Success when we deemed it failure? Revisiting sites and services projects in Mumbai and Chennai 20 years later

Kathryn E. Owens, Sumila Gulyani, Andrea Rizvi *

World Resources Institute, 10 G St NE, Washington DC 20002, United States
World Bank, 1818 H St NW, Washington DC 20433, United States
ARC Associates LLC, 508 Hudson St, Hoboken, NJ 07030, United States

A R T I C L E I N F O

Article history:
Accepted 24 January 2018

Keywords:
Sites and services
Affordable housing
Urban expansion
Inclusive cities
Asia
India

A B S T R A C T

Twenty years after the sites and services approach was largely abandoned by the World Bank, new evidence from India demonstrates that the projects were largely successful and achieved many sought after urban planning goals.

Drawing on field visits, semi-structured interviews with residents and project officials, archival research and spatial analysis, we found that sites and service projects in Chennai and Mumbai had transformed into bustling and thriving communities over the last two decades. Contrary to past critiques, the incremental housing approach – where small serviced plots are developed and sold to low income households – had worked. This unique land product is not typically available in the formal sector and helped to broaden access to the housing market. However, the bigger success to emerge from these projects, is the creation of well-planned and well-serviced neighborhoods that are both livable and inclusive. This occurred because the incremental development process was coupled with neighborhood planning and the integration of mixed income households. Key design innovations included incorporating a range of plot sizes to reach different income groups, increasing density, developing a hierarchy of road and open space layouts, incorporating mixed use by allocating space for commerce and social services, and strategically selecting sites for connectivity to transport and economic activity. Lessons from these projects offer valuable tools and insights for planners as they guide growth to create more inclusive and livable cities.

© 2018 Published by Elsevier Ltd.

1. Introduction

Starting in the early 1970s, the ‘sites and services’ model propagated globally, widely viewed by governments and donors alike as an antidote to rapid slum expansion and failure of past affordable housing programs (Payne, 1984; Peattie, 1982; van der Linden, 1986). Between the early 1970s and 1998 the World Bank alone invested in 100 sites and service projects across 53 countries with a total investment of $14.6 billion. The objective of these programs was delivery of incremental housing for the poor through the provision of small serviced plots, sometimes with a core unit. But despite the initial enthusiasm, sites and services projects suffered from mixed implementation experience and were ultimately abandoned in the mid 1990s. Critics argued that these projects took too long, were too complicated, ‘leaked’ to the non-poor, and suffered low occupancy because the sites were too remote and far from jobs and income opportunities (Keare & Parris, 1982; Laquian, 1983; Peattie, 1982; Mayo & Gross, 1985). At the time, evaluators measured project success based on narrowly defined rates of completion, cost recovery, and achievement of stated project objectives within project duration. Many of these projects failed to deliver against these metrics within the limited project lifespans.

For this study, we visited two cities in India—Chennai and Mumbai1—where about $200 million were invested in developing 28 sites with approximately 143,000 plots over the period 1977 to 1994. Revisiting these sites several decades later offered us a unique opportunity to test the durability of some of the original ideas, claims, and critiques, and to assess their validity on the ground. Specifically, we asked: What, if any, were the positive outcomes? What worked and what did not? What insights do these old projects

1 The official names of both cities were changed in 1996 from Madras to Chennai and from Bombay to Mumbai. We will refer to both using the new official names except in reference to projects.
offer for new programs being designed to accommodate the next
generation of urban residents?

Our findings in Chennai and Mumbai differ sharply from the
negative assessments in the sites and services literature and eval-
uations. Over the 20–30 years since completion, these projects
appear to have achieved remarkable success in delivering not only
housing but also neighborhoods that are livable and inclusive.
Specifically, these projects succeeded in three ways. First, the idea
of “incremental” housing—where people would invest slowly, over
time, at a pace that fitted each individual family’s circumstances—
has worked. Second, the site planning and infrastructure design
innovations introduced in these projects directly contributed to
enhanced affordability and succeeded in delivering well served,
mixed use and physically livable neighborhoods. Third, these sites
now offer a range of housing types and sizes and appear to be
home to households across several employment and income
groups suggesting these projects have delivered mixed-income
neighborhoods.

What aspects have contributed to the creation of physically liv-
able neighborhoods? Theory suggests that four factors determine
the physical quality of living conditions—the housing unit, infrastruc-
ture, tenure, and the neighborhood (Gulyani & Bassett, 2010;
Gulyani & Talukdar, 2008). We find that these projects have deliv-
ered on all four dimensions. First, with investments by plot owners,
the housing units have steadily improved in size and quality. Sec-
ond, residents have access to good and well-maintained infrastruc-
ture – water, electricity, paved streets, drains, sewerage, street
lighting – throughout these neighborhoods. Third, these neighbor-
hoods offer secure tenure and have a mix of owner-occupied and
rental housing, partially because owners have built additional
floors with independent rental units. Fourth, the neighborhoods
are physically well-planned, well-connected to the city, and have
social and economic amenities (schools, clinics, shops, offices
and, at times, industrial areas). In addition, in a departure from
many housing programs that strive to narrowly target only low-
income families, these projects aimed for and appear to have suc-
cceeded in attracting families from different economic classes.
Although this decision was driven primarily by pragmatic cost-
recovery concerns rather than normative goals, our observations
suggest that it has resulted in more socio-economically diverse
neighborhoods.

The package of design decisions in these projects created, some-
what inadvertently, neighborhoods that are inclusive, livable, and
thriving. This case study has implications for both theory and prac-
tice. Importantly, it demonstrates how two normatively desirable
but elusive urban planning goals – mixed-income and mixed-use
neighborhoods – can be achieved while also offering possible tools
for creating affordable housing and better managing urban
expansion.

1.1. Structure of the paper

The paper is structured as follows. In the rest of this section we
discuss the methodology. In Section 2, we start with an outline of
the history of sites and services projects, including an overview of
the World Bank’s investments in these projects globally. We also
review the commentary – positive and negative – emerging from
assessments of sites and services projects, with a special emphasis
on some of the major critiques, in the 1980s and early 1990s that
contributed to their demise. In Section 3, we focus on the case
studies and discuss how the long-term results compare to the orig-
inal performance expectations. Section 4 highlights the key design,
planning, and infrastructure features that contributed to long-term
success. It also examines neighborhood location and land values.
Section 5 discusses findings and policy implications.

1.2. Methodology

Our research draws on a mixed-methods case study analysis of
sites and services projects in the cities of Chennai and Mumbai in
India. We trace the trajectory of select project sites from inception
design through to project closure, and compare this to the situation
on the ground 20–30 years later.

We started our analysis by compiling relevant academic and
“grey” literature on sites and services schemes, as well project doc-
uments from the World Bank project archives. The documents
included site maps, background studies, implementation reports,
correspondence, official project agreements as well as midterm
and final project reviews. In late 2015, we visited 15 of the 28 pro-
ducts sites in the two cities (Table 1), selected to represent a variety
of locations, sizes and designs. Fig. 1 shows the location of the sites
within the built-up area of both cities in 2010 with sizes ranging
from 7 to 180 hectares. The sites we visited ranged from the closest
to the farthest from the city center, as well as the largest to the
smallest. Staff or managers from the government’s original project
implementation teams joined us on site visits in both cities, pro-
viding rare insight into the history as well as evolution of these
projects. At each project site, we documented the general condition
of services, housing typologies, construction quality, current mar-
tket value, and occupancy. We also conducted short open-ended
interviews with households at different sites and had detailed dis-
cussions with former World Bank staff who had worked on these
projects.

Following field work, we conducted a spatial analysis using
satellite imagery of project sites in both cities to compare basic
land use attributes and the nature of physical development. The
boundaries of project sites, types of services provided at each site,
as well as suitable comparative areas of private development were
identified and verified with project managers and staff. This infor-
mation was georeferenced using QGIS to create a layer of project
investments. Then we used Open Street Map’s building layer along
with Google Earth satellite imagery to capture the current building
rooftops on a four-hectare sample site within each investment and
control site. We verified and updated the rooftops within our pro-
ject and control sites to accurately reflect land use and average
rooftop size. Using the additional layers obtained from Open Street
Map and the World Bank, we used QGIS to analyze the imagery.
This allowed a comparison of site layout, road density, and location
within the urban built up areas. Results were triangulated with
field observations and qualitative information from project staff
to ensure the results reflected on the ground realities. This was
supplemented with data and insights from an independent follow-on
study by a NYU team that conducted in-depth interviews with 60
households in Charkop, Mumbai in early 2017 (Adefarasin, Spiegel,
Villasenor, & Weniger, 2017). Finally, we used information about market values and location to assess long term
financial return of each site.

2. Sites and services: a brief overview

2.1. The sites and services model and its intent

The sites and services model that emerged in the early 1970s
represented a dramatic departure from traditional approaches to
public housing provision. The model was broadly applied by develop-
ment agencies and governments alike, and was based on an
emerging understanding of ‘informal housing delivery systems’
(van der Linden, 1986), built on a premise of self-help. Proponents
of this model argued that homeowners know what housing they
need and are capable of providing it (Abrams, 1964; Mangin,
1967; Turner, 1978, 1983). Under the sites and services approach
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات