The Urban Action Kit

The Urban Action Kit is a set of simple, low cost, do-it-yourself activities for urban resilience. They are cheap or even free, fast, and use existing networks and skills.

The kit consists of seven modules: Introduction to urban, Creative communications, Urban agriculture, Early warning early action, Naturebased solutions, and Livable cities.

Each module contains an overview of the concept, four to five activity cards, and one on global policy. Activities can be implemented together or singly.

Try it out! Choose a module. Find an activity that fits your community's needs and your skills — then get to work.

This kit was developed by:











With funding from:









Let us know what you think! Email us at cities@climatecentre.org or take our survey at

https://bit.ly/UAK_feedback



Urbanization and urban context

The population of cities — high-density metropolises of at least 50,000 inhabitants — has more than doubled over the last 40 years, totaling 3.5 billion people by 2015. With another 2.1 billion predicted to live in semi-dense areas, the world urban population will reach 5.6 billion (62 per cent) by 2050. The UN estimates that 90 per cent of urban population growth will be in the small and medium-size cities of developing countries in Asia and Africa.

Rapid and unplanned urban growth increases the number of people exposed to negative impacts of climate change and natural disasters. Many large cities are in river deltas and highly prone to floods and other hazards due to the use of impermeable surfaces, increased groundwater extraction and destruction of the natural environment.

Climate change presents significant challenges to cities, which comprise highly complex interlinking systems including markets, social networks and built environments (housing, roads and other infrastructure). The impacts of climate change (increased rainfall, storm surges, floods, heatwaves and urban heat island effects) are predicted to intensify over the coming decades. Longer term impacts, such as sea-level rises, are also projected.

Urban infrastructure must be resilient to all these impacts. When infrastructure fails, it undermines businesses, local markets and services such as transportation, electricity provision and education. The ongoing COVID-19 pandemic illustrates the interconnectedness and vulnerabilities of city systems as well as their wide-ranging impacts – not just on people's health, but on markets and socio-economic systems too.

In this module, we learn how to identify climate change-related risks in cities and to map urban systems. It's designed to help identify how climate change and other shocks impact the resilience of city systems and the communities they serve.



This activity aims to encourage staff and volunteers to identify climate-related risks and barriers to community resilience in their city, district or neighbourhood (depending on the size of the city). It takes around 40 minutes.

- Form groups of 4-6 people and provide a printed map of the city for each group. Hand out 10-15 sticky notes to each participant.
- Ask each group to discuss and write on sticky notes the risks faced by communities in different parts of the city. Then add the sticky notes to the map of the city (15 minutes). Note where the same risk affects people across the city — this is a city-level threat.
- 3. Ask each group to identify the top three risks related to climate change; to discuss whether these are city-level threats or specific to a geographical location; and to record this on their sticky notes (15 minutes).
- 4. Ask the groups to consolidate the risks identified on to a single map.
- Identify areas where risks are concentrated by circling them and ask participants to reflect on whether and why the risks may be interconnected. (5 minutes).
- 6. Describe the results of the activity in a 1-2 page report which can be the starting point of a more detailed climate risk analysis aimed at improving the resilience of urban communities in a changing climate.

The Semarang city branch of the Indonesian Red Cross Society completed this activity and identified frequent flooding, poor waste management, and increased sedimentation/reduced channel crossings as its top three climate change-related risks. Follow-up consultations resulted in river clean-up operations in collaboration with schools as well as the installation of flood pumps and the planting of mangroves in collaboration with local government.

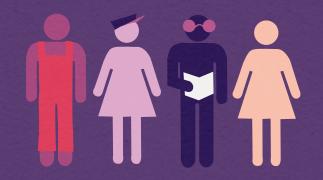


Mapping urban systems

This activity provides guidance on mapping and analyzing the vulnerability of city systems to climate shocks. It can be used to develop urban resilience strategies or to prioritize specific interventions to reduce climate risks. It takes 40-60 minutes, depending on the size of the city and the group.

- Form groups of 4-6 people. Each group either sketches a map of the city or works from an existing map.
- Ask each group to identify the services they use in their daily lives, such as electricity/gas, water, public transport, healthcare, education and add them to the map.
- 3. Ask participants to draw each system on the map in a different colour.
- 4. Bring participants together as a large group to discuss:
 - a. What are the similarities and differences between each group's maps?
 - b. Did they overlook any services (e.g. ports, airports, road networks, bridges, food supply chains, banks all count too)?
 - Working in the same small groups, ask participants to describe a past shock or climate change-related event that resulted in the failure of a service/system.
 - Ask the groups to discuss actions that would reduce the impacts of shocks and climate change-related events on the services/systems such as:
 - introducing local sanitation and water facilities, especially in informal settlements
 - implementing re-greening projects to expand/restore green spaces
 organizing local environmental awareness/clean-up activities.
 - Vanuatu Red Cross Society completed a risk assessment and action

Vanuatu Red Cross Society completed a risk assessment and action plan for Luganville — the capital city. This involved stakeholders from the municipality, local government, civic society organizations and businesses coming together to map and analyze the city's vulnerability to climate shocks. Supported by secondary data analysis, the system mapping exercise increased participants' awareness of urban vulnerabilities, while strengthening the confidence of the Vanuatu Red Cross Society to engage in urban issues.



Identifying vulnerable communities

This activity helps to identify communities in the city that are most vulnerable to different types of hazards. The activity focuses on affinity groups (groups of people with shared interests/experiences). An individual can belong to many affinity groups, whether formally or informally.

- Bring together a team for conceptualizing. This could be your project team, representatives of key partners or a community focus group.
- 2. Ask each person to individually list all the affinity groups they can think of in the city. Examples include teachers, bus drivers, sanitation workers, people with disabilities, people who cycle to work, small business owners, children, parents. There are lots more. To help, think about people's occupations, daily activities, mobility and interests, for instance.
- 3. Ask participants to form teams of three to share and combine the affinity groups they have listed. Ask teams to consider if any affinity groups are missing, particularly those that are highly vulnerable to climate hazards, and add them to the list.
 - Ask each team to assess whether each affinity group has a 'high', 'medium', or 'low' vulnerability to the identified climate ha<mark>zard</mark>.
 - Ask the teams to share in plenary how they have ranked the different affinity groups. Have a discussion on:
 - a. the differences between the teams' findings'
 - b. affinity groups that were only mentioned once.
- In plenary, decide which affinity groups are the most vulnerable and therefore the highest priority for preparedness activities.

Georgetown County in South Carolina has been affected by severe flooding. Researchers found that people that lived in the most low-lying areas weren't necessarily the most vulnerable, because they oftentimes had flood insurance and other protections such as additional financial resources. Instead, those that lived farther from the river at moderate risk of flooding, and who lacked social safety nets or insurance were actually the most vulnerable.



Partnership building

Partnership building is an excellent way to expand an initiative's impact by leveraging in-kind support from people and institutions with complementary skills and resources. Often, once a few partners are on board, others will start asking how they can join and help.

- Identify the initiative. Draft a brief vision of what it will achieve. Think big — specific, bold and realistic visions are the most inspiring.
- Identify all the resources needed to achieve your vision. List them in specific terms such as skills, people's time, products, media coverage etc., rather than funds.
- Identify which resources you can bring to the partnership. Be strategic - focus on your greatest added value.
- 4. Identify the highest priority resources that you need from partners to get started. Identify why prospective partners might be interested in your initiative. This could be in direct alignment with your vision or indirect overlaps. Use this to form a persuasive pitch.
- 5. Meet each partner individually, starting with those most likely to join. Share your vision; why they are a crucial potential partner; how the initiative contributes to their goals; the unique contribution you hope they can bring; and the partners and resources already confirmed, including your own resources.
- 6. Bring partners together and get started.

In Dar es Salaam, Tanzania, the Red Cross and World Bank partnered with city authorities, Ardhi University, University of Dar es Salaam, Drone Adventures and the Humanitarian OpenStreetMap Team (HOT) to map the ten most flood-prone wards in Dar es Salaam. Each partner contributed unique resources to this effort: both universities provided students in urban planning, the Red Cross provided volunteers with neighbourhood expertise, HOT provided training, the World Bank provided flood inundation modeling and Drone Adventures lent a drone for capturing aerial images of the areas to be mapped.



Global link

Cities consume approximately 70 per cent of energy and produce 75 per cent of global carbon emissions. But, as dense hubs of economic and social activity, they also offer opportunities to address the root causes and reduce the negative impacts of climate change. Globally, city governments/municipalities are taking the initiative and collaborating as multi-city networks — such as C40 Cities and Local Governments for Sustainability (ICLEI) — to create carbon-free, sustainable cities. National Societies can leverage their auxiliary role; and, working with local governments, contribute to city-level efforts to find community-based solutions to climate change.



Urban agriculture

This module presents simple and practical ways to promote agriculture and nature-based solutions through activities in urban gardens.

Urban gardens are beneficial environmentally, socially and economically. In schools, they promote learning about the environment, agriculture, food and nutrition. In neighbourhoods, they increase access to locally grown and affordable fruit and vegetables, while reducing waste through composting. In parks and other shared green spaces, they serve as places for recreation and socialization to promote health and well-being; they also increase civic engagement and social cohesion within the community. Gardens can transform urban spaces and help improve air and soil quality and the urban microclimate. They help to improve water infiltration by removing impervious surfaces; they promote creative ways of greening urban spaces (e.g. rooftop or vertical gardens); and they are a better use of vacant lots. Individuals and communities can benefit hugely physically and psychologically by getting involved in urban gardening activities.

This module contains strategies and activities that increase awareness and support the development of different types of urban gardens, depending on the local context and resources available.

BINGO



















Garden bingo

Garden bingo is based on the classic game of Bingo in which each player crosses off numbers on his/her scorecard when they are called out by a game host. In garden bingo, the numbers on the 'player cards' are replaced with images of fruit and vegetables. The caller reads out descriptions of these garden products from 'trivia cards' and each player crosses them off in his/her card. The way to win is to cross off all your fruit and vegetables before anyone else. The game is intended for children and young people to encourage them to eat healthily, while increasing their understanding of agriculture, food security and nutrition.

- Form groups of 4-6 people and provide a printed map of the city for each group. Hand out 10-15 sticky notes to each participant.
- Design and print out player cards with different images of fruit and vegetables on them.
- Write descriptions of the fruit and vegetables for the trivia cards. Use a separate piece of paper for each fruit or vegetable so that they can be called one by one.
- 4. Hand out the player cards and agree on the pattern to complete the game (i.e., by crossing off the fruit and vegetables in a vertical, horizontal or diagonal row, or by finding all of the items on the player card).
- 5. Draw the trivia cards one by one. Participants then find and mark the matching image on their player card. The first person to correctly mark the images in the right pattern wins the game.

Food for Life in the UK works to change the culture of food in preschools, schools and other settings. Over the last 15 years, it has been promoting food education and engaging students and their families in fun activities that increase awareness of food security and agriculture. This type of alternative, activity-based way of teaching has proved to be effective as the schools taking part in Food for Life have seen an increase in the take-up of school meals as well as in school attendance.



Get digging

Get digging encourages communities to design and build urban gardens in community green spaces, backyard farms or school grounds. Getting involved enhances local residents' gardening skills while improving their knowledge of urban agriculture, climate change and the environment, food security and nutrition.

- Coordinate with local authorities to identify a space suitable for an urban garden (e.g. a vacant public lot, a private lot, a backyard farm or the grounds of a school). Seek authorization to convert the space into a garden. Make sure that the area is accessible and safe, close to a water source and gets enough sunlight.
- Involve members of the community in designing the garden (e.g. leaders, businesses, teachers, parents, children). Choose plants based on the type of soil and time of year, or even on the children's favourite storybook or recipe(s). Consult experienced gardeners if necessary.
- 3. Having purchased seeds, plants, materials and tools, arrange a day for preparing the land and planting the garden. Involve the whole community. Facilitate the transfer of gardening knowledge between the generations by encouraging older and younger people to work together.
- Create a garden maintenance plan, scheduling in watering of the plants, weeding, tidying and upkeep. Again, involve the whole community.
- Encourage community members to use the garden as a source of food. Arrange a day for harvesting and sharing the produce.

In the wake of Hurricane Omar in 2008, EAO supported a backyard farm initiative in Antigua and Barbuda, where there were food shortages and price hikes as a direct result of the hurricane's damage. Due to the huge popularity of the programme, the government officially declared 22 April as Hational Backyard Farm Day and it is now celebrated every year. Backyard farms increase communities' food security while helping to bring people together.



Urban jenga

This activity promotes urban gardening where space is limited. The garden takes the form of a tower, similar to the structure of stacked blocks in the Jenga game. Vertical gardens are easy to build and practical to maintain. They use wooden trellises, stone columns or sturdy walls, and plants are arranged so that they grow upwards instead of outwards.

- Coordinate with building owners and local authorities to identify a space suitable for a vertical garden (e.g. a rooftop, vacant or unused lot, backyard, alley or another space adjacent to houses or buildings). Make sure that the area is accessible and safe, close to a water source, gets enough sunlight and can accommodate a vertical structure.
- Design and plan the vertical garden with the building's owners and residents who live where you are planning to build. Choose plants that grow vertically. Consider how much soil, water and sunlight they need. Consult experienced gardeners if necessary.
- 3. Having purchased seeds, plants, materials and tools, arrange a day for building the vertical structure and planting the garden. Involve residents from the entire building and, if appropriate, the wider community.
- Create a garden maintenance plan, scheduling in watering of the plants, weeding, tidying and upkeep. Again, involve residents from the entire building and the wider community.
- Encourage those involved to use the vertical garden as a source of food. Arrange a day for harvesting and sharing the produce.

In the informal settlement of Kibnya, Nairobi — where food insecurity is prevalent and space is limited — residents have found a resourceful way to do urban gardening: vertical sack gardens using recycled sacks or biodegradable cement bags. Over 1,000 farmers are using this technique to grow vegetables on roofs and in narrow alleys to feed their families and enhance their incomes.



Garden hunt

if necessary.

Garden hunt is a game that involves wandering through an urban garden to identify plants based on descriptions of their characteristics and places of origin. This simple game is designed for schoolchildren as well as out-of-school youth. By playing garden hunt, young people learn more about their food culture and the importance of green spaces, especially urban gardens.

- Create clue cards with a description of each plant's characteristics and place of origin. Insert the cards in the corresponding plant boxes and remove the plant labels. Consult experienced gardeners.
- If the group is large, pair up players or arrange them in small teams.
 Provide each player, pair or team with an answer sheet containing
 the plant descriptions and, next to each one, a blank space where
 the players can write down the corresponding plant names.
- 3. Ask players to go around the garden and identify the plants based on the clues they have been given.
- After 15 minutes, gather the players, pairs or teams together and check their answers. Whoever has the most correct answers wins.
- 5. Ask the players what new things they have learned along with their ideas to help sustain the garden.

There are community-run urban gardens across America that provide fresh produce, homemade crafts and safe public spaces for families. These include the Detroit Black Community Food Security Network, Nuestros Raices in Holyoke, Massachusotts;

and younger volunteers are connected to share gardening knowledge, skills and perspectives, while members have the opportunity to discover more about the community's food culture.

and East New York Farms! in Brooklyn, New York. Here, older



Global link

Urban gardens promote volunteerism and collaboration, while harnessing environmental, social and economic benefits.

They are a great way to improve food security by increasing access to nutritious food at home and in schools in line with Sustainable Development Goal 2: "end hunger, achieve food security and improved nutrition and promote sustainable agriculture"; and, in particular, Target 2.1 "by 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round".

Urban gardens bring nature closer to people and promote nature-based solutions in line with Sustainable Development Goal 13: "take urgent action to combat climate change and its impacts"; and, in particular, Target 13.1 "strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries".



Urban WASH

Water, sanitation and hygiene are collectively known as WASH; with each of the three disciplines dependent on the others. Without adequate WASH facilities, water-borne diseases can thrive (e.g. diarrhoea, cholera and typhoid), vector-borne diseases can flourish (e.g. malaria, dengue fever and yellow fever) and basic health services can be overwhelmed. Increasing climate variability is causing outbreaks of water- and vector-borne diseases, leading to public health concerns. It is critical to prioritize people's access to clean water, safe sanitation and the ability to practice safe hygiene.

WASH is often regarded simply as vital infrastructure, especially in urban areas. However, without also raising people's awareness of good hygiene and changing their behaviour (e.g. hands can transport viruses, bacteria, parasites and other pathogens into the body, so thorough hand-washing is a vital precaution) the provision of WASH facilities alone cannot reduce morbidity and mortality.

The urban poor and populations of informal settlements are often the most vulnerable to diseases due to inadequate or absent WASH facilities. It is, therefore, critical to give special consideration to these areas.



Household waste separation competition

Separating waste at its source is a simple recycling action, but an important part of any solid-waste management system. Waste can be separated into at least two categories — wet waste (e.g. kitchen waste) and dry waste (e.g. paper, cardboard and plastic). Awards can motivate households to separate waste.

- Form a partnership between local government, civil society organizations and private-sector waste collectors. Set a goal for the segregation of households' waste / level of recycling.
- 2. Also collaborate with any neighbourhood associations and local NGOs. These stakeholders can play a critical role in raising awareness of the importance of recycling, changing people's behaviour towards it; and, later, identifying awardees to acknowledge the positive difference they are making.
- Decide the area where the initiative will take place. Develop materials to raise households' awareness of the issue and change their behaviour when it comes to recycling.
- 4. Launch the programme and monitor households' progress every four to six weeks. Identify the household that is the best at recycling, based on their separation of waste when it is collected and, therefore, the lower amount of mixed waste arriving at the waste disposal site.
- Organize an award ceremony in the presence of local leaders and dignitaries.

In Coimbatore, India, city officials — working in collaboration with ICLEI South Asia and local NGOs — launched the SUNYA (Towards Zero Waste in South Asia) Project to achieve 100 per cent waste recycling in ward No. 23 of the city. The focus of the programme is separating waste at source. Households are encouraged to take part and awards are given to the best recyclers.



Behaviour change for sanitation workers

Sanitation workers deal with public toilets, sewerage, sewers and maintaining manholes as well as solid-waste management. Working in these hazardous environments can result in acute health issues. The following activity is designed to help sanitation workers recognize the importance of wearing protective clothing and washing/ sanitizing their hands thoroughly and regularly.

- Collaborate with local NGOs, workers' associations and unions to develop a project. Activities could include raising awareness among sanitation workers of the importance of handwashing and/or distributing protective clothing and other safety equipment.
- Conduct a situation analysis to identify gaps in sanitation workers' knowledge and kit.
- Get service providers, local government and even national ministries involved to endorse, formalize and potentially fund the initiative.
- 4. Launch the initiative and organize the first meeting of sanitation workers to explain the importance of thorough and regular handwashing and, if necessary, supply them with protective clothing and other safety equipment.
- Hand over the initiative to local government for future planning, implementation and monitoring.

In Ouagadougou, the Burkina Faso capital, pit latrines and septic tanks are generally emptied manually. The Manual Emptier Association (ABASE), in partnership with local government, NGOs and the service provider, launched an initiative to improve sanitation workers' health and well-being through an awareness-raising programme. ABASE also vaccinated the sanitation workers and provided them with up to date protective clothing and other safety equipment.



Handwashing workshops in schools

Hands can transport viruses, bacteria, parasites other pathogens into the body, leading to diseases such as cholera, dysentery, hepatitis A, COVID-19 and typhoid. The first defence is thorough and regular handwashing using soap and water. Not only is it important to teach schoolchildren about the importance of good hygiene, but also they are important messengers who take the learning home to their parents.

- Identify the school where the workshop will take place. Seek permission from the local education authority, school and headteacher. Together, agree the schedule of workshops.
- Decide what messages to communicate, such as how and when to wash hands with soap and water, and ways that the schoolchildren can involve their parents at home. Design educational posters and put them up near the school washbasins and in other strategic positions.
- 3. Train at least two teachers to facilitate the workshops. Show them the handwashing technique and how to convey these important messages via the children to their parents. Hand over responsibility for organizing and delivering the workshops to the teachers.
- Consider involving soap brands, water utility companies, local authorities and the media.

In Cambodia, Indonesia, Lao People's Democratic Republic and the Philippines, the Fit for School programme developed by GIZ aims to promote good hygiene in schools. A recent survey by its organizers found that 28 per cent of schoolchildren now wash their hands after going to the toilet, compared to just 3 per cent of children in other schools. The initiative has recently been integrated into WASH programmes for schools.



Rooftop rainwater harvesting systems

Installing rainwater harvesting systems can supplement existing water resources as residents can use the rainwater for cleaning, washing and gardening (but not for drinking). Finding shared space within the community, such as a rooftop, for the rainwater harvesting system will encourage ownership and upkeep and help to foster community cohesion.

- The three key components of a rainwater harvesting system are catchment, conveyance and storage.
- Select the catchment site where the rainwater will be collected: the larger the catchment area, the bigger the volume of rainwater collected. Community spaces can be schools, government buildings and places of worship. Involve community members in finding the right location.
- 3. Also consult community members on the design of the system; for example, whether there should be an underground storage tank or a prefabricated steel water tank. As a rule of thumb, 5 per cent of the available annual rainfall is a good starting point for calculating the size of storage tank needed.
- 4. Construct the rainwater harvesting system using local techniques and materials. Keep costs to a minimum by involving community members with appropriate skills in sourcing and assembling the components.
- Agree and assign operation and maintenance activities among members of the community.

Working closely with the government and UNDP, the Sri Lanka Red Cross is implementing a project to install rainwater harvesting in arid areas to increase water security. Mobilizing communities was a critical first step. So far, the project has benefited 542 families in the city of Kurunegala.



Global link

WASH is central to people's health and well-being. WASHrelated activities also contribute towards the climate resilience of cities.

The activities in this module link to various global principles and processes. For instance, the separation of waste at source promotes recycling and contributes to cities' circular economies, which seek to maximize the use of resources through the 3R principles — Reduce, Reuse and Recycle.

Action on the health, safety and hygiene of urban sanitation workers ensures their basic rights in terms of occupational health and safety. Thorough and regular handwashing with soap and water is a simple action that everyone can take to protect themselves from bacterial and viral infections, such as COVID-19. And rainwater harvesting can supplement existing water resources as a component of Integrated and decentralized water resource management.

The actions under WASH also directly contribute to the following Sustainable Development Goals: SDG 11 sustainable cities and communities; SDG 6 clean water and sanitation; SDG 13 climate action; SDG 3 good health and well being; SDG 12 responsible consumption and production; SDG 1 end poverty in all its forms everywhere; and SDG 8 decent work and economic growth.



Nature-based solutions

Nature-based solutions (NbS) are actions that work with, and enhance, nature to help address societal challenges. They can be naturally occurring ecosystems or designed and engineered spaces that make use of natural processes to support human well-being. They can range from wetlands and forests (ecosystems) to engineered rainwater gardens and blue and green roofs or walls.

Putting any space to good use should aim to deliver multiple services and benefits — especially when it comes to the limited lots available in a city. NbS achieve this in different ways, for example, by protecting against flooding and drought; reducing the urban heat island effect; improving air quality; and reducing healthcare expenditure. At the same time, they enhance a city's beauty; improve social cohesion; and promote zero-carbon mobility, such as introducing walking and cycling paths through public parks. NbS can even increase the value of surrounding properties and related (local) government tax income.

From citywide to street and household levels, NbS can create safe, healthy and enjoyable living conditions for people and nature.



Operation stonebreaker

Operation stonebreaker is a campaign you can organize in your city or neighbourhood. It focuses on replacing unnecessary paving slabs, concrete tiles or asphalt surfaces and with patches of lush green vegetation and trees. This can reduce stormwater runoff, extreme heat and air pollution, while increasing space for biodiversity mini-habitats, shade. (medicinal) herbs or mini-crops.

- Start a social media campaign for schools and the wider community to find champions — especially young people — to take part in the operation.
- 2. Identify the first garden lot(s) and obtain the necessary permissions, before extracting the paying slabs, concrete tiles or asphalt surfaces and replacing them with native and fruit trees, flowers and herbs. Promote on social media. Be sure to take necessary safety precautions and properly dispose of waste materials.
- 3. Roll out the campaign by supporting local families in 'stone-breaking' around their houses. Encourage schools and public buildings to 'green' parts of their parking lots or playgrounds. Engage local government, too, in identifying community spaces and streets to convert.
- 4. Inspire wider action through events and sponsorship. For example, by asking a company to provide plants to local schools; or celebrating the first 100 metres of paving slabs, concrete tiles or asphalt removed or trees planted.
- Work with universities to document reductions in heat and rainwater runoff as well as improvements in biodiversity and air quality as a result of the campaign. Invite leaders to visit the sites.

Operatie Steenbreek is a campaign to 'green' urban spaces in the Netherlands. Over 150 partners are involved including provinces, municipalities, water boards, housing corporations, NGOs and companies. The campaign works to replace unnecessary pavements in private and public spaces with a diversity of greenery, with the help of local residents and businesses. This helps cities adapt to climate change, reduce extreme heat, improve biodiversity and enhance city-dwellers' well-being. For more information visit: www.steenbreek.nl



Community conservation mobilization

Mobilizing communities to take up nature conservation is a great way to make a positive impact in the city. Activities include clearing litter from parks or around lakes; planting trees; reopening blocked water channels; or demonstrating to demand protection for city nature under threat of development.

- Meet with representatives from the community to find out where
 nature is under threat. Involve local environmental and social
 development NGOs as well as community-based organizations that
 may wish to lend their support. Agree a shared objective and assign
 coordinator(s) for (social) media, materials and mobilization.
- Pick a strategic date when participants are available, that will generate
 media attention and does not conflict with other large-scale local
 events. List the required inputs and divide tasks among the joint team.
 Distribute flyers around the community and online.
- Plan the day of the activity, beginning with a visit to the location with members of the joint team. With their help, think through possible issues that could affect the event (e.g. weather, traffic jam, transport strikes). Take mitigating action.
- Implement the activity and post updates to social media. If the activity
 is to be repeated, agree who will take the lead and keep/supply the
 materials etc.

In Panama City, Panama, Wetlands International — a global organization that works to sustain and restore wetlands and their resources for people and biodiversity — organized a series of clean-up operations in the wetlands around Juan Diaz, working closely with the Association of Communities. While the Association mobilized the local community and selected the site, Wetlands International provided equipment and mobilized wider support. Together, they cut back overgrowth and cleared drains in the flood-prone neighbourhood, which is on the coast of Panama Bay. Afterwards, the equipment was donated to the community so it could repeat the work in the future.



Rainwater gardens

Rainwater gardens collect, soak and filter rainwater runoff and can be installed in households or commercial/industrial units. Rainwater gardens help to prevent floods and droughts as they relieve pressure on the urban drainage system and recharge the aquifer. They can also serve as a small habitat for biodiversity and beautify the built environment.

- A rainwater garden should be delineated at the lowest point of a property; at least 2.5 metres (m) from the building's foundations; and avoid all public utility lines. To look natural, rainwater gardens are typically round or curved and measure at least 2-3m²; Ideally, a rainwater garden covers 20 per cent of the total area that will drain into it.
- Remove any paving slabs, concrete tiles or asphalt surfaces and weeds.
 Then dig a depression of 15-30cm into the soil following the line of the
 rainwater garden. Pile up the dug-out soil, making sure it has sloped
 and rounded edges.
- 3. Redirect the roof's downpipe, making sure there is an outlet for any overflow of rainwater into the main drain. Use pebbles, stones or gravel as the top layer of the rainwater garden for filtration.
- 4. Plant native perennials, flowers and shrubs in the rainwater garden. Select species that attract pollinators (bees, butterflies) and mosquito predators (dragonflies). Consult an expert on the right type of plants to use in your rainwater garden. Consider the size of mature plants as well as their location for example, place water-tolerant plants in the centre. As young plants are fragile in the first year, ensure lower water levels in the garden to begin with.
- Maintain the rainwater garden frequently by removing weeds or clogging.

Singapore's Active, Beautiful, Clean Waters Programme works closely with schools to install rainwater gardens on school premises. The gardens reduce peak stormwater runoff and improve water quality, while increasing biodiversity and serving as outdoor classrooms for environmental and water education.



Neighbourhood wadis

A wadi is a seasonal wetland that fills up with rainwater during the monsoon or rainy season. While their origin is rural (wadis were originally located in the deserts of Africa and Arabia), they have been adopted as nature-based solutions in cities to divert and delay stormwater from entering and overwhelming the urban drainage system. These small-scale ecosystems also serve as recreational facilities and support urban agriculture.

- Select a place in your neighbourhood that experiences frequent waterlogging. Find out who owns the plot and about local planning regulations. Explore whether local government funding is available for your project.
- 2. Identify community members with experience in design, biodiversity and recreation. Government agencies or company pro bono support may fill any skills gaps. Involve municipal planners to determine the size, shape and storage capacity of the wadi. Design the wadi including any structures such as paths, benches, bins and playground equipment.
- 3. Mobilize the community to dig out the pavement and soil to create the wadi. Use the dug-up soil to elevate the playground. Make sure there is an outlet for any overflow of rainwater into the main drain. Place boulders at the water's entrance and exit, to reduce its speed and prevent it from washing plants away.
- Plant a variety of local water-resistant and well-rooted species around the wadi. Install the other features (e.g. paths, benches, bins, playground equipment, solar-powered streetlights and a board or plaque listing sponsors).
- Organize an opening ceremony, inviting community leaders and local media.

Amsterdam Rainproof aims to create a city that is more resilient to extreme rainfall. The project recently constructed wadis as part of a new neighbourhood development in Stadstuin Overtoom, improving water storage, infiltration and quality as well as biodiversity; putting the wadi to many good uses.



Blue and green corridors

Blue and green corridors combine different nature-based solutions, such as bioswales (vegetated drainage systems), streams, parks, treelined streets and rainwater gardens as well as blue and green walls, roofs and pavements. Together, these measures form a network along which excess water can flow, biodiversity can thrive and people can relax, walk or cycle. These networks have been shown to increase a city's liveability along with its climate resilience.

- Assess the state of existing nature-based solutions such as parks, urban wetlands, green roofs and treelined streets. Mark them on a map and add important context such as areas of flooding, urban heat islands and biodiversity.
- Analyze the map to identify missing connections that would help excess water to flow, biodiversity to thrive and people to relax, walk or cycle. Visit these locations with key partners to visualize the measures needed to establish the connections.
- Design a well-connected network. Then, for each nature-based solution, decide the inputs and outline the benefits. Prioritize the projects and seek the necessary permissions.
- Start with low-cost measures that establish connections quickly and are easy to implement, e.g. covering walls with hanging plants; installing a green roof on a bus stop.
- 5. Encourage local residents to get involved and take on more ambitious projects. Consider installing an information board or plaque at each location so that visitors can learn more about the corridor initiative.

The Medellin Green Corridors Project involved planting trees and shrubs (including palms) to connect 12 sites consisting of streams, hills, parks and road junctions. The initiative has helped to reduce the local temperature by 2°C, lessen the urban heat island effect and improve air quality by capturing particulate matter in Colombia's second-largest city.



Global link

Nature-based solutions are an effective way to improve cities' resilience and adaptation to climate change. Benefits include water safety (flood prevention) and security (supply), food security and improvements to health by cooling the city during heatwaves, improving air quality and assigning spaces for recreation.

These activities link directly to Sustainable Development Goal (SDG) 11: "make cities and human settlements inclusive, safe, resilient and sustainable"; and, in particular, contribute to Target 11.7: "provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities." They also contribute to SDG 13: "take urgent action to combat climate change and its impacts" and, in particular, Target 13.1: "strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries". In addition, they contribute to SDG 15, particularly to Target 15.9: "integrate ecosystem and biodiversity values into national and local planning...".

Furthermore, these activities contribute to the 2015 Paris Agreement and the associated Nationally Determined Contributions, the Convention on Biological Diversity's Alchi Targets, the Ramsar Convention, and the Sendai Framework for Disaster Risk Reduction

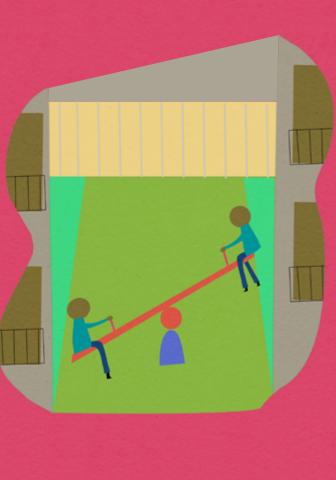
Local government and national ministries may be able to fund nature-based solutions from local and national budgets. Alternatively (international) NGOs may be able to assist in the search for non-institutional donors. Larger project proposals could be channelled through national ministries to the UN system (e.g. UNEP or UNDP) and related financial institutions such as the World Bank or regional development banks.



Liveable cities

Rapid urbanization can impose a huge amount of stress on the environment as well as on the health and well-being of city-dwellers. As a result, 'liveability' has emerged as an important component of urban planning, development and policy-making. The concept of liveability can be integrated within urban systems and buildings to improve city dwellers' well-being, while reducing the environmental impacts of the city.

There is no single definition of 'liveable cities'; however, common principles include clean air, access to green spaces and nature, affordable housing, safety, community cohesion, clean water and affordable, high-quality healthcare. The highest priorities of a liveable city vary from place to place.



'Placemaking' in urban spaces

Placemaking can transform an overlooked urban space into an attractive public place. Examples range from the simple act of installing a bench on the corner of a busy street to transforming a large empty lot into a children's playground. Pplacemaking benefits surrounding communities by being inclusive, creative, collaborative and flexible.

- Select the site consider any unused public places or empty buildings in the neighbourhood for your placemaking project.
- Obtain the necessary commitment and permissions from the local authority.
- Identify other key stakeholders, such as local businesses and building owners; enthuse and mobilize them in your project.
- Visit the site as a project team. You could even organize a workshop at the site to develop initial ideas and designs.
- Conduct a resource mapping exercise who is available to help, what can they contribute, where and when? Revise the concept accordingly.
- Make a start on your placemaking project the weekend is a good time to begin as more people should be available.
- Formally assess your progress after 2-3 weeks; adjust the implementation plan if necessary.
- Once complete, hand over the placemaking project to the local authority for ongoing operation and maintenance, or form a community group to take over.

The Mmofra Foundation is a Ghana-based non-profit organization that works to enrich the cultural and intellectual lives of children. In one placemaking project, it worked to transform a two-acre plot of underused green space in Accra's Dzorwulu neighbourhood into a place centred on children's enjoyment and play. The project, called Mmofra Place (Mmofra means "children" in Akan) was a response to Accra's rapid urbanization, its large population of young people, and the lack of safe public spaces for children. A community group is now responsible for its upkeep.



Neighbourhood festivals

One of the principal indicators of a liveable city is happy and healthy communities. And one of the key elements of a happy and healthy community is social and cultural cohesion. Neighbourhood festivals are a great way for different groups of people to get to know and value each other through recreational activities and cultural exchange.

- Identify the neighbourhood where you plan to hold the festival. Share the idea among the local community; encourage everyone's enthusiasm and involvement.
- Together make an outline plan of the festival so that it ensures the participation of all social groups.
- 3. Submit the outline plan to the local authority and seek its permission.

 Also involve any neighbourhood associations.
- 4. Once permission has been granted, form an organizing committee and make a detailed plan of action. Incorporate different activities into the festival such as stalls, food vendors, music, art, competitions, children's play area, etc.
- Delegate responsibilities to members of the organizing committee; meet regularly to report progress and update the action plan.
- Develop the festival's message(s) on social harmony and cohesion.
 Promote the festival via social/local media.
- 7. Open the festival with a welcoming speech by a high-profile local resident.
- After the event, seek feedback from members of the organizing committee, local residents and festivalgoers to inform future events.

Street Angels Uganda is a non-profit, community-based organization in Kampala that uses art for social empowerment. In 2014 it arranged a festival in the city "to empower people living in slums by developing their creative skills through art". The aim of the festival was to enhance social cohesion and harmony by promoting social advocacy and interaction, community drama and dialogue, education and learning, skills and economic empowerment, environmental awareness and transformation.



Car-free zones

Car-free zones involve of closing particular streets in a city on one day per month, for example, so that people can use them for cycling, running, walking, relaxing and socializing etc.

Car-free zones encourage healthy and active lifestyles, reduce air pollution and increase community cohesion.

- Identify the key partners needed to create a car-free zone, including local government officials who have the authority to close streets in the city.
- Select the streets, taking into account local residents' access and keeping major routes open for the emergency services.
- 3. Plan to open the car-free zone to cyclists, skaters and runners by cordoning off a long thoroughfare for these fast-moving users. Establish separate zones for other activities such as free fitness classes, temporary cafe seating and children's play areas (e.g. a sandpit or paddling pool).
- Advertise the car-free zone through local media so that city residents can plan to take part and motorists can plan alternative routes.
- 5. Ensure adequate signage on the day so that pedestrians don't stray into the cycle lane or vice versa; recruit volunteer stewards to direct people and answer their questions.
- Share photos and videos of people enjoying the car-free zone. Conduct
 a survey of users' satisfaction; use the results to decide if this should be
 a regular feature in the city.

Every Sunday from 7am to 2pm the Colombian capital, Bogota, opens 120 kilometres of the city's streets to cyclists, skaters, scooterand wheelchair-users — anyone using a form of non-motorized transport. The *Ciclovia* (or 'Bicycle Way'), as it's known, has 'fun stops' along its route where people can buy refreshments, listen to music and take fitness classes. among other social activities.



Painting lanes for pedestrians and other users

In many cities it is becoming increasingly dangerous for pedestrians, cyclists and users of other non-motorized transport to cross busy road junctions. Clearly indicating lanes for pedestrians, etc. can help to keep everyone safe and improve mobility around the city. The lanes' markings also bring colour and interest to the city's streets.

- Identify where it would increase safety to create lanes for pedestrians/ users of non-motorized vehicles by keeping them away from cars and other traffic.
- Seek the local authority's permission for the project. Then, involve local community groups, artists, schools and others, hold a community consultation on where the lanes should be painted and solicit design ideas.
- 3. Finalize the design and find volunteers to help with the painting.
- Organize a time to paint the lanes. For the busiest streets, this may need to be very late at night or early in the morning when there is less traffic.
- 5. Ask the police or a local community group to help in blocking off the area while you are painting. Ensure there is at least one person looking out for oncoming traffic.
- 6. Buy the materials and start painting. Appoint a lead artist to sketch out the design on the pavement and to direct others on what to do. It may take several days to complete the painting.

Cities around the world are getting creative and painting lanes/
crosswalks for pedestrians, cyclists and others to keep them safe
from traffic. For example, in Chongqing, China, a crosswalk was
transformed into an image of hands playing a piano keyboard; in the
Chilean capital, Santiago, an artist created a crosswalk by painting
a school of fish; and near the Thai capital, Bangkok, students painted
a 3D image of a crosswalk forcing drivers to slow down in
anticipation of a speed bump.



Global link

Many of the activities in this module support climate change adaptation and mitigation. For example, car-free days cut carbon dioxide and other emissions; painting lanes for pedestrians and other users promotes walking and forms of non-motorized transport; placemaking encourages the upcycling of waste materials and contributes to the circular economy aimed at eliminating waste and the continual use of resources.

Behind all these measures are the people who take action and others whose lives are improved as a result. For example, neighbourhood festivals bring different groups of people together through recreational activities and cultural exchange, contributing to happy and healthy communities — a principal indicator of a liveable city.

Liveable cities are also relevant to many cross-cutting issues on a global scale, such as the New Urban Agenda and the Sustainable Development Goals (SDGs). For example, these activities map directly to SDG 11: "make cities and human settlements inclusive, safe, resilient and sustainable". They are particularly relevant to Target 11.3: "enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries"; Target 11.6: "reduce the adverse per capita environmental impact of cities, including by paying special attention to air pollution"; and Target 11.7: "provide access to safe and inclusive green and public spaces". They also contribute to SDG 3: "ensure healthy lives and promote well-being for all at all ages"; particularly, Target 3.6: "halve the number of global deaths and injuries from road traffic accidents".

In addition, these activities contribute to a country's commitments to the 2015 Paris Agreement.



Early Warning Early Action

This module suggests a range of activities that help vulnerable communities understand and use weather information more effectively, enabling them to take early action to reduce risks and maximize opportunities. Together, these activities form an Early Warning Early Action approach.

The activity 'Understand important weather information' focuses on the language used in weather forecasts and how this can be made more locally relevant. The activity 'Develop weather impact statements and actionable advice messages' sets out a method for developing statements about what the weather will do, together with sample messages on what community members should do as a result. It is recommended to implement these activities together for the strongest results.

The activity 'Map community communication networks' is an easy way to map the flow of communication within a community, which can support the development of appropriate communication systems.

'Design a communication system' focuses on the dissemination of information. It is a step-by-step guide on implementing communication system(s) to quickly cascade essential messages within a community.

The 'Cooling centres' activity provides guidance on how to support community members in days of extreme heat.



Understanding weather information

Understanding how people perceive the weather and its impacts leads to better awareness of, and preparedness for, its effects on the weather on the day-to-day life of communities.

- Ask local leaders and residents what kind of weather affects their community most seriously. Recruit a group of people who have a vested interest in how the weather affects their livelihoods (e.g. farmers, fishers, business people, etc.)
- As a group, identify the main weather hazards affecting the community (e.g. heavy rainfall). Discuss impactful weather that has occured recently and in the past. Vote on the most impactful (minimum 30 minutes).
- 3. Then list the impacts that resulted from these hazards, which can vary from event to event (e.g. heavy rainfall can result in minor flooding on one occasion; but, next time, it can lead to major flooding that carries away livestock and even homes). Order the list from 'minor' to 'major' impacts.
- 4. Find a daily or weekly forecast that provides local weather information that includes your community. This may be published by the national meteorological service or a private weather service (minimum one hour).
- Discuss the actions that you might take for different types of forecast.For example, if a dry spell is forecast this could be a good time for constructing buildings.
- Monitor the forecast regularly and stay alert for possible high-impact weather. Share the weather information with community members so everyone can make timely decisions to suit their needs.

In southern Ethiopia community members identified drought as an risk in their community. Local NGOs worked with the National Meteorology Agency to get access forecast information about drought and communicate it via the radio.



Map community communication networks

Mapping information flows provides a basis for understanding the wider information ecosystem of a city. It captures the way information flows among community members, through various channels and formats. This exercise can also identify blockages in the flow of information. Fixing these can improve climate resilience at local level.

- Form a group of community members to discuss how they access general and climate-related information as well as their preferred media, formats and any challenges to receiving information. Also discuss the type of action(s) they take having received the information and how long it takes to complete each action.
- Observe the local area to identify its communication infrastructure (e.g. community radio) and understand the role that local services or public buildings may play in information sharing.
- 3. Conduct informal interviews with local media, decision-makers and data providers to gather in-depth knowledge of their information needs and preferences. This will also indicate how information is communicated as well as how and when it is shared, along with the different formats used and perceptions of key challenges.
- 4. Using all the information gathered, map the local ecosystem. In particular, identify weather-information actors and channels. It may be helpful to colour-code the different types of actors (e.g. information providers, intermediaries, information receivers). In drawing the network, consider ways to emphasize the most popular and effective channels, and ways to identify actors who add value to the information they share.

In June 2019, the Resurgence team participated in the Understanding Risk Field Lab — a month-long arts and technology event in Chiang Mai, Thailand — to understand the risks of extreme rainfall and floods in the Nong Hoi community by mapping its information ecosystem. Through workshops with local residents, field visits and interviews with key actors, an outline map of Chiang Mai's information network was created.



Design a communication system

Design a multi-channel communication system to help communities share important messages quickly. This should be based on the ways people already share information in the community. These methods may include cascading — where one group of recipients passes the message on to another; training – where key people learn how to relay messages through the channels selected; and feedback — where all users of the communication system report what's working well and where improvements are needed.

- Identify the most effective channels for communication. Convene a
 meeting of local representatives to find out how people share trusted
 information and gather feedback (positive or negative) on the
 communication channels they currently use. Some channels may
 reach particular sectors of the population more effectively than
 others i.e. older people may use SMS; younger people may prefer
 social messaging apps such as WhatsApp.
- Identify the gatekeepers for each channel, If you decide to use schools to communicate with children and their parents, you will need to win the collaboration of headteachers.
- Secure the collaboration of gatekeepers by discussing what you want to achieve. Ask them to pass on important weather messages and provide feedback from the recipients.
- Test and review. Disseminate a test message to see how well the communication tree works. Make any necessary adjustments.
- Monitor feedback from recipients and gatekeepers to adjust and improve your messaging.

A group in Nairobi's Kibera informal settlement worked with the Kenya Meteorological Department on a new communication system for weather. This relayed information and advice to more than 500,000 people on local radio, SMS and social media.



Cooling centres

Cooling centres are places where people can rest and cool down during periods of extreme heat. They are used by commuters, outdoor workers and older people – anyone exposed to very high temperatures and at risk of heat stress. As an early action, cooling centres are easy to implement and low budget. They are a lifesaving measure in communities experiencing a heatwave.

- 1. Identify a suitable location that is accessible and convenient for community members who may be experiencing heat stress, e.g. Red Cross Red Crescent offices, public buildings or spaces provided by the private sector. You could also consider going mobile to reach more people with cooling buses or tents. Working with local government and other partners can reduce the costs of setting up a cooling centre.
- Equip the centre with cooling devices such as shades, fans, cold water sprays or air conditioning units. Make sure you have good air circulation.
- Prepare refreshments for the visitors cold water or fruit juice, for example. Providing wet towels is also a good way to provide some relief from the heat.
- Prepare signs or flyers on the dangers of heat. Use graphics to help accessibility and understanding of the message. Explain the dangers to visitors.
- Use the national forecast to plan ahead by visiting at-risk communities to warn them about an impending heatwave.

In July 2019, the Vietnamese capital, Hanoi was affected by a heatwave with prolonged high temperatures reaching 47.5°C. A Red Cross office and tent were equipped with cooling devices to offer vulnerable people respite from the heat. Visitors were provided with refreshments, first aid, and a much-needed rest to recover from their exposure to high temperatures.



Global link

The activities in this module help communities and vulnerable groups to access, understand and act upon weather information by making it easier to understand and more locally relevant. The module includes a series of activities designed to improve the communication of information to residents, using channels and actors that already exist within the community. Collectively, these activities relate to Sustainable Development Goal 13: "Take urgent action to combat climate change and its impacts"; and, in particular, Target 13.1: "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries" along with Target 13.3: "Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". By making weather information easier to access, understand and use, these activities also directly support Target G-5 of the Sendai Framework for Disaster Risk Reduction that calls for an increase in the "number of countries that have accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels".



Creative communication

This module describes some of the ways you can use creative communication to raise awareness of urban issues. Urban spaces are filled with creative inspiration; here, we share some creative ideas that make use of these spaces.

If the following examples fire your imagination, why not explore other methods of creative communication in your urban work? Creative communication is not just about conveying important messages to a wider audience. It can also help to engender a sense of belonging and shared purpose in your group of volunteers and partners engaged in urban work.

Creative communication allows local groups to actively participate in urban messaging, and finds inspiration in the diversity of these communities and the range of different skills they offer.



Urban art

Urban art brings people together to create installations such as murals, mosaics and sculptures. By designing and crafting the piece of art, people can share new visions of the city, revamp its spaces with vibrant colours and communicate key messages on topics such as culture, health or even climate change or natural disasters. Urban art can inspire people, brighten city-dwellers' lives and promote equality and inclusion.

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- Local authorities, community groups, schools and artists can help to shape ideas for the installation and identify resources, including volunteers and materials. To keep costs to a minimum, consider asking local suppliers if they can provide the materials in-kind.
- 2. Think of spaces in the city that are underused, perhaps due to aesthetics, function or crime. Consider static spaces such as government buildings and mobile spaces such as city buses. Identify the space(s), seek the necessary permissions, and agree the theme or message. Sketch a design of the art installation and show how it will transform the space. Share the design and concept with everyone involved.
- Recruit volunteers and plan how to create the piece of art it could take a few days or a couple of weeks to finish the work, depending on the size of the project and number of people involved.
- 4. Get creative! Consider the volunteers' safety if they're working outdoors, at height, using sharp tools, or working in an unsafe/ unlit area of the city. Post progress on social media and get local media involved.

In 2007, the San Francisco Bay Area chapter of the American Red Cross partnered with a local utility company, nationwide healthcare provider and an advertising firm. Together, they installed temporary murals around the city showing the likely damage of a catastrophic earthquake. The two-day campaign aimed to spur families' preparedness planning.



Tactical urbanism

Cities around the world use short-term, adaptable projects to advance long-term pre-set goals relating to the use of public spaces etc. 'Tactical urbanism', as it is known, is all about action. It refers to a city-, organization- and/or citizen-led approach to a challenge in the built environment, using short-term, low-cost and scalable interventions to catalyse long-term change. Examples include temporarily turning an abandoned parking lot into a café; painting crosswalks in an area with heavy traffic; and adding potted plants to 'green' a pavement.

- Explore the challenges of your city's built environment and shortlist those you'd like to address. Select one and think of creative ideas that show how the challenge can be overcome with temporary changes.
- Recruit appropriate partners to support your activism. These could include local authorities, civil society organizations and/or community groups.
- 3. Plan the event with partners. Identify a city block, square, parking lot, pavement or other area where these temporary changes can be implemented. Seek the necessary permissions. Decide how long the changes will be in place (typically 1-7 days); list the tasks that need to be completed and allocate them to the team.
- Take action and document progress. Share photos and videos of people interacting in the new-look space. Invite local officials to see it for themselves.
- Reflect with partners on the outcome. Consider how to work with the community and local authorities to make more permanent changes that overcome the challenges you identified.

In Lusaka, Zambia, tactical urbanism was used to raise awareness of risks due to extreme heat in the city and to suggest critical actions to take during a heatwave to prevent human health impacts. The day of action included cooling stations with sun umbrellas and footbaths, drumming and slam poetry in an informal settlement.

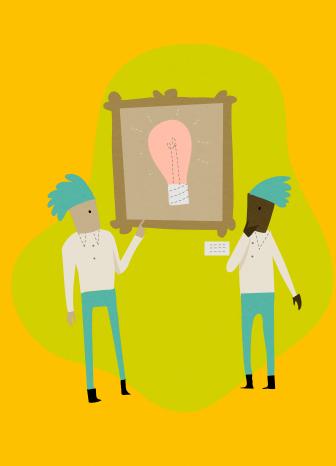


Flashmobs

A flashmob is a seemingly random coordinated action of a large group of people, in a public space, in which they perform for a short period of time and then disperse. A flashmob is intended to grab the attention of the public in an entertaining way and relay a message, such as how to stay safe in the heat.

- Form a group of volunteers from a local performing arts school or community group. Decide where to perform the flashmob based on who needs to hear your message, and where these people are typically found in the city.
- 2. Discuss the top three key messages that you want to communicate. For example, important points on heatwaves could include: risk (e.g. heatwaves are deadly); self-protection measures (e.g. protect yourself by staying indoors during the hottest time of day); and inform the public about an imminent threat (e.g. a heatwave will arrive on Saturday).
- 3. Use the creative strengths of the group to develop a way to deliver these messages and connect with the local audience. For example, you could take the music from a popular song and replace the lyrics with your key messages. Or you could associate certain phrases with a particular dance move. Be creative!
- Practice and perform. A successful flashmob will attract a large crowd and coverage on social/local media.

In New Delhi, India, volunteers developed flashmobs with simple messages about extreme heat: drink more water, keep your head covered and "rest, rest," between 12:00 and 15:00 — the hottest hours of the day. They performed the flashmobs at the airport and a busy marketplace to inform visitors and residents on how to deal with hot temperatures.



Host a cartoon-a-thon

Cartoon-a-thons involve developing and refining cartoons in real-time with the help of a cartoonist and using feedback from an audience to capture ideas and insights. Cartoons can get to the heart of a matter in a simple and eye-catching way.

- Select a theme. It can be about any urban topic, such as creating a healthy and liveable city or staying safe in the city.
- Offer a local cartoonist the opportunity to get involved. Ask the cartoonist to create initial drafts focusing on the challenges and opportunities of the topic.
- Find and book the venue; invite a limited number of people to join the cartoon-a-thon; equip the event with the necessary materials.
- 4. Introduce the topic to open the cartoon-a-thon and get people thinking. Compere the event, perhaps by inviting speakers to share their experiences on the topic and/or asking everyone in the audience to contribute one idea.
- 5. Display the initial drafts of the cartoons before encouraging participants to look at them and share with others their experiences or insights relating to the cartoons.
- 6. Then invite the participants to join a plenary and share their reflections on the cartoons. Simultaneously, ask the cartoonist to revise the initial drafts based on the audience's feedback.
- 7. Share the final cartoons with the audience. Invite people to reflect briefly on what they have learned. Formally thank the cartoonist and participants before closing the event.

A cartoon-a-thon was arranged to explore complex, interconnected urban issues with regional representatives from Spain's Andalucia region, France's Nouvelle-Aquitaine region, the Italian Dolomites and Scotland's Glasgow region. With inputs from participants, the cartoonist created drawings about creating long-term, lasting change despite the limitations of shorter term, election-cycle policies and planning. After the event, the cartoons were shared more widely to make the case for meaningful transformation.



Global link

Documented effectively, creative communications can be powerful examples of urban activism and creativity — showcasing ideas and solutions to a global audience. Photographs and videos can be shared virtually to highlight key issues, demonstrate creative communication and connect to global policy.

Creative communication is especially effective at the global policy level if coordinated action takes place simultaneously in urban areas around the world. Linking creative communication to worldwide events — related to science, medicine, sport, technology or politics, for example — is another way of ensuring that messages have a global reach and impact.

