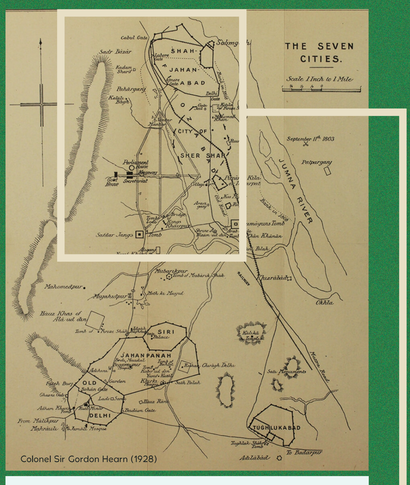
CLIMATE CHANGE IN INDIA:
WHAT DO WE KNOW AND HOW?

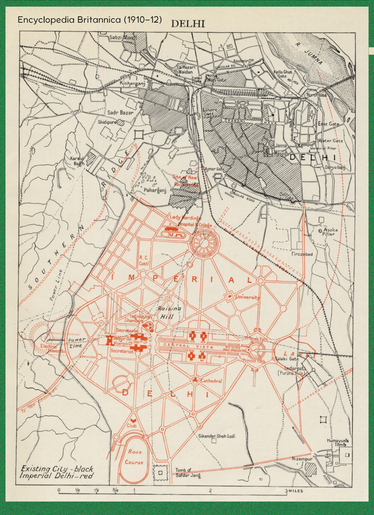
URBAN FLOODING IN DE-RURALIZED CITIES OF SOUTH ASIA

The Indian Subcontinent is predicted to become substantially warmer and dustier, attracting fiercer cyclonic monsoons resulting in tidal, lakeside and riverside inundations resulting in damage to human settlements, the scale of which will be especially devastating for cities.



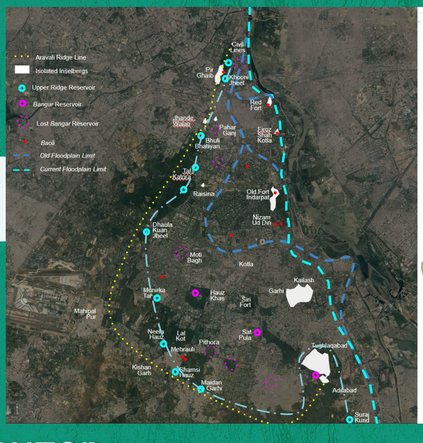
Pre Industrial fortified cities of Delhi (1803) and Colonial Delhi (1910)

Before industrialisation, city building in India carefully considered the terrain and how water flowed or stagnated over it. Fortifications controlled populations, while embankments, ghats, stepwells, peri-urban agriculture or forestry and intra-city horticulture regulated water within the city. These measures facilitated ample water and dust control in the dry season and flood mitigation in the monsoons.

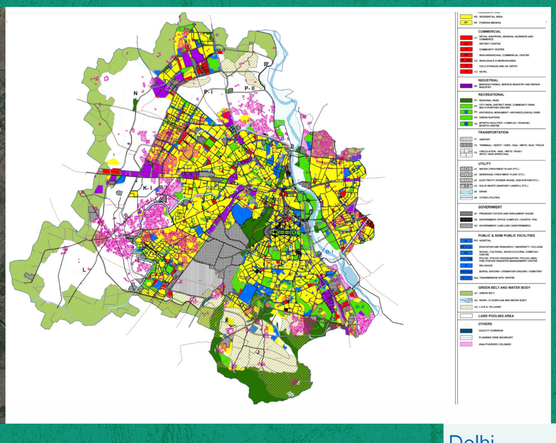


Fossil-fueled Industrial Age, during the colonial period, critically changed how cities were made in India. All terrain sensitivity in city-making was flattened into two-dimensional Master Plans for expansion, "city improvement" and resource extraction. Cities outgrew their fortifications and included the lowlands of surrounding fields, forests and water bodies. Embankments no longer controlled monsoonal runoff but instead helped flat roads and rails cut across uneven terrain.

Thus, South Asia's planned urbanisation can be thought of as a colonial de-ruralisation. Even today, facing climate crises, cities expand endlessly based on two-dimensional Master Plans into their rural and ecological adjuncts. To make cities more resilient to drought, dust and deluge, modern urban planning must reflect earlier three-dimensional terrain constraints of city-making.



Disappearing water bodies of Delhi



Delhi Developmental Plan (2021)

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