

SDG PROJECT ASSESSMENT TOOL



Bangkok

Decision Support System for Flood Management

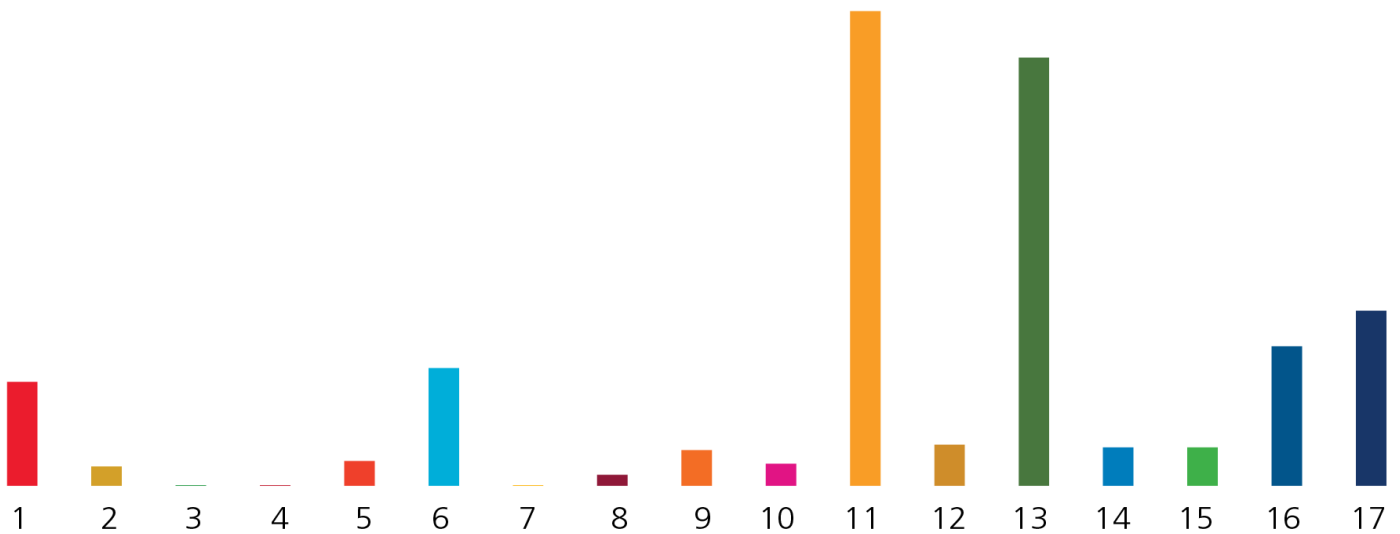
This tailor-made sheet aims to demonstrate how the SDG Project Assessment Tool's General Framework has been tailored to the project in Bangkok, Thailand. It highlights how the project includes the priorities within the Sustainable Development Goals, and the different principles that were selected for this project. As this sheet has been tailored to the project's scope and needs, the performance criteria has been selected in consultation with the partners of the Programme.

Sustainable Development Goals

B) This is the SDG alignment summary

This shows how the project includes the priorities stated within the SDGs.

Sustainable Development Goals



Fields of Assessment

A) These are the fields of assessment

This is a summary of the assessment in relation to 8 key drivers, split into Technical & Effectiveness aspects of the project. While the technical aspects show the technical design of the projects, effectiveness aspects focus on the long-term sustainability and impact





Selected Performance Criteria

This is a list of all selected performance criteria. Note that caveats/comments/amendments have been included in the internal version of this document to some performance criteria in accordance with the nature of the project and the participatory discussions with the city authorities and delivery partners.

Ref	Sustainability Principle	Ref	Performance Criteria
<i>Key Driver: Spatial Planning</i>			
10	Affordable and reliable public transport reduces cost burdens for all	10.1	The project is based on a comprehensive land assessment, taking into account existing land uses, cultural significance, and environmental factors including vulnerability to climate hazards.
		10.2	The project considers existing land zoning and is designed to minimise exposure to climate hazards.
		10.3	The project promotes strategies and approaches to prevent and reduce the risks of developments (planned and informal) in climate hazard areas, considering their location, type and scale.
		10.4	The project minimises or prevents development in environmentally sensitive areas, and encourages relocation away from such areas where appropriate.
		10.6	The project undertakes city-wide climate risk mapping under a range of scenarios.
		10.7	The project ensures that urban development is in line with future population growth projections, and does not result in unsustainable land use and consumption.
		10.8	The project identifies land within the city limits suitable for extensions (informed by demographic, economic, and other holistic projections), promoting sustainable and controlled city growth.
22	Well designed public space provides nature-based solutions for increased resilience	22.1	The project is based on an assessment of how existing public space contributes to city resilience efforts, including disaster mitigation and response.
		22.2	The project proposes a network of public spaces as mitigation measures and/or disaster response.
		22.3	The provision of public space on environmentally sensitive and high-risk areas is avoided, particularly on riparian land and/or river banks.
		22.4	The project plans for public and open spaces that can support post-disaster community recovery.
		22.5	The project and its design solution takes into account the area's existing biodiversity and ecological infrastructure, proposing nature-based solutions that promote the use of native species.
		22.6	The project ensures that public space contributes to overall resilience and reduces the impacts of climate change, including heat island effects.
		22.7	The provision, distribution and design of public space proposes solutions to increase retention capacity.
<i>Key Driver: Environmental Resilience</i>			
24	Identification and assessment of vulnerable areas in planning helps reduce exposure and prevents damage from climate disasters	24.1	The project is based on an understanding of previous climate related disasters and their risks for damage.
		24.2	The project is based on a background assessment of current and future risk scenarios, identifying the most severe and most probable scenarios.
		24.4	The project identifies vulnerable urban communities and their needs including potential measures to mitigate vulnerability.
		24.5	The project is based on an assessment of significant direct and indirect costs of potential disasters, including, but not limited to, human and financial losses.
25	Equipment and systems for early warning and monitoring help inform emergency response to reduce damage	25.1	The project proposes the installation of detection and monitoring equipment (satellite imagery, rain radar, precipitation monitors, seismic activity monitors, etc.) for potential disasters, including but not limited to, floods, earthquakes, tsunamis and hurricanes.
		25.2	The project ensures that early warning and appropriate response information is effectively communicated to reach all, particularly marginalized and vulnerable groups – especially those that might be neglected by mainstream communication channels due to language or technology.
		25.3	The project identifies the institutional, systemic and/or individual needs and opportunities of the city in regard to capacity to respond to emergencies.

26	A plan for evacuation and relocation ensures effective disaster response	26.1 The project is based on a risk assessment of possible disasters that could take place in the area, ranking them according to probability and severity.
		26.2 The project includes a plan for evacuation and relocation during and after disasters .
		26.3 The project engages the community in the development of an emergency response plan .
		26.4 The project ensures institutional preparedness by defining the roles and responsibilities of different agencies and departments in disaster response, and includes a strategy and command and control.
		26.5 The emergency response plan considers how to engage private sector utilities to meet energy, water, trash collection, communication and telecommunications requirements during and after the emergency.
		26.6 The project identifies relocation areas that are not hazard-prone, and do not negatively impact natural and cultural areas.
27	Resilient design of infrastructure and planning for spare capacity helps maintain and restore basic services, ensuring reliability during and after disruption	27.1 The project incorporates strategies for resilient design, construction and operation of infrastructure systems.
		27.2 The project includes a plan to maintain and protect infrastructure other critical built assets in the event of a disaster.
		27.3 The project uses principles of redundancy, modularity, and flexibility to ensure resilience.
		27.4 The project implements new infrastructure and development in low-risk areas to reduce damage from climate disasters and other hazards.
		27.5 The project uses redundant design to ensure spare capacity in case of disruption caused by disasters.
		27.6 Redundancy within the project is intentional and cost-effective.
		27.7 The project considers redundancy to maintain and restore basic services after disruption on a city-wide scale.
28	Integrated water systems, including hard infrastructure and nature-based solutions help improve storm water management	28.1 The design is based on an assessment of existing storm water management, hard infrastructure and nature-based mechanisms for water management. .
		28.2 The project safeguards natural storm water buffers as part of the city's stormwater management network.
		28.3 The project protects and strengthens relevant ecological systems, including but not limited to, water retention, infiltration, afforestation, urban vegetation, floodplain management, mangroves and coastal vegetation.
		28.4 The project strengthens the area's water resource management by considering linkages between networks.
29	Sustainable management of resources helps address depleting resources and sustainable consumption and production patterns	29.1 The project is based on an assessment of the area's climatic and environmental conditions in regard to water, energy and waste, including a diagnosis of the city's risks and vulnerabilities.
		29.2 The solutions provided in the project take climate change into account and aim to reduce the project's carbon footprint, toxic waste and greenhouse emissions.
		29.3 The design of the project demonstrates an awareness to the issue of depleting world resources, and incorporates solutions that sustainably manages resources, for example in the choice of materials used in the project.
		29.5 The project considers the lifecycle of materials, and incorporates solutions that consider the principles of reducing, reusing and recycling materials in consumption patterns and production chains.
30	Efficient, climate-sensitive and context-relevant design helps reduce energy consumption and the impact of extreme weather conditions	30.1 Extreme weather conditions are simulated as scenarios in feasibility studies conducted to inform the project.
		30.2 The project incorporates nature-based solutions that are relevant to their location, and build upon local environmental conditions and traditions.
		30.3 The project includes nature-based solutions and renewable energy sources with a goal of energy conservation.
		30.4 The design of buildings and other spaces promotes energy efficiency through passive design features.
		30.5 Building design incorporates components that reduce energy and water demands, such as incorporating greywater and renewable energy sources.
<i>Key Driver: Data-Driven Process and Management</i>		
35	Efficient data collection based on planning needs supports efficient planning processes and resource management	35.1 The project is based on a background assessment to identify data gaps within the project scope that are critical for the urban planning and management processes.
		35.2 The project establishes data collection strategies bases on an assessment of planning data needs.
		35.3 The project delivers tools and applications that allow for efficient data collection and management.
		35.4 The project delivers automated data collection systems and processes to enable real-time monitoring of service delivery.
		35.5 The project establishes mechanisms for requesting and accessing data, with clear response times.

36	Effective data management systems supports sustainable planning processes	<p>36.1 The project is based on a background assessment (within the project scope) of the local government's current data framework, including omissions, redundancies, impediments and alike, as well as the institutional and internal organisational arrangements, levels of capacity and available hard-and-software.</p> <p>36.4 Partnerships are supported by specific publicly disclosed and detailed sets of guidelines for collecting, preparing, publishing and updating data, as well as roles & responsibilities for each partnership entity.</p> <p>36.6 The project is in compliance with technological sovereignty and digital service standards, attending to principles of interoperability, agility and usability, with particular attention to prevention of dependency on suppliers (vendor lock-in).</p> <p>36.8 The project establishes indicators for assessing the quality and richness of data from each data source.</p>
37	Efficient use of data supports evidence-based and justifiable decision-making processes	<p>37.1 The project contains a background assessment on data flows between stakeholders, identifying gaps and barriers.</p> <p>37.2 The project delivers a functional and operational framework for a centre (or similar) within government focused on data science and intelligence that works across sectors.</p> <p>37.3 The project builds and formalizes practices for integrating data analysis into decision-making processes, taking into account relevant data sets.</p>
38	Monitoring and evaluation ensures long-term impact	<p>38.1 The project includes a background assessment on data availability and requirements to conduct impact assessments, as well as monitoring and evaluation beyond the programme period.</p> <p>38.2 The project is subject to a comprehensive and unbiased social, economic, and environmental impact assessment.</p> <p>38.3 The project proposes mitigation measures and safeguards that respond to the findings of the impact assessment.</p> <p>38.4 A comprehensive monitoring and evaluation strategy has been defined that responds to the impact assessment and defines contingency measures beyond the programme period.</p>
39	Inclusive, transparent, continuous and meaningful participation ensures that the needs and aspirations of the community are addressed through the project.	<p>39.1 The background assessment identifies public, private, academia and civil society stakeholders at city, regional and national level that are relevant to the project. The project assesses how affected groups can be included and how to ensure a gender sensitive approach.</p> <p>39.2 The project builds on existing mechanisms to ensure community participation in urban planning and management processes. If these mechanisms do not exist, capacity development and recommendations are provided.</p> <p>39.3 The participatory process includes all relevant stakeholders and ensures that the views of marginalised and vulnerable groups are represented. The participatory process ensures a gender sensitive approach. If indigenous people are affected by the project, prior informed consent is ensured.</p> <p>39.4 The participatory process is ongoing throughout the project lifecycle, starting from the formulation stage onwards.</p> <p>39.5 Stakeholders have opportunities to influence the project through a meaningful participation process. The project targets the needs of the population.</p> <p>39.6 The project clearly communicates how participatory processes will be conducted. Relevant information is provided regularly to stakeholders and affected communities on the project development and outcomes of participatory engagements. Information is made available, shared in a reasonable timeframe and channels have been provided for stakeholders to submit their concerns or request information.</p> <p>39.7 The project uses data systems and civic technologies for public engagement.</p>
<i>Key Driver: Capacity-Building and Market Maturity</i>		
40	Strong technical and professional capacity from all relevant stakeholders secures long-term implementation	<p>40.1 The project conducts a needs assessment (including skills, human resources, and equipment) to understand the ability of partners to support project implementation and ongoing maintenance.</p> <p>40.2 The background assessment identifies capacity gaps in all relevant partners and stakeholders. This can include stakeholders within government at technical or leadership level, and third parties such as the private sector, civil society and academia.</p> <p>40.3 The project assesses what technological and capacity gaps can be realistically addressed through capacity development activities.</p> <p>40.4 The project proposes strategic capacity development activities that will support implementation and sustainability.</p> <p>40.5 The project develops institutional memory through support to mechanisms that document project implementation and capacity development.</p>
41	Public relations and education campaigns gathers early support and improves the likelihood of positive impact	<p>41.2 The project has an effective communication strategy to reach all stakeholders and community groups during various phases of the project.</p> <p>41.3 The project's communication methods address potentially exposed and/or threatened individuals/communities using the appropriate linguistic and technological means for disseminating knowledge effectively.</p>
42	Building local partnerships and drawing on local resources and capacities facilitates sustainable project implementation	<p>42.1 The project explores the opportunity to involve local partners in the execution and maintenance of the project.</p> <p>42.2 The project considers the involvement of local partners taking into account their level of professional capacity.</p>

- 42.3 The project considers sustainable practices for the building and execution of the project such as promoting locally sourced materials and resources and minimizing the carbon footprint through sustainable sourcing of materials and transportation.
- 42.4 The project only proposes international partners for its execution and maintenance where local capacity and market maturity does not meet minimum standards.

Key Driver: Urban Governance and Legal Frameworks

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| 44 | Alignment and coherence with existing laws and policies at local, regional and national level enhances the viability and impact of projects | 44.1 The project aligns with existing policies (at local, regional and national level). |
| | | 44.2 The project's development and implementation is enabled through the existing legal framework (at local, regional and national level) in housing, planning, transport, procurement, etc. |
| | | 44.3 The project aligns to the city's strategic goals including spatial, economic and environmental strategies as well as existing projects implemented or in the pipeline. |
| 45 | Action plans for long-term sustainability increase the impact of projects | 45.1 The project includes risk assessment and built-in mitigation measures in the event of changes in leadership and lack of commitment to carry out the projects beyond the Programme. This includes but not limited to strengthening institutional ownership both at high political and technical level. |
| | | 45.2 The project establishes a strategy to continue and maintain the projects after the Programme. This includes but is not limited to establishing clear steps for implementation and defining a process to formalize the project as a legal instrument. . |
| | | 45.3 The project includes a communication and capacity development strategy to inform stakeholders about legal obligations, rights and appeal mechanisms. |
| 46 | Defined roles and responsibilities at all levels of government provides clarity in case of overlapping mandates | 46.1 The project develops an assessment of the institutional setting and uses this to assign roles, responsibilities and authority to ensure success. |
| | | 46.2 Roles and responsibilities are assigned based on institutional capacities and abilities. |
| | | 46.3 Project stakeholders are given the necessary authority and capacity to carry out their responsibilities . |
| | | 46.4 Cross-sector and -government coordination mechanisms help to establish project legitimacy and buy-in, and multi-level coordination mechanisms are in place to ensure effective design and implementation. |
| | | 46.5 The project proposes third-party partnerships where appropriate to achieve better project outcomes (ie private sector, civil society, and academic). |
| | | 46.6 Proposed partnerships follow principles of good governance by being transparent, fair and promoting public benefits. |
| 51 | Effective data dissemination to empower individuals and community | 51.1 The project considers a demand-based data approach identifying effective ways to disseminate data. |
| | | 51.2 The project establishes detailed and clear criteria for transparency and levels of openness of data. |
| | | 51.3 The project delivers a public, intuitive, responsive and assisted digital interface for data visualization/manipulation, allowing for efficient use by citizens. |

Key Driver: Financial Strategies

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| 54 | Data literacy and capacity building enhances technology development, research and innovation to support sustainable urbanization | 54.4 The project provides data-oriented capacity building for improving data-driven urban management in public departments. |
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