

TRACING BACK TO MOVE AHEAD: A REVIEW OF DEVELOPMENT PATHWAYS THAT CONSTRAIN ADAPTATION FUTURES

Diagnosing maladaptation often requires examining the past decisions that created unsustainable development pathways. Lessons learnt can inform adaptation decision-making, and avoid maladaptation.

KEY IMPLICATIONS FOR POLICY, PRACTICE AND RESEARCH

This study aimed to address a gap in maladaptation scholarship which failed to explain the relationship between different dimensions of maladaptation. Our paper highlights a socio-cultural understanding of path dependency in the context of maladaptation, which had previously been related to large-scale infrastructure-development-limiting flexibility. We therefore demonstrate how future research and practice can use a pathways approach to understand and diagnose maladaptation in order to mitigate or avoid its potential effects.

We propose that policy-makers and planners first acknowledge how development trajectories acquire dominance, and then begin empowering normative alternatives that open future adaptation options. There are glimpses of hope in both cases. Citizen initiatives which claim to protect or sustain natural assets in the city must be inclusive, and seek solutions which are collectively designed, through multiple engagements and with a wide range of stakeholders. The bringing back of traditional methods in farming must incorporate growing recognition that input-intensive practices do not necessarily usher equitable and sustainable food production. We recommend that future adaptation pathways be informed by lessons from the past, and avoid lock-ins and trade-offs which entrench inequity.

KEY FINDINGS

This study aimed to traced implications of particular development trajectories in urban and rural India. The first case examined how urbanisation in Bangalore city has decreased the capacity to respond to concurrent risks of flooding and water scarcity, while the second case charts how agricultural policies in India have narrowed local capacity to deal with climatic and non-climatic uncertainties.

WHAT WAS DONE, AND WHAT WAS NOVEL?

We examined why certain systems are locked into unsustainable and maladaptive trajectories that continue to exacerbate vulnerability of the most marginalised people. Looking at the two case studies of urbanisation in Bangalore, and increasing mechanisation of the agricultural sector, we argue that looking back at past development decisions helps diagnose maladaptation practices.

The approach is novel because it uses a backcasting approach to adaptation pathways, and demonstrates how development decisions with no concern for climatic risks might also have maladaptive outcomes at larger spatial or temporal scales. This is especially true in developing countries.

Using a historical perspective, we identify triggers of change in local and regional development which have led to an adaptation-constrained space. We find that both pathways display irreversible lock-ins and inherent trade-offs which entrench inequities. We argue that such development pathways are potentially maladaptive. Whether they are expected to deal with climate impacts or to meet development goals, the fact that they constrain current and future adaptive capacity at multiple levels is why we consider them maladaptive.

