

URBAN TINKERING

An alternative approach to planning

Use the urban living system (eg. green areas, rivers) and the built environment (eg. roads, buildings) together to better meet all the integrated needs of cities.

Example: Planting trees in cemented walkways with grids around the trees to allow water to flow into the ground, preventing flooding whilst leading to a green and shady walkway for citizens.

Integrate built systems with living systems

Trying new things by approaching an issue from a variety of angles, with the expectation that some might fail. This allows emerging opportunities previously not available under a “fail-safe” approach. Redesigning activities be “safe-to-fail” means there will be a higher probability of failing but that the consequences of failure will be lower.

Example: Designing an on the ground implementation project to have many potential outputs, depending on the context and local context processes.

Fail-safe to safe-to-fail

Re-imagine the use of existing urban elements and identify valuable shifts in how they work. Shifting infrastructure functions create the opportunity for design adaptability and innovation, allowing infrastructure elements to serve multiple, often unrelated, functions that address context-specific challenges.

Example: Old shipping containers can be used for living spaces, restaurants, hotels, sanitation facilities and even hospitals.

Nothing is useless

Build on what you have on the ground

Use the existing landscape and diverse local knowledge to create innovative and context specific solutions to existing challenges.

Example: Encroachment onto wetlands by human settlements is a major challenge in Africa. Tinkering these houses so that they minimise the impact on wetlands will go a long way to ensure the environment and social systems can co-exist. Houses can be put on stilts for the flooding season with effective waste collection systems integrated so that waste is not dumped in the wetland areas.

Informality as opportunity

Informality is common in African cities, especially where rapid urbanisation overtakes the ability of planners to keep up. Urban tinkering allows for greater levels of flexibility and adaptability in planning. Therefore, urban tinkering unlocks the innovation in informality which be used as an opportunity.

Example: Most African cities are predominantly informal, which comes with results in various challenges. However, with a lack of budget to formalise these, and highly sensitive issues around relocation and resettlement, these unplanned areas can become somewhat “formalised” through an urban tinkering approach. This could include integrating greenery for flood control or providing bins and a compost making system.

The world is in need of new ways of thinking and approaches to achieve sustainability. Tinkering – *adjusting and moulding of existing landscapes through small scale “urban experiments” that can result in dramatic shifts in the way the landscape works as a system* – where designing for multifunctionality provides innovative solutions to the problems of sustainable development in the context of rapidly changing conditions.

This approach can both guide the design of new, and redesign of existing, urban structures, as well as promote innovative integration of grey, green and blue infrastructure.