MAINSTREAMING ADAPTATION INTO URBAN DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT PLANNING
Lessons from Dar es Salaam, TZ

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MAINSTREAMING
the process of systematically integrating a selected value/idea/theme into policy domains

mainstreaming ADAPTATION to climate change grounded in the Environment Policy Integration (EPI) strategy

Into URBAN DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT planning
MAINSTREAMING of adaptation to climate change guarantees MORE EFFICIENT USE OF FINANCIAL AND HUMAN RESOURCES than occurs when adaptation is designed, implemented, and managed as a series of STAND-ALONE MEASURES.

Open questions:

- How to define adaptation mainstreaming
- How to achieve it
- What issues to mainstream into urban development and environmental management planning
## Comparing Action-Specific and Mainstreaming Approaches

<table>
<thead>
<tr>
<th>Action-Specific Approach</th>
<th>Mainstreaming Approach</th>
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<tbody>
<tr>
<td>One self-standing measure</td>
<td>Various integrated measures</td>
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<td>One policy sector concerned</td>
<td>Multi-sectoral</td>
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<tr>
<td>Few actors involved</td>
<td>Many actors involved</td>
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<tr>
<td>Specific knowledge and competences required</td>
<td>Diverse knowledge and competences required</td>
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<tr>
<td>Linear decisional process</td>
<td>Iterative decisional process</td>
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<tr>
<td>Replicable in many places</td>
<td>Context specific</td>
</tr>
<tr>
<td>Achievable in short term</td>
<td>Achievable in medium-long term</td>
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<tr>
<td>Standardized design and implementation</td>
<td>Experimental design and implementation</td>
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<tr>
<td>Clearly ex-ante defined inputs and outputs</td>
<td>Likely variations of inputs and outputs</td>
</tr>
<tr>
<td>Plan-driven, conformative</td>
<td>Target-driven, performative</td>
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• the action-specific approach seems to be simpler in terms of planning, acquisition of financing and other necessary means, decision-making, implementation, and evaluation of results.

• the transformative potential of the mainstreaming approach can be compromised by a lack of shared, short-term goals, which can reduce the motivation of and push from public administrations.

• the overall hope of success for a special action is certainly higher than that of a mainstreaming initiative but

• THE EFFICACY OF A SPECIAL ACTION AS REGARDS REDUCING VULNERABILITY IN THE MEDIUM-LONG TERM WITH RESPECT TO RISKS THAT AT PRESENT ARE NOT ENTIRELY KNOWABLE IS NOT AT ALL GUARANTEED.
How to Achieve Mainstreaming

four operational streams, which are neither mutually exclusive nor exhaustive:

• PROCEDURAL
• ORGANIZATIONAL
• NORMATIVE
• REFRAMING
Mainstreaming what into what

Climate Proofing versus Adaptive Capacity Improvement

two different streams depending on how vulnerability is interpreted:

1. vulnerability is a linear result of climate change impacts on an exposure unit (outcome vulnerability)
   Adaptation objective: limit negative outcomes of climate change by securing the physical environment through improved infrastructure and measures for impact mitigation

2. climate change is considered to interact dynamically with contextual conditions associated with an exposure unit (contextual vulnerability)
   Adaptation objective: improve adaptive capacity drawing upon the sustainability livelihood framework and Sen’s capability approach. Structural inequalities are addresses in order to change vulnerability circumstances
Urban Development and Environmental Management

why these sectors should be considered the front line in the adaptation mainstreaming process?

• a large number of potential climate change victims is concentrated in cities, as are fundamental assets and activities for the production of a large part of national wealth.

• urban development is both one of the main causes of climate change and one of the non-climate factors destined to exacerbate the effects of climate change.
Potential of intervention for UDEM

Urban development is not always a driver of increased vulnerability. The type of UD pattern defines whether UD contributes to an increase or decrease in people’s vulnerability. The ability to carry out urban planning in an effective way is part of local capacity for adaptation.

Land-use planning and ecosystems management have beneficial effects in terms of providing environmental services that are crucial to supporting people’s livelihoods as well as disaster risk protection services.

Urban planning has the potential to create synergies between climate change adaptation and mitigation measures, while the importance that the choice of one urban form over another can have in terms of improving adaptive capacity and the reduction of GHG emissions is more controversial.
Approaches for Mainstreaming Adaptation into UDEM

The most common approaches for mainstreaming adaptation in urban development and environmental management draw upon the well-established field of sustainable urban development and more the recently developed field of urban resilience.

Work streams can be distinguished that concentrate on various aspects of the urban reality and require the contributions of three different disciplinary groups:
1. applied technological and infrastructure-based approaches;
2. human development and vulnerability reduction;
3. investing in natural capital and ecosystem-based adaptation.

The IPCC suggests combining the contributions of these streams, since all three address complementary and useful aspects for effective adaptation.
Challenges of Uncertainty and Justice

In fact, what is most important is

1. reinforcing the capacity of administrations to manage the uncertainty surrounding future changes and

2. to uncover issues of justice and fairness embedded in the procedures for decision-making and the distribution of burdens and benefits.
As concerns UNCERTAINTY, the literature on adaptation converges on the following points:

i) investment in improved knowledge of local climate change effects;

ii) integration of available information into decisions;

iii) in the absence of robust information, consideration of no or low regrets strategies; and

iv) preference for reversible interventions and flexible decision-making processes in order to allow for ongoing adjustment as new information becomes available.

The second point (JUSTICE) recalls the broadly discussed question planning for whom?