG	Sustainable Development Goals
TUMI	Transformative Urban Mobility Initiative
UN-GGIM	United Nations Committee of Experts on Global Geospatial Information Management
UN-Habitat	United Nations Human Settlements Programme
UN-Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNHRP	United Nations Housing Rights Programme
UN-Habitat	United Nations Human Settlements Programme
UNECE	United Nations Economic Commission for Europe
UNICEF	United Nations Children's Fund
VGI	Volunteered Geographic Information
WASH	water, sanitation and hygiene
WFP	World Food Programme
WHO	World Health Organization
WPLA	Working Party on Land Administration

GLOSSARY

Cadaster – register of real estate objects (land parcels, buildings, pipelines)

Cadastral map – graphical representation of the location of a parcel, building, pipeline, etc.

Formalization – action to officially register a real estate object (parcel, dwelling, apartment, etc.) as a legally owned property

Informal real estate or construction – an unauthorized property unit or construction lacking property titles and /or planning/building permits; or built-in excess of such permits

Key register – state register that contains high quality data maintained by the so-called custodian (also known as basic register or authentic register)

Land administration – can refer to the cadaster, land register, and/or cadastral map, the combination of all three, or sometimes only two or even one of them

Land register – registration of real estate titles (ownership, lease, mortgage)

Land Registry – the organization responsible for the recording of data and sharing of information also called the Cadaster

Land tenure – legal regime in which land is owned by an individual (land holder)

National Spatial Data Infrastructure (NSDI) – technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data

Tenure security – the certainty that a person's rights to land will be recognized by others and protected in cases of specific challenges

Titling – the process of assigning real estate titles to a person and recording them in a land registry
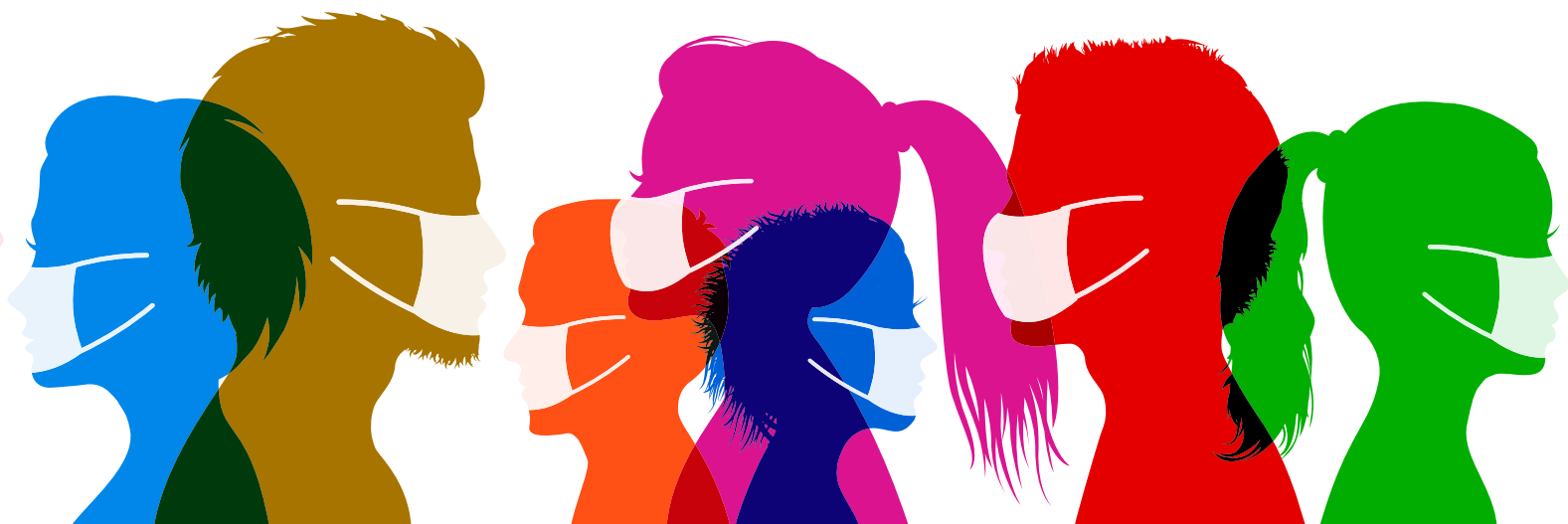
EXECUTIVE SUMMARY

In the UNECE region there are approximately 50 million people living in informal settlements (United Nations, 2019a), with a large percentage of them in the Southern and Eastern subregions. These settlements typically have dense populations, limited services such as 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 people. Overcrowding and poor housing conditions in informal settlements pose challenges for States in protecting their residents from the pandemic. In addition, marginalized communities are often inadequately included in public vaccination campaigns and frequently show greater vaccine hesitancy. The economic impact of the pandemic has particularly hit these residents and increased the many challenges in their lives.

The pandemic has not only created new challenges, but "has 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" (UN-GGIM, 2020). The measures proposed in this COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region (Recovery Action Plan) deal with the new COVID-19-based challenges and the pre-existing ones.

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

The integration and formalization of these informal communities is a vital step for the longer-term resilience-building. The Regional Action Plan uses colour coding to visually distinguish different goals: immediate emergency-focused goals, short-term emergency related goals, intermediate term goals blending resilience and emergency goals, or long-term resilience-focussed goals.

The Recovery Action Plan refers to the UNECE *Guidelines for the formalization of informal constructions* (United Nations, 2019a), the separately prepared *Policy Briefs*[1] covering a number of special topics, and the *Assessment Reports*[2] prepared for the cities of Tirana, Bishkek, Podgorica, and Skopje. It also relies on 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* (FAO, 2012), and the UNECE *Policy framework for sustainable real estate markets* (United Nations, 2019b), as well as the *WHO Housing and Health Guidelines* (WHO, 2018). The Recovery Action Plan is informed further by the obligation of national and local governments, under international human rights law, to improve the right to adequate housing for everyone, without discrimination.[3]

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1 Policy briefs on energy, nature-based solutions, water and sanitation, urban mobility and innovative financing. Available at https://unece.org/housing/post-covid-19-recovery.

2 Ibid.

3 See *International Covenant on Economic, Social and Cultural Rights*, article 11 and relevant reports of the Special Rapporteur on the right to adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context on informal settlements (A/73/310/Rev.1) and on COVID-19 (A/75/148).

This document is based on nine broad policy areas, and each section begins with the main goal for that policy area. Under each goal there will be several targets: secondary goals, under the main one. There will also be individual actions to help achieve these targets.

The nine policy areas

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, hygiene 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 and 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 range of topics related to the pandemic response and achievement of SDGs. The focus is on mitigating and preventing pandemic-related harm to residents of informal communities. The pandemic does not recognize legal or physical boundaries, so building resilience to pandemics within informal settlements helps neighbouring formal communities too.

Pandemic prevention, resilience and mitigation can be accomplished by key actions from local and national governments and communities. For these to work, good governance and management of land, best use of the built environment, and the comprehensive, inclusive, fair and efficient supply of services are essential. These actions are also influenced by how we consume and extract natural resources for the built environment and engage with nature.

The integration of informal constructions within the economy, formal land markets, legal framework, land planning, and appropriate administrations will help achieve resilience and the SDGs. Building registers and address register data were among the most useful datasets during the COVID-19 pandemic. Therefore, it is important each building is included in the building register, whether or not it is registered in the cadaster. Finally, successful recovery actions should closely attend to involving local communities, making logical adjustments to social behaviours in response to a pandemic, and building 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 be 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, as well as diversification of the rural economy, should be integrated with the concepts discussed in this publication.

The proposed actions have several general themes, discussed in more detail in the cross-cutting themes section and the relevant policy areas. These relate to similar actions, applied across many of the individual policy areas and deserving special attention. These cross-cutting themes are strongly related to the formalization of informal constructions strategy, and more detail no them may be found in the Guidelines for the Formalization of Informal Constructions. Formalization and registration of informal constructions into a modern cadaster may be essential for good geospatial infrastructure, especially if combined with other information for building these settlements back better. The themes are as follows:

a) *Data collection and management:* Appropriate decision-making relies on appropriate reliable data. It is vital to coordinate and carefully plan the data collection phase to avoid overlapping, gaps, costs, and delays.

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 an essential requirement.

d) *Resource allocation and integration:* An effective strategy should incorporate integrated solutions.

e) *Economic benefits, local and political awareness and will:* Success can only 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 assessment of local needs, the pandemic's changing nature, shifting political and social will, availability of resources, and other factors on a case-by-case basis. This document takes a flexible approach to the timing of potential interventions. Priorities should be balanced between local realities and careful consideration of costs, benefits and risks.

This Recovery Action Plan shows that appropriate interventions can have health, safety and other socio-economic benefits. The goals of increased pandemic resilience and SDG achievement can be advanced together. Greater integration and formalization of informal communities within the broader formal markets is vital to achieving greater pandemic resilience, as well as more equitable and sustainable.

INTRODUCTION

Cities face many grave threats, with the COVID-19 pandemic being the most immediate. Achieving the 2030 Agenda for Sustainable Development and the Sustainable Development Goals will mitigate or prevent many city challenges and can also advance society towards a more sustainable, just, and inclusive future. These challenges are especially acute within informal settlements, where living conditions often bring unnecessary suffering to their residents. Informal settlement residents may be more exposed to pandemic and environmental risks, and their social and economic exclusion may be further entrenched if national, regional and local governments do not address those challenges quickly. Governments at all levels must remedy the root causes of informality while also confronting the pandemic threat in their journey towards a sustainable future.

An estimated one billion urban dwellers live in informal settlements worldwide, and approximately 50 million of those are 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 (United Nations, 2019a). Informal development is best described as a spectrum of formality (United Nations, 2009). Part of the solution is for policy makers to have a deeper understanding of the nature, types, and socio-economic consequences of different informal constructions. Categories of informality can be described by:

(a) Type: title or ownership informality, 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.

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 failure to adopt pro-growth planning. Other factors include limited policies for affordable housing, private sector weakness, lack of political will to develop land policies, transition from centrally planned to market economies, and the failure or reluctance of state agencies to implement measures supporting economic reforms (United Nations, 2019).

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Formalization efforts in countries in the UNECE region

Informal development is not new for the UNECE region. Formalization projects have been used in Greece, Italy, Portugal, Spain and Turkey but have not fully eliminated the phenomenon. However, in the early 1990s, informal settlements in the region have increased rapidly because of political and economic changes in Eastern Europe and former Soviet Union countries.

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

Informal settlements put European and Central Asian land reforms and property registration projects at risk. This is mainly because such a large amount of dead capital is a challenge to national economies. Equally importantly, 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 the settlements' residents.

Therefore, many countries were encouraged to initiate formalization projects. These included:
– Privatizing occupied state-owned land and determining compensation for occupied privately-owned land
– Providing ownership titles and registering them 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
– Applying building standards 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 their governments' policies in addressing this challenge. Despite good efforts, several complex reasons were found to have delayed the formalization progress in some areas, with some quite difficult to address. These include weak private property rights due to established policies, difficulties in upholding environmental standards fairly and equally, and including environmental protection in programmes related to informal settlement formalization. Based on this assessment, the UNECE Guidelines for the formalization of informal constructions were compiled and published in 2019.

Common challenges in informal settlements include population density, inadequate basic services including water supply and sanitation, poor public transport, unregistered residents, limited access to health care and education, inadequate housing and insecure tenure, and unregistered land rights. Furthermore, informal settlements are often on the periphery of urban areas, lacking access to markets and resources. Home-based workers also face challenges to entrepreneurial activity (Chant, 2014).

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* Any reference to Kosovo, whether to the territory, institutions or population, is to be understood in full compliance with Security Council resolution 1244 (1999) and without prejudice to the status of Kosovo.

These challenges also make informal settlements potential hotspots for pandemic spread. Limited demographic, health, and geospatial data on informal settlements make it difficult to know the local dangers or to apply any recovery policy in a fast and efficient manner. As such informal settlements are candidates to join pandemic hotspots like at work, within family networks etc.

Residents of informal settlements often have few resources, precarious employment, limited digital connectivity, and include many of society's most vulnerable residents, including women, girls, minorities, and people with disabilities. The lack of integration of informal residents with society, the mistrust that stems from such inequity, and inadequate communication and information-sharing make informal settlement 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 get paid employment (UNFPA, 2007). In addition, the prevalence of male-biased land tenure policies, and restrictions on women's rights to own property, decreases women's housing options. Poor quality housing, or eviction and homelessness, can also increase the risk of insecurity and sexual violence (Chant, 2014; McIlwaine, 2013).

People with disabilities are generally at greater risk of contracting COVID-19. They may experience barriers to implement basic protection measures such as handwashing and maintaining physical distancing. These include lack of access to water, sanitation and hygiene (WASH) facilities, a reliance on physical contact to get support, inaccessibility of public health information, or being placed in often overcrowded and insanitary institutional settings. These barriers are even greater for those living in informal settlements or affected by humanitarian emergencies. Furthermore, people 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.
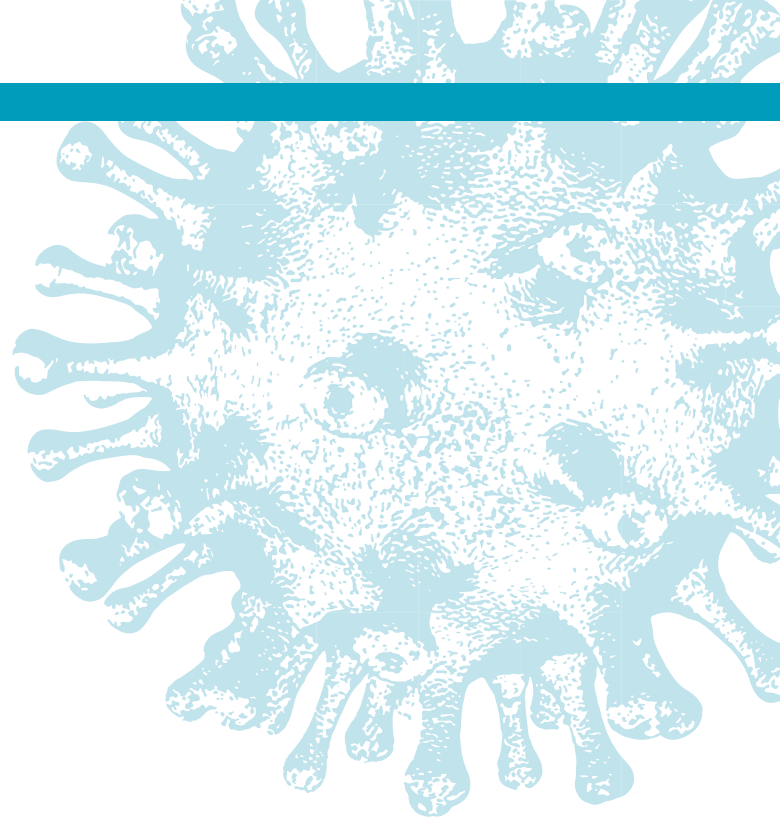
Urgent action is needed to enable informal settlement residents to stay safe and healthy and thus increase resilience to any future pandemic. Formalization projects can help overcome some of these resilience challenges, while also helping to achieve the 2030 Agenda for Sustainable Development and its 17 SDGs, as well as build back better from the COVID-19 pandemic. Informal settlements are particularly vulnerable to the impact of disease outbreaks because of the very nature of how people have to live within them. Disease monitoring and containment can be particularly difficult due to the lack of adequate geospatial, and demographic data that could be used to fully understand the risks faced by these communities and inform appropriate policy responses.

The *COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region*, complemented by the *Guidelines for the formalization of informal constructions* addresses the risks faced by informal settlement residents. The need for the formalization of informal constructions is critical to SDG achievement and for pandemic resilience. Integrating these informal constructions into formal land markets provides clear ownership and security of tenure through titling, and thereby greater economic security and flexibility for residents. It can also offer greater access to credit and mortgages and allow more efficient use of limited resources to residents, particularly women. The integration of informal constructions into formal land markets integrates the human capital of informal settlement residents. It also removes barriers to land capital, improving resilience and growth potential to society in the process.

Formalization is therefore a tool to increase security of tenure and ownership rights (FAO, 2012) and economic growth, and to protect and promote human rights. After or in parallel with formalization, urban and infrastructure upgrading can help achieve growth targets, the 2030 Agenda for Sustainable Development with its 17 SDGs 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 everyone.

It is the responsibility of national, regional and local governments to improve living conditions for those marginalized through formalization, mitigate environmental, structural or other risks, and support residents in upgrading their housing. This would help realize the right to adequate housing, including healthy housing for everyone, and therefore provide better protection against any future pandemic, for people in informal settlements, and thereby the whole population. Formalization of these marginalized communities is also of paramount importance to "Building Back Better".

This publication received input from members of the UNECE nexus *Sustainable and smart cities for all ages*, including experts on policy areas, each of whom contributed to the detailed thematic policy briefs that supplement and expand key topics discussed within this Recovery Action Plan.[4] In addition, the publication benefited from assessment reports prepared for four cities detailing selected informal settlements and the formalization efforts used.[5]

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[4] The Policy Briefs are available at https://unece.org/housing/post-covid-19-recovery.

[5] The four Assessment Reports for the project cities Tirana, Bishkek, Podgorica and Skopje are available at https://unece.org/housing/post-covid-19-recovery.

I.   A PANDEMIC-RESILIENT AND SUSTAINABLE VISION OF THE FUTURE

People living in informal settlements are often forgotten, invisible, underserved, and wanting to be fully included within society. The potential of these communities can be unlocked by political will and the implementation of proper plans.

In 2015, 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. The 17 SDGs are an action framework to end poverty, protect the planet, and improve the lives and prospects of everyone. The year 2020 marked the "Decade of Action", with only ten years left to achieve the SDGs. Therefore, recovery measures from the COVID-19 pandemic must contribute to "Building Back Better". By coordinating 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.

Informal settlement residents have much more in common with their formal neighbours than differences. Integration of informal settlements within formal markets can help overcome challenges and enrich lives. Related goals include minimizing pandemic hotspots, achieving sustainability goals, upgrading infrastructure, awarding land titles, securing tenures, decreasing housing shortages, making basic services more available, and abating water and energy issues. More subtle problems and their solutions include risk minimization, better social harmony, reducing gender inequality, respecting human rights, and greater overall economic efficiency.

Building an inclusive, just and sustainable world for all

Striving to reach an inclusive, just and sustainable world requires appropriate information, such as geospatial, demographic, gender sensitive, scientific, and crowd-sourced information, to uncover and understand problems (UN-GGIM, 2020). There should be political willingness to proceed in a just and inclusive fashion. Effective leadership and communication at all levels can engage all levels of local community. The goal is to mitigate the risks posed by the COVID-19 pandemic and increase resilience within informal settlements against future pandemics and natural disasters. Meanwhile, a formalization programme should be applied with appropriate registration and titling to secure tenure, protecting the human rights of informal residents. This can help integrate informal settlements and their residents within other aspects of society.

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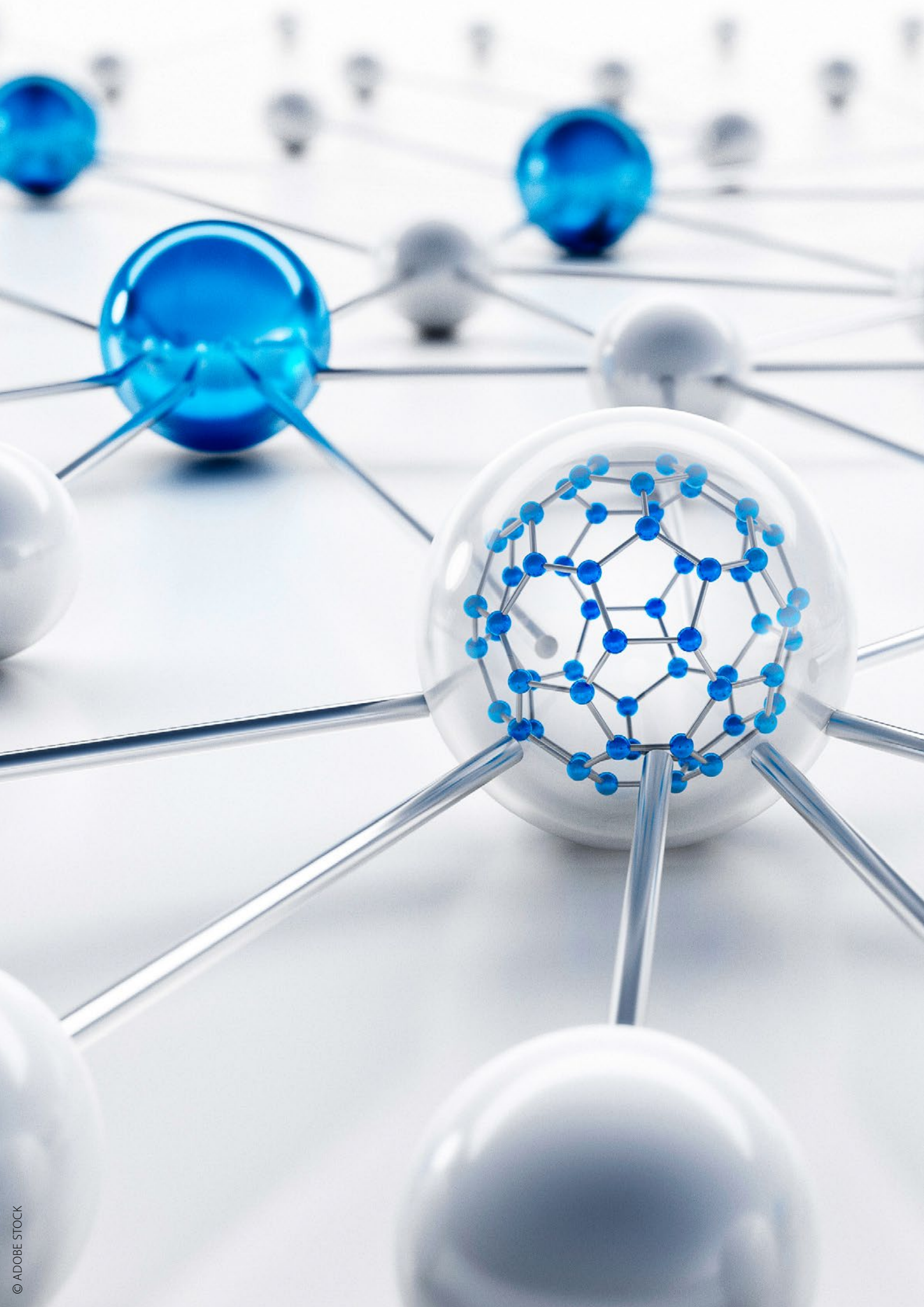
II. STRUCTURE AND GUIDING PRINCIPLES

The structure of this Recovery Action Plan identifies goals, targets, and actions that are crucial to a successful pandemic response. Appropriate local implementation should have timing, priority and scope based on physical and social realities in different communities.

Structure

The Recovery Action Plan outlines nine policy areas, each of which contains a goal. These goals are divided into concrete targets with specified actions to achieve them. Time frames are not given as successful implementation will vary greatly based on socio-cultural context, political and local will, financial resources, as well as the immediacy of the pandemic and other threats faced by an informal community. Emergency and mitigation measures may have to be sustained for long after the emergency period has ended, and several goals will sometimes have to be worked on at the same time.

Bearing this in mind, the general timing would be:

(a) **Emergency goals (emergency-focused)**
Categorized targets and action points to achieve short-term goals - generally those needing to be accomplished in under six months.

(b) **Short-term goals (emergency-related)**
Categorized targets and action points to achieve short-term goals - generally those to be accomplished in under a year.

(c) **Intermediate term goals (blended resilience and emergency-focused)**
Categorized targets and action points to achieve intermediate-term goals - the greater complexity is generally expected to need 6-18 months to accomplish.

(d) **Long-term goals (resilience-focused)**
Categorized targets and action points to achieve long-term goals - the greater complexity and nature of the solutions are generally expected to need over a year to accomplish, perhaps one to five years.

Targets and actions are colour-coded by coloured circles according to immediacy of their components.

A red circle is placed next to a target or action with important emergency components.

A gold circle is placed next to a target or action with short-term components.

A green circle is placed next to a target or action with important intermediate components.

A blue circle is placed next to a target or action those with important long-term components.

Many targets and actions will have multiple-coloured circles, indicating that important aspects cover a variety of emergency, short, intermediate and long-term components.

This Recovery Action Plan incorporates a flexible, comprehensive, people-centred and gender-sensitive approach to developing appropriate COVID-19 pandemic responses. It is crucial that any successful plan and implementation programme is accepted by the local community. The character of the informal settlement, local culture, governmental, legal, scientific, environmental and economic realities must be taken into account. Local community members, officials and other stakeholders must communicate effectively at every stage of the plan to achieve the greatest benefit.

Guiding principles

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 (FAO, 2012).

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

(a) Comprehensiveness

There is no group of measures that can achieve complete protection from all pandemics or other threats. The optimal outcome is a comprehensive and integrated set of policies and behaviours that balance the dangers of a specific pandemic threat with the realities of the world. The Regional Action Plan focuses on informal settlements in the UNECE region, where risks are more acute, information is limited, and political and social will or trust is often lower. There should be a balance between these realities and culture, competing social needs, the economic engines upon which they depend, science, and limited natural resources. The actual situation at any moment balanced with socio-environmental realities, should drive decision-making at all levels.

Coordinated cross-sectoral approaches are necessary. One-dimensional solutions may lead to undesired or unexpected results. They often address symptoms of the problem, and can miss the complexity of the blended socio-cultural, socio-economic, and actual science of the many threats facing us and our planet. 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, 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 locally appropriate 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 innovations. They should be flexible in approaching different informal settlement challenges. Pandemic threats will raise issues related to culture, society, faith, economics, and governance, so the solutions must address these too. The greater the direct connection to how people live and what they value, the more effective interventions will be.

Interventions need to be flexible, to avoid unintended negative effects. Inflexibility can 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 should be 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-centred and human rights-based approach (A/73/310/Rev. 1; UN-Habitat, 2017)

Pandemic responses should always be interlinked with social policies promoting social well-being: promoting human rights, supporting gender equality and empowerment of women and girls, as well as helping reduce social inequality that can lead to unrest. Whilst the true nature of the threat should always be addressed scientifically, considering any world-scale problem in narrow technocratic terms invites opposition and failure despite the best of intentions.

The UNECE region contains large differences in 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, and they are at even greater risk relative to these factors. This is due to generally weaker social cohesion, lower incomes and resources, precarious employment and basic utility access, socio-cultural biases, as well as generally lower lesser access to education and necessary basic services.

The Recovery Action Plan has universal relevance to the UNECE region, and it is urgent that goals and targets be properly incorporated into policies at both the national and local levels. For optimal outcomes, however, local socio-economic, cultural, institutional, and geographical contexts must be integrated into the design and implementation of locally specific pandemic and threat measures. Effective participation of informal settlement residents is vital in deciding response measures and policies affecting them, from policy design, through implementation, to evaluation.

III. CROSS-CUTTING THEMES

Cross-cutting themes permeate this Recovery Action Plan. It is useful to discuss them separately to keep them at the forefront of implementation. They should be carefully considered through all policy areas when determining appropriate responses and priorities within the context of local realities, risks, and challenges. The most obvious cross-cutting concepts are discussed below.

Data collection and management

All policy areas have the theme of collecting data, studying, analyzing and planning. Without appropriate information it can be hard to differentiate between causes and symptoms. A lack of sufficient and up-to-date data, including gender-disaggregated data, may make it impossible to perform a cost/benefit analysis to determine implementation priorities. Compiling, maintaining, and updating databases, maps, registries, demographics and street addressing, ensure responses are effective and differentiated, according to the needs of diverse populations. Within informal settlements, information on these factors is often missing, hampering the ability of local authorities and stakeholders to implement appropriate and timely plans. Therefore, geospatial and demographic data collection needed for most of the policy areas must be coordinated with the formalization project. Information registers should be improved using modern techniques to collect missing information. Compiling the appropriate information and developing systems to retain and update this information, particularly title registers and cadastral maps, can provide subtle but potentially huge benefits to everyone.

The United Nations *Integrated Geospatial Information Framework (IGIF)*[6] provides a wide range of strategic pathways to ensure that data is available when needed. The UN-GGIM (2020) can also give useful guidance regarding relevant data management.

Integrated Geospatial Information Framework: nine strategic pathways and three main areas of influence
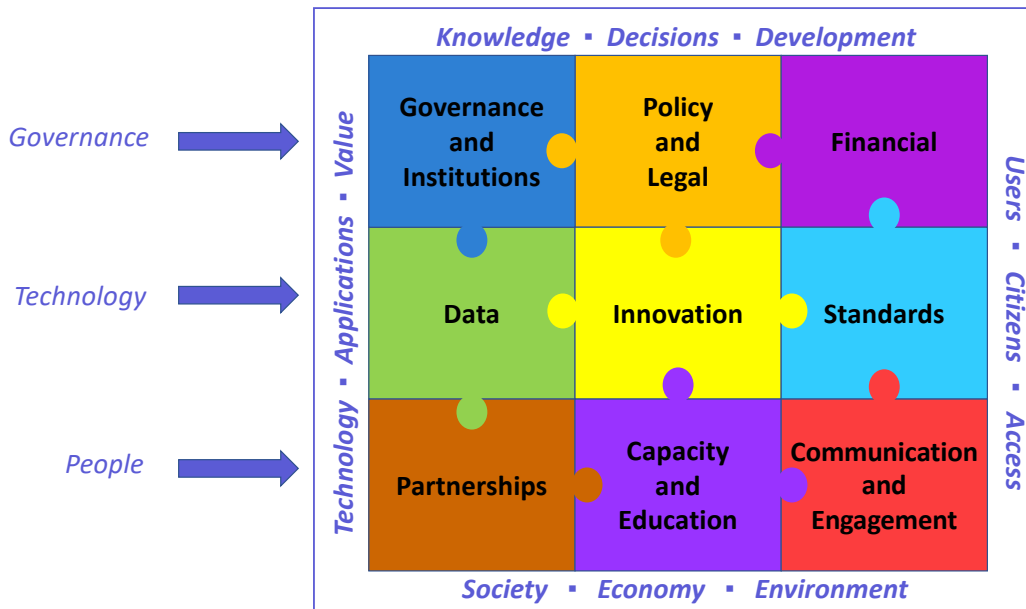
Source: UN-GGIM (2018b).

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6   For more information, see https://ggim.un.org/igif.

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

Communication and promotional plans

A larger communication plan should include messaging, gathering consensus, disseminating instructions, as well as provide data such as health and safety, scientific and policy information, communication of community benefits, and transparent registry data which supports efficient land markets. All of these are critical aspects discussed throughout the Policy Areas.

The messaging methods, tone, language and communication depth could make the difference between success or failure for any individual component of the Action Plan. Effectively communicating this information, gathering consensus and providing transparency are critical components of most socio-economic actions, and of this Recovery Action Plan in particular.

Good communication strategies are also essential. Appropriate, socially sensitive, accurate science-based messaging which uses inclusive dissemination channels can minimize dissent and help retain "will, and positive local perceptions" if pandemic fatigue settles in. It can decrease mistrust, increase compliance with health and safety measures, and speed 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 lack of obstruction, of most 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 for consistent and appropriate messaging that is based on good data and appropriate science, appropriate resource allocation, inclusiveness, as well as a sustained local and political will. Engaging and understanding the needs and priorities of local informal settlement residents, as well as broader political realities, is critical to gaining 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 as well as cultural, socio-economic, political, legal, scientific and medical information. It will also need a realistic analysis of risks, benefits and available resources, because well-intended but unrealistic plans will 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 so this should be considered when priorities are set, for timely achievement of SDGs and to withstand the pandemic threat. The achievement of some of the Goals and Targets will also build upon each other, with greater socio-economic, mitigative and resilience benefits when accomplished together.

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

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Additionally, the Goals, Targets and Actions 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 technical, institutional and organizing capacities to carry out these actions may not be present, so there may be a need to train individuals and strengthen institutional capacities to meet these specific challenges.

Huge benefits can be derived from giving people legal empowerment, integrating dead or inefficient land and labour capital through formalization, achieving the SDGs, and enhancing effective governance. Therefore, obtaining and retaining the trust and political will of local communities is vital to the success of this Recovery Action Plan. Doing this requires well-informed, nimble and effective leadership at key levels within the local community, local authorities, and possibly within the national government.

Gender equality, diversity and disability

Another cross-cutting issue for the Recovery Action Plan is a gender, diversity and disability approach. This ensures the specific needs of women and girls, LGBTQ+, and people with disabilities living in informal settings are considered 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 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, and greater equality and justice in gender relations is promoted. Gender analysis is based on sex-disaggregated data and qualitative information about disparities between men and women in each sector. Gender analysis will inform gender-specific interventions targeting all these groups 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 fair, efficient, and sustainable manner, allowing for broader socio-economic progress, justice, and empowerment of people, especially those in vulnerable and marginalized situations.*

Rationale

The right to adequate housing is an internationally recognized human right. Adequate housing refers to more than just a roof over one's head, it means housing with security of tenure and prevention of eviction, which is and remains affordable, is habitable and has access to public services. In the developing world about 33 per cent of urban dwellers live in informal settlements, and there are more than 50 million informal dwellers among twenty-member States of UNECE (United Nations, 2019a). Lack of security, the frequent concentration of sub-standard housing, and limited public services, burden the lives of settlement residents and increases their vulnerability to COVID-19. Meanwhile, these same residents interact with and provide vital services to the outside regional population, despite their greater vulnerability to the virus as their professions do not often allow digital work from home or physical distancing. In the long run this creates a greater pandemic-related health and safety risk for everyone. Therefore, ensuring protection of informal settlement residents benefits everyone and should be an element of a comprehensive COVID-19 prevention strategy aiming to protect the local economy.

It is of prime importance that, during the COVID-19 pandemic, public authorities should avoid any measures that would make life worse for informal settlement residents. In particular they should refrain from executing any evictions so that that people can shelter

from the virus in their homes, whether in formal or informal housing.[7] Evictions increase the risk of spread of the virus and also contribute to homelessness, making the situation of affected persons worse. Often evictions only relocate the problem of informal and substandard housing to another neighbouring community. While relocation of some households living in informally erected housing cannot always be avoided, this should only happen after all alternatives have been explored. If it still cannot be avoided, it should be implemented in full conformity with international human rights standards. These are set out in the United Nations Basic Principles and Guidelines on Development-Based Evictions and Displacement (A/HRC/4/18, Annex I), which details 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 compensation for loss of property if appropriate.[8]

In general, formalization of informal housing complemented by participatory and rights-based upgrading of informally settlements is the approach that the United Nations, including UNECE, UN-HABITAT and OHCHR endorses. This approach should underpin all core actions to be implemented in this Action Plan.[9]

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7   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.

8   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.

9   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.

Informal constructions represent "dead capital": they usually cannot be registered, taxed, transferred, rented, upgraded, or mortgaged. They 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 effects on poverty, GDP, risk, real estate values, tax revenue, human rights, and sustainability. It is important to note 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 sector[10] and have less access to land.[11]

It is urgent that these assets be transformed into more productive capital, and the cycle of poverty and suffering is broken. An expanded real estate tax base, and the valuation industry upon which efficient markets depend, can also be achieved by a successful formalization programme.[12] This is accomplished partially through creating an efficient, equitable, and just land and labour market in informal settlements, and also 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 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 healthcare and disaster responses, 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 within informal settlements; the first step to formalization. For this, crowdsourcing, volunteered geographic information and volunteer work should be considered. Existing informal settlements urgently need to be formalized and affordably integrated into the economy 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. 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 creation of future informal constructions should accompany the formalization process. These need to address the root causes of informality in parallel with or after the formalization process. They should be structured to encourage people to follow official regulations and laws and build affordable constructions within existing systems. When this is not possible, social and affordable housing programme options should be explored. For example, the state may adopt affordable housing policies, providing state land, services and materials to beneficiaries and requiring compliance with regulations for these self-made constructions, under the supervision of the responsible agencies. This should be tested with pilot programmes, to match resident demand with the willingness and flexibility of state actors. Done properly, this can help minimize future informality by addressing some of the root causes of existing informal constructions. It will involve the state in assisting with 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 informal developers who may try to take advantage of formalization procedures.

Many countries have not developed adequate policies, institutions and capacities to prevent informal development and limit the harm caused by tenure insecurity, eviction and displacement, as well as substandard and unhealthy housing. In these countries, there is higher exposure of residents to pandemic threats or other disasters. There is a need to improve relevant land-related institutions, as well as provide professional education broadly. Informal settlement

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10   For more information, see https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_updated.pdf.

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

12   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.

residents' lives are improved and protected by wide-scale improvement in institutional function, social inclusivity and protection, the integration of health and safety with geospatial data, as well as security of tenure, housing, land and property rights.

Target

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.

Actions

1.1.1   *Identify* the current coverage, quality, and scope of 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 and safety, mobility logistics and infrastructure plans for the broader formal and informal communities. Consider crowd sourcing or 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 or similar, as well as organizing mapping and addressing programmes. This is to prevent informal settlement residents perceiving these exercises as a threat to their houses and lands. Volunteers and team leaders should be organized and provided with simple training courses on how to use the mapping methods. A simple open-source application tool and an appropriate base map should be used, such as cellphone-based, orthophoto,

air photo or crowdsourced maps such as OpenStreetMap.[13]

1.1.4   *Supplement* existing demographic information with a wide variety of health statistics for residents including gender, age distributions, disabilities, pre-existing health conditions, urban density and health care access. Include data for measuring housing conditions that affect health, such as insulation, heating, indoor and outdoor air-quality, safety and quality of drinking water (WHO, 2018) for better planning and resource allocation. For urban upgrade programmes, additional data should be collected on housing affordability, access to water sanitation, access to health care, schooling and access to public transport.

1.1.5   *Make information transparent and accessible, affordable and easy to manage.* For example, all geospatial and related socio-demographic information should be available in a form which enables better decision-making by government, professionals, the business community, stakeholders, and inhabitants.

Target

1.2   *Informal constructions are formalized* in a fair, efficient, transparent, and inclusive manner. This would empower residents, support social and economic inclusivity and ensure better pandemic responses (United Nations, 2019a).

Actions

1.2.1   *Identify* the extent of informal or unregistered constructions and parcels, and the current weaknesses the legal and regulatory framework in terms of coverage,

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13   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 at https://gltn.net/access-to-land-and-tenure-security/#.

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 informal arrangements, classify the informal constructions, understand the causes, and research their effects on transportation networks. Use this to 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 Assessment (UN-Habitat, 2011 and 2014) has been conducted and an appropriate, inclusive and human rights-based resettlement plan is already in place that conforms to the United Nations Basic Principles and Guidelines on Development-based Evictions (A/HRC/4/18). 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. This means defining areas or zones and categories of buildings eligible for formalization as well as protected areas, necessary legal action, appropriate actions, the registration process, title provision, necessary fees, and determining the institutions involved. Also, it should be ensured 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 process. This should include processing documents, mapping all structures, titles and registering, legal actions, collecting fees if appropriate, and monitoring the process. Legislation and technology need to be developed in tandem as each relies upon the other.

Target

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 protection for human rights, gender equality and dignity.

Actions

1.3.1 *Identify* the existing legal structures including laws, policy, procedures, 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, including tenure security, emergency, and health service provision.

1.3.2 *Determine* what legal problems are likely to hinder formalization and 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 inequalities 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. It should also ensure

adequate pandemic-related health services, with special regard to the needs of women and girls.

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. Economic as well as health and safety benefits should be emphasized.

1.3.6 *Understand and prepare* for legal and criminal challenges in informal communities as they relate to lockdowns, partial or full closures, and short term economic or 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 all residents (A/HRC/25/54).

1.3.9 *Raise awareness* and improve education on the benefits of formalization so that formalization covers nearly all informality and is all mapped.

1.3.10 *Develop* appropriate procedures to allow smooth and regular updating of all collected geospatial and demographic data, addressing all structures, and keeping registries current. This will foster economic progress and integration with formal markets, and in time it will also decrease social tension.

1.3.11 *Allow* for any required structural improvements to 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 residents so that this does not impede full formalization. Formalization programmes can be threatened by extensive reliance on inspections, permits, fees, long wait times, general mistrust, high construction, or efficiency standards. These factors must be carefully considered and balanced with the goal of complete coverage and integration.

1.3.12 *Ensure* affordable and accessible judicial complaint mechanisms for residents. This could be embedded in a land dispute resolution mechanism and should entail free legal aid for residents directly or indirectly affected by tenure formalization and cannot afford private legal counseling. This mechanism should also be able to suspend evictions, pending complaints from affected individuals.

Target

1.4 *The institutions underpinning land, labour and capital economics, as well as health and 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. These include regulations for taxation and professions, health and safety, property rights and tenure security, credit and banking, effective governance and corruption, and the justice and legal system.

1.4.2 *Understand* how these institutions interact, and identify barriers and choke points impeding efficient, fair, and affordable provision of these services. Barriers and inefficiencies in their interaction impede empowerment, equitability, economic progress, and by extension human rights and health and safety.

1.4.3 *Determine* where institutional impediments are and prepare a strategy for addressing some of the barriers impeding economic growth, health and safety, and human rights. This will involve speeding up processes, removing unnecessary steps, lowering costs, removing corruption, and promoting inclusivity.

1.4.4 *Improve resource allocation and overcome* the challenges involved in removing 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 as well as 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 recommendations should be based on the best medical data and 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 local community level. To this end, local community leaders need to be informed and involved as much as is reasonably possible, to achieve best compliance with science-based plans designed to protect both formal and informal communities.

There are many ways local informal settlement residents can become involved in safeguarding their communities. Organizing local groups to address pandemic-related challenges may be vital to limiting viral spread with the least negative impact on local society and the economy upon which it depends. Society's most vulnerable people can be helped by volunteer groups trusted by residents, small-scale home education pods, local assistance for elderly and at-risk residents, community and faith-based food or medicine sharing programmes and other similar groups. 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 requiring local knowledge including customs and procedures, especially as it may need to contradict these. 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. Additionally, plans for alternative small-scale pod-based programmes as an alternative to larger public and private institutions such as education, or larger businesses are useful. The creation of coordination and communication plans to enhance the speed and efficacy of pandemic responses are also vital. Strong support from local community and faith leaders is crucial for successful pandemic response implementation measures. It is also important to identify gender inequalities and empower women and their role in the local community, to ensure easy access to goods and services for all.

Target

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 threatsengage residents and address the specific needs of the community.

Actions

2.1.1 *Identify* trusted community leaders as well as 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 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 in infrastructure or shortages of basic goods, water, energy, food and medicine. Plans also should be developed for elderly care, mental health, addiction problems, combating abuse, personal protective equipment (PPE), education pods, utility and infrastructure problems, and other community-specific issues.

2.1.5   *Assist and organize* the city or town, 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

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

Actions

2.2.1   *Identify* the donors, faith-organizations and charities concerned in assisting in local community pandemic response.

2.2.2   *Engage* the above, plus international NGOs, donors and other stakeholders with local authorities and government ministries, as well as appropriate local groups, for effective aid programmes.

2.2.3   *Create a plan* to link the variety of NGOs, donors, faith-based organizations, and their resources with 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 the other issues discussed in this document, with NGOs and charities as possible funding sources.

2.2.4   *Initiate* charity and NGO programmes with appropriate oversight protocols and proper targeting of funding and goals to minimize corruption and waste and maximize benefits.

Target

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 settlement residents in specific communities. If some 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,[14]

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14   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.

crowd-sourcing tools and use remote conferencing tools. These facilitate public participation in designing, monitoring and adjusting plans which deal with specific local pandemic challenges or other crisis situations.

2.3.3   *Develop* urgent community-specific plans to assist in spreading fact-based scientific information and be aware of where governmental and aid agency responses are addressing similar issues. These plans should include community leaders, community groups, social media, and other sources appropriate to local communities.

2.3.4   *Supply information to local communities including* consistent messaging in 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 focussing on consistent science-based problem-solving to assist communities in responding 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   *People are empowered to cope with a pandemic by leveraging relevant information technologies and making them easily available.*

Rationale

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

Greater access to data also allows for a coordinated response to pandemics and other disasters. It allows for accurate and current information on pandemic risks to be shared in real time with the community. Many informational, technological, environmental, infrastructure, service and social barriers were identified during the COVID-19 pandemic, such as data sharing, data quality and access to services. Creating a risk register including 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 can be easily spread, informing how to protect people and how they can protect themselves. Methods such as telehealth, teleworking, tele-education, and online education options are effective in lockdown periods. These technologies can be crucial to education when schools fully or partially close during high-risk times. 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 lockdowns 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 communities recovering more rapidly.

Pandemics need short-term responses to control and limit the viral threat. Accurate information should be provided via the above technologies 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.

They can also be a valuable source of basic human contact. 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

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

Actions

3.1.1   *Survey* the current state of radio and mobile phone technologies in terms of 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. There will also need to be enough digital literacy among the population, especially the elderly 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 such as infection and death rates, testing sites, hospitalization, and quarantine protocols, contact tracing, health instructions, mapping of communities, understanding mobility patterns for transportation improvement, and COVID-19 testing results.

3.1.4   *Develop* smartphone applications to provide and gather 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 which analyzes mobility patterns to find dangerous hubs and choke points.

3.1.7   *Consider and explore* if radio and tele-education would be useful 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

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 in terms of 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. Consider current community employment as well as potentially expanding new employment opportunities designed around global and local teleworking. An e-portal for government services should be developed where possible, which allows for more efficient processes, decreases corruption, and improves health and safety through less traffic at government offices.

3.2.4 *Decentralize* employment opportunities in small-scale, easily socially distanced occupations in the case of a 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 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 and smartphones may be needed to increase the viability of teleworking. It may be possible to find donors for some of this equipment.

Target

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 such as radio stations, social media, applications and websites 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 and local services. Social media platforms can be used, radio, smartphone applications, transportation service tracking and websites.

3.3.3 *Aggressively combat* false 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 and safety measures begin to cause economic and cultural distress. Consistent, logical, and science-based messaging with good leadership is vital to success in the dissemination of appropriate and reliable information. When combating false narratives use top-down and bottom-up educational messaging by engaging trusted people to communicate the message making the truth more credible 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 as well as communication and engagement of people. Properly designed, these can limit negative social impacts of the pandemic.

3.3.5 *Provide* online services to combat social isolation, negative mental health and addiction pandemic effects, and provide 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 and 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 programmes. This is the foundation for the empowerment of

young people and allows greater flexibility for everyone in a rapidly changing labour and employment environment.

3.3.7 **_Establish_** an information centre in informal settlements where people can get support. This can be a base for trained staff to pro-actively approach residents with campaigns to use online resources to solve local problems and inform residents of vital 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 informal communities._

Rationale

The public physical infrastructure and related services are critical to the health, safety, security, economic potential, societal structure, protection for basic human rights especially for society's most vulnerable groups, and attaining a better, sustainable, and more resilient future. Within this policy area roads, water, sanitation, and energy grids will be the main topic but telecommunication, railways and public transportation are also important elements to be incorporated.

The physical road networks within informal settlements are often unplanned, narrow, complex, and sometimes choked with debris and garbage. Often, they do not adequately allow for emergency service access, efficient public transportation usage, and more sustainable mixed modes of transportation such as mass transit, bicycles, foot traffic, as well as cars. This is often due to a lack of governance, planning, and limited availability of geographic, demographic, and spatial information for these areas. Enhancements in physical transportation infrastructures can help to prevent pandemic spread through greater social distancing, faster and easier access to employment, education, health service and shopping areas. It can also lead to increased economic performance of residents thereby 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 protecting human health during all infectious disease outbreaks, including 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.

Informal communities are often 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 poor maintenance of septic tanks, 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 often cannot afford soap for handwashing and disinfectants for cleaning waterpoints, toilets and surrounding areas. All these are essential to mitigate and prevent pandemic-related harm to informal community residents.

During a pandemic, public service providers should not cut off water, electricity or fuel for required heating that may be provoked by inability to pay service fees, as many informal settlement residents may 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 respective households or the entire population of an informal settlement or sections. Fully cutting electricity will completely exclude children from taking part in remote schooling or e-learning 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 settlements and their integration with formal markets. These factors enhance socio-economic recovery and promote better resident health after the pandemic, as well as contributing 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, socio-economic realities, political will, and pace of upgrades that pragmatically fit the community. It also combats climate change in a sustainable manner.

The COVID-19 crisis requires short-term responses to address key pandemic weaknesses created by inadequate road and water, sanitation and energy utility infrastructures. The provision of safe water, sanitation, and hygienic conditions is essential to protect 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, as well as healthcare 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 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. Many of the benefits of these responses are indirect: strengthening and empowering residents over time by making them safer, healthier, more economically viable and flexible. They also help achieve more societal balance, especially for women and minorities, and a more equitable balance between formal and informal communities over time. Attaining these goals increases resilience to pandemics, and other disasters as well.

Target 🔴 🟠

4.1 *The physical road and transportation network is adequate and safe* for emergency services; paved, necessary width for vehicles and so on. When possible, it should be flexible enough to safely accommodate differing modes of travel such as mass transit, foot traffic and bicycles. It should also be adequate for economic integration with the formal community and able to accommodate pandemic-related social distancing.

Actions

4.1.1 *Map and identify* the characteristics of the physical road and transportation network in terms of type, adequacy and quality of roads, physical barriers, common modes of travel, time and distance relationships to home and work. This should also take into consideration the specific needs of people living with disabilities. Global Positioning Systems (GPS) and smartphone technology can be used to gather this type of information[15] 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, both 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 remove any physical barriers, debris, waste so that emergency services can safely reach the community. Make a collaborative plan for the relocation of market stalls, tents or other informal land uses that may inhibit access of

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

emergency services in consultation with the users. This should be done in a manner that allows them to continue carrying out their informal business. In case tents or informal structures provide housing, their relocation should be carried out in compliance with the United Nations Basic Principles Guidelines on Development-based evictions and displacement.

4.1.4   *Produce a fit for purpose plan* to adjust 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 and home. It is also vital to improve the quality of lighting, roads, paths, surface types and connectivity with transport hubs, for the effective use for all types of mobility.

4.1.5   *Consider* the feasibility of different transport modes to increase energy efficiency, decrease pollution, promote public health and safety, and increase social distancing wherever possible. These create indirect health benefits by increasing resilience, as well as direct benefits through better social distancing, and should be put to use where practical. *Promote* those messages through an effective media and communication campaign.

Target

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

Actions

4.2.1   *Study* and map existing water and sanitation service provision and the legislation supporting it. *Determine* where the systems are centralized or decentralized, adequate, affordable and equitable, the risks they face including climate change related or natural disaster risks. Also determine where they fail, and why, including potential governance bottlenecks to water and sanitation provision.

4.2.2   *Identify* and map what groups or locations are underserved with water and sanitation services. A potential tool to be used in this context is provided by the Equitable Access Scorecard.[16] This is a self-assessment methodology developed under the UNECE-WHO Regional Office for Europe Protocol on Water and Health to help policy makers establish a baseline measure of equity. This supports development of action plans 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 Plans[17] is available under the 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, so investment now may be wise on many levels.

4.2.4   *Develop a funding strategy* involving government, donors and NGOs, and consider that informal settlement residents are unlikely to be able to afford significant upfront development costs, although subsidized and back-loaded costs can be explored. Low, subsidized, or no upfront connection fees should be applied.

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

17   The Guidance Note is available in three languages: English, French and Russian (https://www.unece.org/index.php?id=44284).

4.2.5 *Affordably facilitate* clean water with adequate and equitable sanitation services within informal settlements through infrastructure programmes. 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 is 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 most of the population comply with water, sanitation and hygienic provisions. Water handling and household storage in informal settlements is vital to ensure water quality. Important considerations include the hygienic maintenance of the sanitation infrastructure and the waste management systems.

4.2.8 *Increase* the frequency of solid waste disposal and management and *identify* locations for garbage collection, supplementing them if necessary.

4.2.9 *Prohibit* service cuts of water and sanitation provision to informal settlement residents or ensure that every household has a size-based minimum amount of energy available every day by installing meters.

Target

4.3 *Adequate energy services are provided to informal settlement residents* incorporating affordability, improvement of energy efficiency – renewable if possible, sustainability and performance standards suitable to the specific local context and

achievement of SDGs. 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 vulnerable people.

Actions

4.3.1 *Identify* detailed characteristics of energy services used by informal settlement residents. This should include the variety of energy types, efficiency, theft of energy and ways to prevent it, delivery and payment methods, and sustainability. It should also include what performance standards are mandated compared to what is typically in use, and what is realistically possible given the socio-economic realities for specific informal settlements.

4.3.2 *Prohibit* service cuts of energy provision to informal settlement residents 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 energy services. This should include inadequate indoor and outdoor air quality, inadequate water, waste or sanitation services, energy costs, degradation of green spaces, greenhouse gas emissions, potential fire hazards, and any other identifiable negative factors.

4.3.4 *Study* the available opportunities for improving energy efficiency and decreasing risks. This should include more efficient equipment, incentives including front-end subsidies for energy efficiency, back-end pricing models with long term recovery of front-end costs, flexible payment systems, energy cooperatives, 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 an expanding energy infrastructure.

4.3.6   *Assess* the situation of local informal settlements complying with minimum energy performance standards (set at the national level) for buildings as mandated by national legislation. This should be done with a view to setting up a process to support 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 the 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, during or after formalization, necessary steps for applying MEPs should be considered by the state and 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.

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. Aspects of sustainable energy supply during the pandemic lockdowns and restrictions must be considered.

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 are the economic foundation upon which we depend. 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 limited resident resources, 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 and vaccine distribution. Meanwhile, 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 responsible manner which balances social, cultural, economic, psychological, and health and safety concerns. Government, community residents, and stakeholders need to come together and adjust how they will live and work for the duration of the pandemic threat. This is to minimize loss of life, economic loss, and preserve social values and norms during these trying times.

This crisis requires short-term responses to the COVID-19 threat, addressing how to limit viral spread by adjusting how services are used. Vaccination distribution, along with planning and proper consistent messaging to support it, is also critical. Service provision in areas where demand is much higher due to the pandemic must be temporarily expanded. Short-term financial funding sources must be found, such as group or individual microfinance, as well as aid agencies 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 and services, and the development of plans for future pandemics where similar shortages or vaccinations may apply. They will need to incorporate strategic stockpiling and local manufacturing for some key sectors such as PPE, food, and medical equipment. More generally they will have to plan for flexible health care capacity plans, more digitalization, and centralization or decentralization of services as appropriate to limit viral spread. In the longer term they should include 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

5.1 *Health service provision is sufficient to meet public need* (FAO, 2020) for typical demand, and has in place adequate expansion capacity for pandemic response.

Actions

5.1.1 *Identify and map* the adequacy of current social protections and health care services, as well as their locations relative to formal and informal residents to ensure equitable care is available. This includes an analysis of public transportation systems available to the public for such access.

5.1.2 *Determine* if these 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 for the provision of e-medicine instructions or diagnosis, and ways to address shortfalls in social protection.

5.1.4 *Estimate* what and how much additional social protection and healthcare services will be needed under pandemic peak periods. This includes identifying the social, cultural, communication, economic barriers or trust gaps that may make informal settlement residents avoid or renounce formal health services. Alternatives which residents are likely to use should be understood, as well as what effects that will have. Digital services should be used as much as possible.

5.1.5 *Prepare* to adjust to emergency social protection and health care provision with plans in place for a rapid scale up. Hospitalization, including intensive care facilities, testing and vaccination services are particularly important. This includes storing, distribution, and care with no, or very limited, opportunity for corruption and black-market activities.

5.1.6 *Ensure* that physical access to sufficient social protection and healthcare services is available to all formal and informal residents, and that there is no bias against minorities or society's most vulnerable. Ensuring access could entail using mobile healthcare units where needed, if access to hospitals or clinics is difficult for vulnerable groups.

Target

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

Actions

5.2.1 *Identify* the adequacy of current emergency services such as ambulances, fire rescue, paramedics and other staff, equipment.

5.2.2   *Determine* if emergency services appropriately reach informal communities and what barriers may prevent servicing these areas. This includes knowing the adequacy of road paving, street width and congestion including by garbage or debris, markets or other informal street usage, 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 centres for informal residents. Short-term specialized solutions may be required if current routes are insufficient to handle peak periods, and mobile healthcare units may be needed.

5.2.4   *Create* a plan for expansion of emergency service, rapid training of new staff protocols, as well as 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 known 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

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

Actions

5.3.1   *Identify* community leaders, respected local health care providers, influential community groups and others willing and able to communicate consistent and accurate medical information. 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 or respected these are allows 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* health messaging using appropriate local channels, languages, and media (Holzwarth, 2020).

5.3.4   *Ensure* accurate messaging overcomes false messaging and stays consistent even during periods of pandemic fatigue.

Target

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

Actions

5.4.1   *Identify* the sectors of the informal community at greatest economic risk from pandemic challenge such as public markets, service industries, retail and food service.

5.4.2   *Understand* what governmental resources are realistically available for short-term economic support, as well as the political will to offer it.

5.4.3   *Explore creative solutions* to community underemployment problems. These could include infrastructure programmes, expanded home occupation with small incentives, subsidized relocation for employment, training programmes, small-scale manufacture, and phone or computer distance work plans.

5.4.4   *Employ* the 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 their 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 appropriate solutions can be implemented.

The cost of a failure in pandemic response inordinately falls upon women and society's most vulnerable groups. Extremely difficult economic choices already face informal settlement residents. Stay-at-home orders exacerbate these challenges, and these residents often already face bias, prejudice, inconsistent justice, corruption, insecure 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 job loss can be catastrophic. Unless appropriate action is taken, a pandemic makes these problems worse.

Stay-at-home orders may be the only viable way of combating a pandemic such as COVID-19 when cases are spreading rapidly. However, these orders cause havoc for social and economic systems. Informal settlement residents are usually at greater risk of getting infected due to their typical occupations. They are also more likely to be severely affected due to lower 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. For example, 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 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, lockdown, 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 so community engagement and plans must be drafted appropriate to local realities and cultural needs. Society's most vulnerable groups need to be carefully considered in any plan for it to be successful. These include women, children, ethnic minorities, faith minorities, the elderly, the health compromised, the indigent and the economically compromised.

Target   🔴 🟠 🟢

6.1   *The cultural and demographic characteristics in informal settlements are considered so* that diversity and language barriers experienced by informal settlement residents are not an additional hazard to appropriate pandemic response.

Actions

6.1.1   *Understand* the demographics, diverse cultural norms and importance of 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 such as weddings and other public gatherings are putting everyone at risk. This would require 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 used, measures requiring physical distancing, and need to wear masks.

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. Ensure that they are not selectively enforced against residents living in informal settlements, or particular communities or groups. 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 are putting the public at unacceptable risk. This can include food sales, group meals, children and at-risk groups including the elderly sleeping or living together with younger family members.

6.1.5   *Forecast and prepare* for opposition to social change recommendations. 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 everyone's safety. 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 short-term harm to the community.

6.1.7   *Avoid* backlash against the government where possible by closely engaging community leaders and having accurate medical science-based solutions that also respect the dignity and values of informal residents and 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 communication barriers. Outreach and communication campaigns that take these potentially exacerbating influences into account will make pandemic response more successful.

6.1.9   *Ensure* respect for public health measures by all residents, 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

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.

Actions

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 informal settlement residents may be present that may increase during a 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 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 these threats or potential criminal actions are investigated by the police and other law enforcement agencies.

6.2.4   *Ensure fairness in 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 young people from potential 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 informal residents as well as the wider community at a greater and avoidable risk.

6.2.7   *Provide sufficient financial and other support* to ensure that informal settlement residents who fall ill can afford stop working, be tested, and if tested positive, can quarantine without placing their families or their work-related contacts at 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   🔴 🟠 🟢

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. They may also need support to comply with stay-at-home or quarantine protocols.

Actions

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* programmes so informal settlement residents can more safely work from home. This may require

some workflow redesign from employers, and support programmes 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 are 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 supported so they can travel to better employment opportunities. These support services will decrease poverty and have longer-term benefits as labour skills are enhanced to meet demands.

6.3.6   *Use stay-at-home orders* appropriately, for a sensible time period 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 and possible trust gaps. Therefore, 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 so the risks and magnitude of pandemic spread are 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 policy makers can understand and mitigate risks while supporting the informal settlement residents.

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 or others at risk. To avoid this, they need appropriate PPE, testing services, and local authority support.

Target

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

Actions

6.4.1   *Identify* the aspects of local cultural life that may place residents at greater pandemic risk. These may include weddings, funerals, worship, local markets, mass transit stops and regular mobility patterns.

6.4.2   *Adjust* local social usage to preserve cultural identity and protect community residents.

6.4.3   *Overcome* objections to changes in cultural life to protect residents. This must be accomplished in cooperation with local leaders, faith leaders, community groups and ordinary residents. It will need to be predicated upon accurate medical science and messaged effectively.

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

Adequate food, basic consumption goods and medical supplies need to be safely available to informal settlement residents during crises. Access to food is a human right under article 11.1 of the International Covenant on Economic, Social and Cultural Rights. If these products are manufactured locally, the pandemic might impact their safe production. Alternatively, if they are from farther away or imported, shortages might occur at the worst possible times. Additionally, manufacture of these goods can become more difficult due to pandemic-related safety issues, and new regulations may be needed. Worker shortages may limit basic production, food processing, and distribution efforts.

An important goal for all settlements should be food and nutrition security. The four pillars of food security are availability, access, utilization, and stability. Pandemic challenges make these goals more problematic (CFS 2012/39/4; FAO and others (2020). When they are jeopardized, plans should be made to overcome the new obstacles to food and nutrition security.

Ideally, goods should be distributed safely to all informal settlement residents. A pandemic such as COVID-19 with its restrictions and lockdowns creates shortages of basic necessities but also surplus goods. Examples include food ordered but never used due to the shutdown of the hotel, restaurant and catering (HORECA) sector. Shortages and surpluses both affect prices, risks, producer compensation, as well as the efficiency and integrity of supply chain logistics. The supply and distribution of basic goods can also become exacerbated by black markets. The distribution of necessary goods must be ensured, and provided in a fair and just manner, especially to society's most vulnerable groups and shielded from black-market activity whenever possible.

The COVID-19 crisis requires short-term stockpiling of necessary goods, and improved safety measures in food processing and farmers' markets, as well as basic goods manufacture. In addition, making sure that supply chains function is the top priority in 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 production and distribution of food, medical supplies and basic goods must be based on the specific characteristics and patterns of each pandemic. The distribution of surplus food at drop-off centres, warehouses and food banks, plus surplus medical supplies, should be tracked and organized. Public, private sector, and civil society can cooperate to organize collection, storage, and distribution functions (Banerhee and Duflo, 2011 and 2019).

These challenges also require more options for social distancing in facility design, the distribution of necessary goods such as food and medicine, and safety needs. It needs an emphasis on fairness and justice to offset black market activity and corruption. It also requires a good understanding of where residents are located so they can be served adequately by all relevant stakeholders such as aid agencies, food banks, NGOs and community programmes. Specifically, the size and location of the most vulnerable groups must be known so distribution processes can function, and resources are available to meet their needs and respect their human rights.

Target

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

Actions

7.1.1   *Analyze and map* the food supply chain and its main actors, the logistics of food supply networks, and the accessibility of the road network. The geospatial and demographic data derived from the formalization process should be used for this. The medical supplies and basic goods distribution systems

should also be analyzed and mapped. These are vital to the regular function of informal settlements and the surrounding region. This process includes mapping the operational flows of supply and demand, and mapping locations such as farmers' markets, cafes, restaurants, hotels and retail outlets. The goal is to recognize supply and selling procedures to identify pandemic spread risks in the distribution chain.

7.1.2   *Identify* where the distribution of food, medical supplies, and basic goods supply chain logistics systems have become inefficient due to pandemic complications, and where they create health and safety risks of viral spread.

7.1.3   *Enhance* food, medical supplies and basic goods distribution systems by removing social, institutional and physical inefficiency barriers, by stockpiling key goods, and organizing fast collection of surplus food. This is to ensure that demand is met even with a breakdown in the labour and production sectors.

7.1.4   *Regulate appropriate social distancing* in the distribution process of necessary goods to protect all residents, with particular emphasis on the most vulnerable groups.

7.1.5   *Consider expanding* take away cooked food or home delivery alternative procedures for vulnerable groups, the elderly, especially during lockdown periods instead of "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 safe distribution of staple and medical goods to all informal settlement residents even though normal patterns of distribution may be unsafe or compromised. Additionally, a pandemic supply crisis may cause necessary products to be overpriced for 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

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

Actions

7.2.1   *Analyze* the key aspects of the food and basic goods production system essential to survival in informal settlements, and vital to the economic stability of residents.

7.2.2   *Find* where the food and basic goods manufacture and processing systems are difficult to perform while also applying appropriate social distancing and other COVID-19 safety measures, so these challenges can be overcome.

7.2.3   *Strengthen* the food, water and basic goods production and processing systems by removing inefficiency barriers, ensuring raw materials and enhancing worker productivity. Use appropriate technologies to enhance the economic resilience of these sectors, indirectly building pandemic resilience.

7.2.4   *Apply appropriate technology* to enhance productivity, promote hygiene standards and increase or control social distancing within the production and manufacturing processes.

7.2.5   *Include* expanded hand washing stations and all appropriate PPE to the labour force appropriate to their role in production of food, medical supplies, basic goods as well as distribution.

7.2.6   *Understand* the limits to the adaptations possible within the food and basic goods manufacturing processes supporting informal local communities, so that critical problems under a pandemic situation are anticipated.

7.2.7   *Prepare* an action plan on how to overcome these community-specific problems related to food production and manufacturing before they become critical.

Target

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

Actions

7.3.1   *Study and be quick to respond to changes* in the current level of corruption, black market activity, transportation cartels, and current worker skill and manpower shortages.

7.3.2   *Gather data and information* on corruption hotspots, plus any other links with criminal activities profiting from the pandemic, 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. Corrupt individuals and black markets will be quick to exploit a pandemic crisis so the costs to 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 society's most vulnerable.

7.3.5   *Limit the scope* of black market and illegal activities and *prevent* widespread profiteering of necessary goods and medical supplies.

Target 🟠 🟢

7.4 *Local authorities and communities are prepared to deal with labour supply shortages in a pandemic* and to support informal settlement residents.

Actions

7.4.1 *Plan for emergency measures* for where pandemic-created critical labour shortages will put the health and safety of residents in danger, and place strains on the already-struggling public and private sectors and on people's lives. Examples include the labour pool for trained medical staff, labour-intensive manufacturing, or work in enclosed food-processing facilities.

7.4.2 *Enact emergency measures* for identified critical labour 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 centres in informal settlements to inform residents about COVID-19 measures, and support them in with accessing aid, short-term housing or food, medical information, community aid groups, and employment opportunities. This last would include newly created and organized employment.

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 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 community residents to safely enjoy green spaces and other 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 vulnerable groups are more likely to be exposed to air pollution, and more likely to develop more severe COVID-19 respiratory symptoms (EEA, 2020). 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 to limit the viral spread during the enjoyment of recreational and social activities. Social activities such as weddings, funerals, and faith-based events that local customs require assembly of many people are especially challenging on a cultural level. Tact, proper messaging, and community leader support will be needed for reasonable compliance with safety measures for this type of gathering. Long-term resilience to pandemics in recreational and social gatherings must be based on the disease's specific characteristics, patterns of viral spread, and lethality. In the case of COVID-19, an emphasis on improved social distancing, handwashing, and PPE is crucial. To protect their people, and thereby the economy that fuels society and produces tax revenue, governments should focus on safe outdoor recreation, and strictly limit indoor and mass gatherings for sport, music or other dense social gatherings.

Target 🔴 🟠

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 events.

8.1.3   *Adjust or ban* outdoor group recreational and social gatherings that cannot be safely enjoyed in their current form. Local community leaders' support will be vital for this.

8.1.4   *Provide or make affordably available* handwashing stations, cash transfer stations, expanded digital payment methods, vending, food and drink, and adequate PPE. These should all be suitable for 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 quality of life and environmental sustainability within informal settlements. Promote participatory mapping and effective public participation to ensure there are paths which 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 watersheds and green spaces.

Target   🟠 🟢 🔵

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 tourism-related activities such as hotels, motels, rooms to let, cultural sights, transportation nodes and attractions. 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 compliance via communication and local engagement. Also, it may be necessary to fine or penalize businesses who violate safety measures and place people at undue risk.

8.2.4   *Develop* a policy, including processes and responsibilities, that ensures safe transport for recreational and social travel including taxis, mass transit, airport to hotel, shuttles, cleaning and ventilation guidelines. Also, the policy should encourage safer and healthier modes of transport such as walking and cycling.

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 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 centres, government buildings, transport hubs like train stations and retail outlets pose greater risks due to 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 plan to limit viral spread at hot spots. They need to understand the normal movement patterns of people within specific informal settlements and adjust these to limit high density travel in locations that could become high viral spread junctions.

The structures and layout of communities create many risks and inefficiencies that impede long-term economic success, health, safety, and the security of residents. Poor planning can also create an environment more conducive to viral spread within the broader community. The COVID-19 pandemic crisis requires short-term responses because of its very high transmission potential, related to risks posed by how the built environment is used. Additionally, creating long-term resilience to different pandemics 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

9.1   ***Large and intensely utilized commercial, educational, and public facilities are safe.*** This involves ensuring safe operation of hospitals, medical centres, government buildings, schools, transport hubs, and shopping centres.

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

Actions

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 alongside the formalization process, and with mapping and identification of vulnerable groups and their geographic distribution so responses are appropriate to risks. Electronic service provision should be used wherever possible.

9.1.2   ***Identify*** which buildings have the most frequent use and therefore require long queues. 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 by phone, computer, or television, 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. This includes doors or windows openable without using hands, increased ventilation, wider corridors, redesigned queue systems, increase seat spacing, and limited number of people inside at one time.

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. Children may be at risk in the school setting, but this can be managed, as opposed to the risks they pose when out of school, as well as limiting the negative economic effect of having a parent stay with them.

Target   🟠 🟢 🔵

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, access to public spaces must be improved, along with an adequate housing stock.[18]

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18   This should also prevent the loss of homes during the emergency period. It can be done through moratoriums on evictions due to rental and mortgage arrears and deferrals of mortgage payments. National legislation on prevention of forced eviction can also be strengthened, particularly in informal settlements and slums as well as introduction of rental stabilization or reduction measures. For further useful measures include 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 https://unhabitat.org/sites/default/files/2020/05/130520_-_housing_and_covid-19_key_messages.pdf).

Actions

9.2.1   *Understand* the increased risks of viral spread due to the specific physical characteristics of informal housing in local settlements (WHO, 2017).

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 like hotels that are currently empty and repurposed community assets like schools and community centres that are currently closed. This is to help prevent the spread among family members, at-risk vulnerable groups, and the local community, if small size or density of informal homes is a significant risk factor.

9.2.4   *Expand* and invest in social housing options both as short-term solutions for homelessness and longer-term action to provide greater access to affordable housing. These facilities should be designed to limit the indoor public spaces 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 good ventilation along exterior public walkways if climate, and density of project, permits. Elevators and indoor or centralized staircases create high traffic choke points. Decentralizing access to apartment flats by using more exterior walkways and staircases can greatly decrease concentrations of people, limiting viral spread risk.

9.2.6   *Make simple adjustments* in how 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. Whilst these should be enabled to reside at their own home as long as possible, relocation may sometimes be more appropriate and feasible, respecting the principle to live in environments that are safe and adaptable to their personal preferences and changing capacities.[19]

Target

🔴 🟠 🟢

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

Lower traffic should 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, reducing the risk of cluster spreads in pandemics. It is therefore important that informal housing settlements be upgraded with careful integration of retail and business. Beyond risk exposure, such spatial planning strategies (FAO, 2012) will give other benefits such as reduction of pollution, enhancing cities' climate policies.

Actions

9.3.1 *Study the movement patterns* within informal settlements to identify where high-density 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, as well as actual and proposed traffic flows, should be incorporated in the plans or maps to limit exposure risk at hot spots.

9.3.3 *Balance the risk* of a pandemic with the existing dangers facing the community. Informal communities are often at greater risk from a variety of other threats such as fires, floods, poor air quality or chronic health issues. Disaster response infrastructure should be enhanced and appropriate for each of these community-specific challenges. This should be done through the identification of vulnerabilities and risk exposure as part of greater integrated risk-management strategy. A holistic strategy to protect residents is needed in these already at-risk communities.

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19   See United Nations Principles for Older Persons, General Assembly resolution 46/91 of 16 December 1991.

V.   FINAL CONSIDERATIONS

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 – residents often have two or three jobs. They generally tend to rely on inadequate service provision, including of energy, water and sanitation, have more limited healthcare, and reduced access to education. There is a general lack of good demographic and spatial data, heavy concentrations of minorities, vulnerable groups, and generally low incomes, coupled with limited resources. There is commonly a history of government mistrust by informal settlement residents, as well as 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, surrounding formal communities too. There is also 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. 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. This would include gathering and retaining necessary information, allowing for the formalization of existing informality, along with effective registry and cadaster enhancement, formalization

of rights and completion of the cadaster. In turn this would provide the framework for building the necessary spatial data infrastructure. Furthermore, they should provide the appropriate level of services, ensure tenure security, justice, equity, the fulfilment of 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 and 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 goals, targets, and actions to minimize or prevent the harm resulting from a pandemic and particularly respond to the challenges of COVID-19. 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 challenges related to fighting a pandemic. However, the structure, depth and focus of this document has left some important details undiscussed.

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, 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, plus geospatial and 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 from country to country, region to region, and informal settlement to informal settlement. It should also vary according to the changing nature of the pandemic threat, shifting political or social will, alterations in available resources, and other changes in challenges facing residents and local authorities. 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 and 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 effective. Therefore, most of these local implementational aspects have been left for discussion and consideration by the parties involved.

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

This Recovery Action Plan is meant to show where appropriate interventions can have health and safety as well as socio-economic benefits. It shows 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 specific local challenges and resources will result in more effective and appropriate interventions. Greater integration and formalization of informal communities within the greater national landscape will potentially provide innumerable benefits for everyone.

REFERENCES

Banerhee, Abhijit V. and Esther Duflo (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.

_____ (2019). *Good Economics for Hard Times: Better Answers to Our Biggest Problems*. New York: PublicAffairs, New Delhi: Juggernaut Books, London: Allen Lane.

Chant, Sylvia (2014). Exploring the 'feminisation of poverty' in relation to women's work and home-based enterprise in slums of the global south. *International Journal of Gender and Entrepreneurship*, vol. 6, Issue 3 (September), pp. 296–316.

Committee on World Food Security (2012). Coming to terms with terminology. CFS 2012/39/4. Available at http://www.fao.org/3/MD776E/MD776E.pdf.

European Environment Agency (2020). *COVID-19 and Europe's environment: impacts of a global pandemic*. 5 November. Available at https://www.eea.europa.eu/publications/covid-19-and-europe-s.

Food and Agriculture Organization of the United Nations (2012). *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Rome. Available at http://www.fao.org/3/i2801e/i2801e.pdf.

_____ (2020). *The contribution of social protection to economic inclusion in rural areas*. Rome. Available at http://www.fao.org/3/cb2458en/CB2458EN.pdf.

Food and Agriculture Organization of the United Nations (FAO), IFAD, UNICEF, WFP and WHO (2020). *Transforming food systems for affordable healthy diets*. The State of Food Security and Nutrition in the World, no. 2020. Rome: FAO. Available at http://www.fao.org/documents/card/en/c/ca9692en.

Food Security Information Network (2020). Joint Analysis for better Decisions. *Global Report on Food Crises*, no. 2020. Available at https://docs.wfp.org/api/documents/WFP-0000114546/download/?_ga=2.259323722.1396681784.1594047665-547583090.1594047665.

Holzwarth, Stefanie (2020). Using public transport to create awareness on COVID-19 – a Kenyan invention. *TUMI*, 27 July. Available at https://www.transformative-mobility.org/news/using-public-transport-to-create-awareness-on-covid-19-a-kenyan-invention.

Inter-Agency Standing Committee (2017). *The Gender Handbook for Humanitarian Action*. Available at https://www.gihahandbook.org/.

_____ (2019). Guidelines: Inclusion of Persons with Disabilities in Humanitarian Action. Available at https://interagencystandingcommittee.org/iasc-task-team-inclusion-persons-disabilities-humanitarian-action/documents/iasc-guidelines.

McIlwaine, Cathy (2013). Urbanization and gender-based violence: Exploring the paradoxes in the global south. *Environment and Urbanization*, vol 25, Issue 1 (April), pp. 65–79.

United Nations (2009). *Self-made Cities: In Search of Sustainable Solutions for Informal Settlements in the United Nations Economic Commission for Europe Region*. Geneva and New York. Available at https://unece.org/info/Housing-and-Land-Management/pub/2875.

_____ (2013a). *Realizing Women's Rights to Land and Other Productive Resources*. New York and Geneva: UN Women and OHCHR). Available at https://www.ohchr.org/Documents/Publications/RealizingWomensRightstoLand.pdf.

_____ (2013b). *The Equitable Access Score-card: Supporting policy process to achieve the human right to water and sanitation*. Available at https://www.unece.org/index.php?id=34032.

_____ (2016). *Guidance Note on the Development of Action Plans to Ensure Equitable Access to Water and Sanitation*. Available at https://www.unece.org/index.php?id=44284.

_____ (2019a). *Guidelines for the Formalization of Informal Constructions*. Geneva. Available at https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/Technical_guidelines_informal_settlements.EN.pdf.

_____ (2019b). *Policy Framework for Sustainable Real Estate Markets*. Geneva. Available at https://unece.org/housing-and-land-management/publications/policy-framework-sustainable-real-estate-markets-0.

_____ (2020a). The Impact of COVID-19 on Women. Policy Brief, 9 April. Available at https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_updated.pdf.

_____ (2020b). COVID-19 in an Urban World. Policy Brief, July. Available at https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_urban_world_july_2020.pdf.

_____ (2020c). Global Issues: Food. Available at https://www.un.org/en/global-issues/food.

_____ (n.d.). Gender Equality and Sustainable Urbanisation. Women Watch fact sheet. https://www.un.org/womenwatch/feature/urban/.

United Nations Development Programme (n.d.). COVID-19 Global Gender Response Tracker. Available at https://data.undp.org/gendertracker/.

United Nations, General Assembly (2018). 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. 19 September. A/73/310/Rev. 1. Available at https://www.undocs.org/en/A/73/310/rev.1.

United Nations, Human Rights Special Procedures (2020). COVID-19 Guidance Note: Protecting residents of informal settlements. Guidance note by the Special Rapporteur on the right to adequate housing, 23 April. Available at https://www.ohchr.org/Documents/Issues/Housing/SR_housing_COVID-19_Guidance_informal_settlements.pdf.

United Nations Committee of Experts on Global Geospatial Information Management (2018a). UN Integrated Geospatial Information Framework (IGIF). Available at https://ggim.un.org/igif.

_____ (2018b). 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.

_____ (2020). COVID-19: Ready to Respond. The Role of the Geospatial Community in Responding to COVID-19. Background document to the report "Strengthening of Geospatial Information Management" at the tenth session of UN-GGIM. New York, August and September. Available at http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/Covid-19_Ready-to-Respond.pdf.

United Nations Economic Commission for Europe (2015). Geneva UN Charter on Sustainable Housing. Available at https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/EN_Geneva_UN_Charter_on_Sustainable_Housing.pdf.

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

_____ (n.d.). Post COVID-19 Recovery in Informal Settlements in the ECE Region. Available at https://unece.org/housing/post-covid-19-recovery.

United Nations Human Settlement Programme (2011). Losing your Home, Assessing the impact of eviction.

_____ (2014). Assessing the Impact of Eviction: Handbook. Nairobi, June. Available at https://unhabitat.org/sites/default/files/download-manager-files/Handbook%20Assessing%20the%20Impact%20of%20Eviction%20%2828Aug2014%29Final.pdf.

_____ (2017). The Human Rights-Based Approach to Housing and Slum Upgrading. *The Human Rights in Cities Handbook Series*, vol. I. Available at https://unhabitat.org/the-human-rights-in-cities-handbook-series-volume-i-the-human-rights-based-approach-to-housing-and-slum-upgrading.

_____ (2020). COVID-19 campaign: Take action for cities. Available at https://unhabitat.org/covid-19.

United Nations Office for Disaster Risk Reduction (2020). Disaster Resilience Scorecard for Cities: Public Health System Resilience. Addendum. Consultative version 2.0, April 2020. Available at https://www.unisdr.org/campaign/resilientcities/toolkit/article/public-health-system-resilience-scorecard.

United Nations Population Fund) (2007). State of world population 2007: Unleashing the potential of urban growth. *State of World Population*. New York. https://www.unfpa.org/publications/state-world-population-2007.

UN Women (2020). *The impact of COVID-19 on women's and men's lives and livelihoods in Europe and Central Asia: Preliminary results from a Rapid Gender Assessment*. Available at https://eca.unwomen.org/en/digital-library/publications/2020/07/the-impact-of-covid19-on-womens-and-mens-lives-and-livelihoods.

World Health Organization (2018). *WHO Housing and Health Guidelines*. Geneva. Available at https://www.who.int/publications/i/item/9789241550376.

_____ (2020). *Strengthening preparedness for COVID-19 in cities and urban settings: interim guidance for local authorities*. Available at https://apps.who.int/iris/handle/10665/331896.

Other references:

A/73/310/Rev.1 - 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

A/75/148 - 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, Balakrishnan Rajagopal on COVID-19 and the right to adequate housing: impacts and the way forward

A/HRC/4/18, Annex I - Basic Principles and Guidelines on Development-Based Evictions and Displacement

A/HRC/25/54 - 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

International Covenant on Economic, Social and Cultural Rights – https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx

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

The COVID-19 pandemic has not only created new challenges in informal settlements which already have dense populations, limited water supply and sanitation services, 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 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 frequently, show greater hesitancy to get vaccinated. The economic impact of the pandemic has in particularly hit these residents and thus, further increased the many other challenges in their day to day lives.

The measures proposed in this COVID-19 Recovery Action Plan for Informal Settlements in the UNECE Region (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 UNECE 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.

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 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.