



Tenure security and urban social protection in India

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Abstract

This paper is contextualised against India's forthcoming national urban housing programme, the Rajiv Awaas Yojana (RAY), the key component of which is to extend property rights to slum dwellers. The entire programme is intended to extend property rights, and through that the property market, to slum dwellers so that they can navigate the property and finance markets, along the lines of De Soto. This paper argues that policies to improve *de facto* tenure security in the slums in urban India should be the starting point of any housing programme addressing the development of existing slums. The research hypothesis is: tenure security has a positive relationship with living conditions, human development, economic status and access to entitlements. In other words, the higher the levels of tenure security, the higher the living conditions, human development achievements, economic status and access to entitlements. The paper discusses the concepts of tenure security, the importance of tenure security in social protection and India's urban housing policy. Applying the understanding that tenure security is a continuum of rights, the paper constructs different levels of tenure security in the slums from the field surveys, conducted in Ahmedabad and Surat, cities in the state of Gujarat. The relationship of tenure security with outcomes, as mentioned above, have been explored through statistical data, gathered through household surveys in the slums in the two cities mentioned. The paper finally has recommendations for the upcoming shelter programme in India.

Keywords

Tenure security, *de facto* tenure security, slums, living conditions, India



1 Introduction

This paper is contextualised against India's forthcoming national urban housing programme, the Rajiv Awas Yojana¹ (RAY),² the key component of which is to extend property rights to slum dwellers.³ The entire programme is premised extending property rights and through that the property market to slum dwellers so that they can navigate the property and finance markets, along the lines of De Soto. In his best seller, *The Mystery of Capital*, Hernando de Soto (2000) argued that capitalism has failed in the Third World because of the lack of property titles. He further argued that owning property would enable the poor to borrow money from the formal sector, expand their small businesses and thereby open up the world of capital accumulation to the poor. This approach emerges from a strong market lobby within and outside the Indian government.

The RAY guidelines are currently being formulated, which means there is scope for making the programme more flexible than currently envisaged.⁴ There is still time to ask the following questions: (i) what purpose does the extension of property rights to slum dwellers serve and is it necessary to do so? (ii) Would it instead be sufficient to assist slum dwellers to attain perceived tenure security (referred to as *de facto* tenure in this paper), or does *de facto* tenure security matter? (iv) What is tenure security, how is it constructed in urban India, and what are the processes through which tenure security, at least *de facto* tenure, increases? (iv) Is it feasible to extend legal property rights to all slum dwellers in the current land legal system and urban political economy?

This paper argues that policies to improve *de facto* tenure security in the slums in urban India should be the starting point of any housing programme addressing the development of existing slums. The research hypothesis is: tenure security has a positive relationship with living conditions, human development, economic status and access to entitlements. In other words, the higher the levels of tenure security, the higher the living conditions, human development achievements, economic status and access to entitlements. Living conditions are represented by variables of housing conditions and the availability of basic services; human development is represented through literacy rates and educational levels; economic status through work participation rates, quality of employment, household and per capita income, and savings; and entitlements through a ration, BPL (below poverty level) or election card.

The paper starts from an understanding that tenure security is a continuum of different levels of rights and that there is no either / or situation with regards to tenure

status. The policy endeavour should be to improve the level of rights rather than aiming for an ultimate right or legal right, as argued by De Soto. In other words, a gradual approach to achievement of tenure rights is more achievable than waiting for land legislation to be streamlined to give slum dwellers property rights as envisaged under the RAY. The politicians may like to promise the ultimate of 'giving property titles to slum dwellers' to win votes (Durrand-Lasserve and Selod 2007), but they may find doing it is not as easy as saying it. In India, this is particularly true given that only a few states have enacted legislation extending legal rights to slum dwellers.

It is important to distinguish between legal rights to shelter and property titles. While the former indicate use right over a habitation or land, the latter indicate use as well as exchange rights over a piece of land. The latter is therefore a market paradigm of land holding, whereas the former is a welfare approach wherein the right to shelter is extended, which is enough to improve the overall wellbeing of an urban household.

Section 2 is a discussion on the subtle differences between levels of tenure security in theory and practice, the latter drawn from case studies of two Indian cities – Ahmedabad and Surat. The research locales and methodology are discussed in section 4 after India's broad shelter policy has been explained in section 3. The methodology section describes how we constructed three levels of tenure security based on our studies in two locales in Ahmedabad and one in Surat. We also discuss the ward and sample selection process.

Section 5 presents measurable, statistical analysis of relationships among data variables and identifies independent and dependent variables from the data set. It describes the impacts of tenure security and regression analysis, explaining the strength and direction of impacts of tenure security on living conditions, human development, economic status and access to entitlements in each of the three locales. Section 6 presents a composite analysis and conclusions with regards to tenure options for existing slums in Indian cities.

¹ Awas Yojana means Housing Programme. It is named after the former Prime Minister of India, Rajiv Gandhi, belonging to the Indian National Congress, the ruling coalition at the national level.

² The RAY has come after the National Urban Housing and Habitat Policy (NUHHP) accepted by the national government in 2007. There have been two outcomes of this policy at the national level, Affordable Housing Policy and the RAY.

³ 'The State Slum Free Plan of Action would need the State to prepare legislation for the assignment of property rights to slum dwellers/urban poor as the first step.' http://mhupa.gov.in/w_new/RAY%20Guidelines%20English.pdf (accessed 8 December 2010), p. 11.

⁴ The author is part of the committee and also witness to the subtle manoeuvring going on to push the 'property rights regime' in the RAY.



2 Shelter security and social protection

2.1 What is tenure security?

Land tenure is defined as the mode in which land is held or owned (Payne 2000) and a 'rights that individuals and communities have with regard to land, namely the right to occupy, to use, to develop, to inherit and to transfer' and are thus 'primarily to be viewed as a *social relation* involving a complex set of rules that governs land use and land ownership' (Durrand-Lasserve and Selod 2007: 4). Land tenure is a bundle of rights, some people enjoying full rights to use and transfer land, while others have limited rights (Fisher 1995 in Durrand-Lasserve and Selod 2007). It is different than property rights, which are defined as a recognised interest in land or property vested in an individual or group (Durand-Lasserve and Royston 2002). In other words, land tenure status indicates people's level of security in the use of land, whereas property rights indicate defensible legal ownership.⁵

Research, particularly in non-socialist developing countries, indicates that, in practice, land tenure rights are a continuum of rights within the informal housing markets, ranging from temporary squatting to a quasi-legal right to land (Payne 2000). In general, poor people in cities move from informal to quasi-legal (*de facto*) tenure through various processes and then to legal (*de jure*) tenure through public policy interventions legalising property titles. Legalising land titles implies altering land legislation with regards to ownership, use and transfer, embodied through town planning legislation, development control regulations and standards, land use ownership or use contracts, and the size of land holdings. These rights vary depending on the character of the particular state and the rights guaranteed to the country's citizens. In addition, security of tenure is affected by the social norms and cultural values of a society.

In sum, tenure security is a complex entity which provides protection to a household or individual against their involuntary removal from their house or land without due process of law. In the absence of such a policy, the urban poor and low-income migrants seek to consolidate their urban citizenship through political citizenship in an electoral democracy, welfare interventions by the state, organised grassroots movements and, in the absence of all the above, through their own subversions of urban legalities.

The continuum of tenure rights is linked to the process of housing mobility among low-income households. Mobility in housing and tenure rights has been explained through demand-side models as well as supply-side policies. The demand-side models, coming from economists, have

linked housing mobility with income and life cycle mobility. These models, such as 'progressive housing development' (from Turner 1967 and 1968, and Keare and Parris 1982) and the 'incremental housing investment model' (conceived by Hamer 1985) have argued that when a new migrant comes to the city (and generally these are single, young males), he lives in rental housing near his place of work. Subsequently, his economic conditions improve, by when he has advanced in age and calls for his family or marries and has a family. This requires him to move to a larger and better house. Later in his life-cycle and with a higher income, this migrant moves into home ownership. The demand-side models therefore argue that housing mobility, that is improvement in housing conditions, is a function of improvement in income and that housing policies should be aimed at meeting the demands of individual households in different income groups. This understanding of housing mobility has influenced the World Bank's design of slum upgrading programmes since the early 1970s.

Supply-side analysts, and hence their proponents, have argued that access to tenured land can also be ensured through political action, such as the planned invasion of public land or the large-scale supply of small land lots in peri-urban areas, as President Salvador Allende attempted in Chile in the 1970s (Edwards 1983). This institutional intervention approach was embodied in the pronouncements of the United Nations' various Habitat Conferences, which canvassed for extending guaranteed tenure security to slum dwellers; 'Land tenure security is next only to food and water in importance in urban living,' (Oberlander 1985). Hansen and Williams (1987) have brought the demand- and supply-side explanations together with policy recommendations to create a 'progressive housing model' with four stages: (i) stage zero – pre-ownership (rental housing), (ii) stage one – initial settlement, (iii) stage two – self-motivated upgrading and (iv) stage three – external-shock-motivated upgrading. The first three stages relate to duration of stay in the city and the stage of people's life-cycle, whereas the last stage relates to public policy. External shocks in the form of public policies to do with tenure guarantee can lead to upgrading that consolidates low-income households in the urban system. In short, the debate has been between those arguing for leaving the housing mobility of low-income households up to the market (including policy support for those markets), and those arguing for proactive public policy to increase low-income housing supply, either through building public housing or tenure guarantee interventions.

⁵ Within the context of 'Eminent Domain' of the state.



2.2 Why tenure security is important

Broadly, tenure security guarantees protection by the state against forced evictions, thereby 'making a significant impact on the living and working conditions of the ... urban poor' (UN-Habitat 2004: 8). Millennium Development Goal 7, Target 11 – 'the improvement of the lives of at least 100 million slum dwellers by the year 2020' – is also concerned with tenure security. Conversely, forced evictions cause disruptions in the lives of the poor and push households below the poverty line. This is the minimum benefit of tenure security; it protects the already vulnerable urban population from falling into poverty. In addition, security of 'tenure is directly linked to urban citizenship, as certainty of tenure can solidify the right of slum dwellers to exist in the city, organise, make claims on public resources, and co-manage settlement improvements with NGOs and public authorities' (UN-Habitat 2004: 9).

Literature on tenure guarantee has generally observed the effects of tenure formalisation, that is, the extension of *de jure* status to slum settlements, either through giving property titles to slum dwellers or through administrative recognition such as notification of a slum or extending lease rights for a certain period. Literature on the impacts of *de facto* tenure security, which in essence is recognition of occupancy rights, is scarce.

Durrand-Lasserve and Selod (2007: 9) have shown the possible effects of both *de facto* and *de jure* tenure rights through a flow chart. They argue that extension of *de facto* tenure, that is, recognition of occupancy rights and protection against eviction, has potential positive impacts on home improvement, children's education, labour-market participation in general and of women in particular, women's empowerment, and small business revenues. In South Asian cities, it also leads to an increase in home-based work as, as well as working at home on cultural grounds, women are now employed in sub-contracting economic systems.⁶ In fact, in our field work we found extensive home-based work in the slums of Ahmedabad and Surat. Home improvements lead to improvement in health. Increased labour market participation and small business revenues lead to an increase in incomes, which also have a positive impact on health. In all, tenure security can lead to poverty reduction and economic growth.

If *de jure* tenure is extended through recognition of occupancy through certain administrative instruments – in India, say, through property tax bills, photo or biometric identity cards, or through delivering property rights on a freehold or leasehold basis – there may be more benefits.

Administrative recognition of occupancy rights, in addition to benefits accrued through *de facto* tenure, could lead to improved land administration, increased local tax revenues and improved provision of basic services. Extension of property titles is expected to lead to access to formal mortgage credit and an increase in small business investments. It can also lead to private sector investment in real estate and unification of land markets, possibly leading to efficient land use in addition to the benefits that *de facto* tenure could extend. Durrand-Lasserve and Selod (2007) also argue, however, that extension of legal titles could lead to inequality in land use and access to land as informal land markets could be marginalised. Gilbert (2001), countering De Soto's proposition of extending property rights to the slum dwellers, argues that there are many assumptions in the proposition that property title extension could benefit the poor, an argument expanded on in a later section.

Tenure security therefore is important for social protection. Social protection is taken to refer to 'the public actions taken in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given polity or society' (Nortan *et al.* 2001: 7 and Conway *et al.* 2000: 2 in Barrientos 2010: 2). Barrientos (2010) has also argued that social protection offers a framework that fulfils the development agenda in developing countries because it (i) helps protect basic levels of consumption among those in poverty or in danger of falling into poverty; (ii) facilitates investment in human and other productive assets which alone can provide escape from persistent and intergenerational poverty and (iii) strengthens the agency of those in poverty (Barrientos 2010: 2). Tenure security benefits, as illustrated above, and the social unacceptability of poor living conditions in urban areas, as pronounced time and again in various Habitat Conferences, make it an important dimension of social protection.

In the International Labour Organization's categorisation, social protection measures are (i) preventive, (ii) promotional and (iii) protective. Some scholars have added a 'transformative' category, which introduces a notion of equity. The transformative element refers to the need to pursue policies that relate to power imbalances in society that encourage, create and sustain vulnerabilities (Devereux and Sabates-Wheeler 2004). Extending even *de facto* tenure, and certainly extending *de jure* tenure, does play a role of reducing power imbalances in urban contexts. Hence, tenure security, even *de facto* tenure, plays the role of preventive, promotional and protective

⁶For Indian cases, see Seabrook (1987) and Sharma (2000).





social protection. This, however, would depend on the constraints of the local political economy, as *de jure* tenure guarantee could also have adverse impacts on the urban poor, as discussed in Chapter 2.4.

Scanty research is available on the effects of tenure security in India. Tenure regularisation policies have been implemented in a few states, namely Andhra Pradesh, Madhya Pradesh, Orissa, Rajasthan and Maharashtra (Datey 2010). In all these states, specific period leases have been extended to individual households. Consequently, some households have opted for lease rights and some not. In Rajasthan, the tenure regularisation programme has regularised unauthorised colonies. In some slums, the impact was only to improve basic services (Verma 2009). In Madhya Pradesh, there has been a remarkable improvement in the availability of basic services (Datey 2010). Studies have not observed the impact of tenure security on improvements in education, health and income, etc.

In Ahmedabad, in a slum named Pravinnagar-Guptanagar where *de facto* tenure was extended under Slum Networking Programme (SNP) – a programme where an NGO partnered with the local government to extend basic services and granted a ten-year ‘no eviction guarantee’ or *de facto* tenure, certain improvements were observed, even in social indicators. The programme aimed to improve the slum’s physical infrastructure and as a result the living conditions of the dwellers had certainly improved. The facilitating NGO had collected household-level pre-programme base data (in 1997) and post-programme data (2000), from which it was found that (Joshi 2002):

- i) Total immunisation of children had increased from 62 per cent to 80 per cent (p. 282).
- ii) There was an increase in institutional delivery from 69 per cent to 81 per cent (p.283).
- iii) The literacy rate had increased from 30 per cent to 34 per cent (p. 285).
- iv) The proportion of households in the lowest income bracket of per capita income Rs. 1,000 per month reduced from 57 per cent to 30 per cent and the proportion in the highest per capita income range of Rs. 4,000 per month increased from 2 per cent to 8 per cent at current prices (p. 287).
- v) There was a decrease in unskilled and casual employment from 17 per cent to 8 per cent (p. 289).
- vi) There was an increase in assets such as refrigerators, motorised two-wheelers, sewing machines and the use of liquid petroleum gas for cooking (p. 290).

vii) There was an increase in dwelling unit size and access to basic services.

Shelter security attained through security of land tenure is considered next only to food and water in importance in urban living in the literature on urbanisation (Oberlander 1985), and in a declaration first made at the UN Habitat Conference in Vancouver in 1976 and reiterated since in all subsequent Habitat Conferences and World Urban Forums. Other arguments in support of shelter security are: (i) it addresses the question of multi-dimensional poverty, ranging from reducing shelter deprivation (including access to water supply and sanitation) to improving health status and, for home-based workers, income; (ii) it leads to capital formation among the poorest of the urban population, something economists view as the penetration of capitalism at the bottom of the pyramid; (iii) it protects households in times of hazard and risk of inclement weather; (iv) it acts as collateral security for micro finance; (v) it provides the urban poor with an address, which is necessary for accessing entitlements in urban areas and (vi) above all, it is an essential component of redistributive policies and hence an important input in urban equity.

2.3 What do evictions do to poor households?

Literature suggests that the transformation processes in the Indian metropolitan cities in the wake of post-2000 economic reforms⁷ have led to large-scale slum demolitions. These include: (i) An estimated 200,000 households in just four metropolitan cities, Mumbai, Delhi, Kolkata and Ahmedabad, have been evicted between 2004 and 2006 and slum demolitions continue unabated.⁸ (ii) In Mumbai alone, about 90,000 homes were demolished in six months from December 2004 (Indian People's Tribunal on Environment and Human Rights 2005, Mahadevia and Narayanan 2008). (iii) In Ahmedabad, in the three-year period from 2006, 30,000 households have been displaced, (excluding the further displacement to be caused by a riverfront development project)⁹ accounting for about 8.5 per cent of the total slum-dwelling households in the city.

Studies post slum demolitions show that dwellers lose their livelihoods in the wake of demolitions, children drop out of school and some never go back, the quality of life deteriorates as a consequence of losing access to water and sanitation as well as exposure to natural elements, women's insecurity increases as a result of an increased threat of sexual violence, health conditions deteriorate, incomes decrease and, overall, poverty is recreated.

⁷ See Mahadevia and Narayanan (2008), Narayanan *et al.* (2008), Mahadevia and Brar (2008a and 2008b), Benjamin (2001), Benjamin (2008), Benjamin *et al.* (2008), Kundu and Mahadevia (2002), Mahadevia (2003), Mahadevia (1998), Nair (2005), Baviskar (2003), Batra and Mehra (2008), etc.

⁸ As per a presentation by Darshini Mahadevia, CEPT University, at a Workshop on Macro Approaches to Housing the Urban Poor, organised by CEPT University and MHT, SEWA, at CEPT Ahmedabad on 3 January 2008.

⁹ Sabarmati Riverfront Development Project (SRDP) is expected to displace 30,000 to 45,000 households, according to the varying estimates available from the Sabarmati Riverfront Citizens' Rights Group. The official document acknowledges displacement of 14,000 households (Our Inclusive Ahmedabad 2010).



Field visit observations by jury members of a public hearing

The last site for the field visit* was the relocation site of the Khodiyar Nagar evictees, on the periphery of Ahmedabad. This relocation site was an open, low-lying wasteland, marked by the presence of electricity transmission towers, the close proximity of a municipal solid waste dump in and bordering a solid-waste treatment plant of the Ahmedabad Municipal Corporation (AMC). Residents told the jury members that they were brought here with their salvaged belongings from the demolition at Khodiyar Nagar, and that they were provided with chalk-marked parcels of land that measured 10 ft by 15 ft. There were already several hundred shanties, sheltering people evicted from several other development projects. They were all given a municipal document marking out their parcel, as a 'temporary relocation' site. No more information had been provided on paper, such as the length of time they would need to stay here, whether compensation would be provided, or whether they were permitted to build shelter. It was only after three to four years that some amenities were provided to a level that they described as a bare minimum. Members of the jury were shown evidence of these experiences by the residents.

The jury members noted that this rehabilitation site looked like a new slum. Living conditions were abysmal. Basic facilities like water and sanitation were not adequate and were common. At the time of the visit, most of the public water taps were not working. In the absence of adequate toilet facilities, the whole settlement was stinking so badly that the jury found it difficult to stand there even for a few minutes. In the absence of internal roads, it was difficult to move around within the settlement. Residents told the jury members that they had to travel more than 5 kms every day for work. Those who were working as daily wage workers found it difficult to get a job nearby. This settlement is connected by only one bus route and buses are run every 40–50 minutes, which forces residents to travel by auto rickshaw. As well as causing extra expenditure, this has delayed people getting to work. There is no school nearby and the main highway to Vadodara is unsafe for children. The only functioning service was electricity, which had been connected to each house.

Source: Our Inclusive Ahmedabad 2010: 27-8.

* The jury members visited the sites of demolitions as well as site of rehabilitation.

A survey of slums in Mumbai six months after demolitions in 2004–5 showed that

- i) Just 70 per cent of male children (age 6–14) and 60 per cent of female children were going to school.
 - ii) About 19 per cent of males and 37 per cent of females in the 26–59 age range and 65 per cent of males aged 15–25 years were unemployed.
 - iii) One-third of households stated that they had lost work for a period ranging from two to three months and just 8 per cent stated that the demolitions had had no impact on their livelihoods.
 - iv) Of those who had stopped working, 67 per cent said it was because of uncertainties caused by the loss of their house and another 20 per cent said it was on account of injuries caused during the demolitions.
 - v) Sixty per cent of the working population had to change their employment after the demolitions as many had moved to squatting on new locations.
 - vi) Eighty-seven per cent of households stated some asset loss.
 - vii) One-third of households had lost their livelihood-related equipment and assets.
 - viii) All had moved to temporary shelter from semi-temporary or permanent shelter and were without access to water, sanitation and electricity.
 - ix) Nearly all students had lost schooling days post-demolition and subsequently 22 per cent stopped going to school.
 - x) Children and the elderly had suffered various degree of trauma in the wake of the demolitions.
 - xi) Some people had died, either due to shock or injuries suffered resisting bulldozers deployed for the demolitions. (Mahadevia and Narayanan 2008)
- In Ahmedabad, a study by Shah *et al.* (2009) of those dumped on the city's periphery after their houses had been demolished for various infrastructure projects, found that:
- i) households had lost access to water supply and sanitation, which was available at household level before demolitions;
 - ii) 2,000 households were forced to use 35 dry toilets, and to squat on land which had no drainage facilities;
 - iii) defecation in the open had increased from 36 per cent before demolition to 60 per cent after;
 - iv) the percentage of children going to school had dropped from 87 to 41. Reasons for dropping out of



school were given as no school in the vicinity and the inability to afford the transport costs of sending children to school;

- v) there was no public health care centre and hence half of the people had shifted to visiting private practitioners and incurring higher expenditures and sometimes putting their lives in the hands of quacks;
- vi) their food expenditure had increased by 20 per cent on account of lack of access to public distribution and fair-price shops; and, in all,
- vii) poverty was recreated. There was no shelter security for these households in the place where they were dumped.

2.4 Property rights vs. de facto tenure security

There is also a long-standing debate about whether to guarantee secure land tenure for the urban poor through a rights-based approach or through conferring property titles. Market theorists, especially Hernando de Soto, have argued for the latter (De Soto 2000). De Soto's position has been questioned by some scholars, who have argued that 'empirical evidence points to a continuum of security in illegal settlements that depends less on the exact legal status and more on occupants' perceptions of the probability of eviction and demolition (enforcement); as well as the availability of services and passage of time' (Gilbert 2001). Thus, slum dwellers gradually invest in improving their homes, even without possessing any legal land title (Payne 1989, Razzaz 1993, Varley 1987).

Perceived security of tenure through the provision of public utilities by local government is enough to release household investment in housing (Payne 1989: 44). Payne (1997) further argues that land rights are part of a society's other rights and cannot come into force in the absence of other rights. Thus, if land titles are given in a society where other rights are not present, the poor will not be able to retain them.

More seriously, critics argue that when legal titles are conferred on informal properties, their prices increase, which may lead to outright purchase of properties from the original occupants. Rents also rise in legalised slums, leading to forced evictions by the owners. Those who are more powerful may manage to secure property rights for themselves to the detriment of those who are economically weaker (Cross 2002) or unable to produce any proof of their residency in the city (Durrant-Lasserve and Selod 2007).¹⁰ In other words, conferral of legal rights without a transformation of economic and political power

relations is likely to result in the removal of those rights from the poor and powerless – unless accompanied by some legal support for the non-alienation of rights.

The other problem with the policy of extending property titles is that the household has to provide its proof of residency or establish its eligibility to receive land titles. This is an onerous task, particularly for those without patrons or resources to get eligibility documents, who then get displaced. Urban governments work with a 'cut-off' date to identify and extend property title to eligible slum dwellers. Those coming after that date automatically get disqualified. These dates get extended from time to time and at every stage there is a section of slum dwellers termed 'ineligible'. There is also a problem of how to define a household. In India, joint families (where adult married brothers stay together with their parent or parents), are a normal phenomenon. In such a situation, who is 'eligible' to receive title is a big question.

Lastly, critiques have also argued that land titling as a means of accessing credit is overstated. There are informal credit markets that serve the poor, and the poor may not want to offer their homes as collateral (Durrant-Lasserve and Selod 2007). Hence, the process of implementing land titling is more complex and it is doubtful whether it is worth the effort.

¹⁰ While undertaking research into the effects of displacements in Mumbai, our survey team encountered people who did not let us fill up the survey forms because they wanted to get their names listed in an ongoing enumeration of households for the purpose of rehabilitation. Also, as a member of a Gujarat High Court-appointed committee taking care of the grievances of people displaced by a city-level project, this author has come across many such cases wherein the original occupants were pushed off and new names added to the list of those to receive rehabilitation.



3 The shelter approach, policies and programmes in Gujarat

¹¹ For details see http://mhupa.gov.in/w_new/Affordable-Housing.pdf, (accessed 8 December 2010)

¹² Under the BSUP, 995,183 dwelling units were approved for construction by 15 October 2009, with a government contribution of Rs. 128073.2 million (US\$ 24335.5 million) (https://jnnurmms.nic.in/jnnurm_hupa/jnurm/BSUP_Status.pdf, accessed on 20 October 2009)

¹³ Only 7 schemes (source: https://jnnurmms.nic.in/jnurm_hupa/jnurm/DPR_BSUP-status.pdf, accessed on October 16, 2010) of the total 549 proposed are for slum upgradation (source: https://jnnurmms.nic.in/jnurm_hupa/jnurm/BSUP_Status.pdf, accessed on October 16, 2010) (as of 15.09.2010).

This indicates that the state governments have used the BSUP funding for constructing new housing units.

¹⁴ For Ahmedabad, see Our Inclusive Ahmedabad (2010). In Surat, information was based on discussions with officials of the Surat Municipal Corporation (SMC).

¹⁵ <http://www.udd.gujarat.gov.in/udd/smPolicy.pdf>, (accessed 22 June 2010).

¹⁶ New dwellers have now replaced those covered by the survey. It is not yet clear if they are 'eligible' for rehabilitation.

¹⁷ As per the presentation by the Ahmedabad Municipal Corporation (AMC) at a national workshop on Approaches to Lands for the Urban Poor in India, organised by the Ministry of Housing and Urban Poverty Alleviation, Government of India and CEPT University, Ahmedabad, 17 April 2009.

¹⁸ Data collected from the SMC.

In the Indian federal system, urban development is under state government jurisdiction. Hence, urban housing policies and legislation have to be framed by the state government. Even legislation relating to land, and hence to land tenure regularisation, falls within the jurisdiction of the state government and the national government cannot do anything about it. However, the national government has, from time to time, directed the policies of state governments through framing national level policies and subsequently following them up with national-level housing programmes and partial financing of public housing schemes. Thus, any discussion on shelter policies and programmes needs to cover both national and state government efforts.

The national government has moved ahead with a housing policy which aims to ensure 'legal house' for all the urban poor in India. In 2007, it accepted the National Urban Housing and Habitat Policy (NUHHP), which states that 95 per cent of the current slum-dwelling population would be covered through in-situ up-gradation, indicating that they would be extended tenure security and options for upgrading their current dwelling unit. The policy does not mention anything further on the question of tenure security. But the RAY, as referred to earlier, which follows the NUHHP, clearly states that it would mean property rights. But, this legislation has to be framed by the state governments and currently, the state of Gujarat, the research locale, does not have any legislation on tenure regularisation or for giving of property rights to the current slum dwellers. It would come to the discussion on state government's shelter policy and legislation a little later in this section.

After framing the NUHHP in 2007, the national government came up with guidelines on 'Affordable Housing' in 2010 and is now in the process of framing guidelines for the RAY. These include bringing in the private sector to deliver formal housing to the urban poor through the extension of interest and cash subsidies.¹¹ Before the NUHHP 2007 was framed, the national government was already implementing a programme called Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which was launched in December 2005, and which has a component called Basic Services for the Urban Poor (BSUP).¹² This has been understood as a programme for the construction of small-sized housing, presumably for the urban poor.¹³ Before the success of this programme could be evaluated, however, the RAY was launched. In Ahmedabad and Surat, BSUP units are used for rehabilitating households displaced through city-level infrastructure and beautification

projects.¹⁴ The overwhelming issue in allocating BSUP housing has been to establish eligibility criteria for identifying beneficiaries. The BSUP, therefore, is not a tenure regularisation programme, though those allotted the new housing would get a *de jure* tenure. However, urban India has experienced a large-scale small-unit public housing programme for the first time since independence. A total of 1.02 million dwelling units have been approved all over the country and the national government has released Rs. 5524.44 million (US\$ 123 million) to state governments to implement the schemes. The central government share is 80 per cent of the total dwelling unit cost minus the land costs.

The state of Gujarat, as already mentioned, does not have tenure or property rights granting legislation, but, has announced its own housing policy in March 2010, called 'Regulations for the Rehabilitation and Redevelopment of the Slums, 2010'. In essence, it is a rehabilitation policy to evict slum dwellers to make way for various infrastructure projects. Apart from this, there is no other housing policy in the state. These regulations state that 'beneficiaries' of the legislation would be the 'eligible slum dweller' or any project-affected person. An 'eligible slum dweller' is one who is 'not a foreign national and is the occupant of hutment for a period of minimum 10 years and has a domicile of Gujarat for 25 years or his descendant' (p. 4).¹⁵ For proof of occupancy, any two of the following documents are required: (i) copy of ration card, (ii) copy of electricity bills, (iii) proof of being included in the electoral rolls and (iv) any other proof as decided by the prescribed authority (p. 4). A project-affected person is one whose name is on the list of surveyed persons. Since the survey could have been done at the time of announcing the project, there can be a large time-lag between the date of the survey and the date the rehabilitation is announced. For example, those to be displaced by Sabarmati Riverfront Development were surveyed in 2001; rehabilitation notices were not served until 2009–10, by which time a large number of households in the project area had changed.¹⁶ The proposed rehabilitation is through a high-rise building constructed by a developer.

Both Ahmedabad and Surat have been actively implementing BSUP projects, although it is a national government programme. The Ahmedabad Municipal Council (AMC) is already constructing 50,000 housing units and has plans to construct 100,000,¹⁷ while the Surat Municipal Council (SMC) is constructing 42,000 units,¹⁸ mostly to be assigned to slum dwellers displaced by various city-level development programmes.





Besides the BSUP projects, both cities have implemented their own slum development programmes. These have been mainly for the extension of one or up to four basic services in existing slums: water supply, sewerage pipes, paved roads and street lights. For example, the AMC was implementing three slum development programmes before the national government's BSUP housing programme. These are: (i) the 90:10 scheme wherein the AMC contributed 90 per cent of the cost of household water connection and toilet construction, but only in notified slums;¹⁹ (ii) a No Objection Certificate (NOC) given by the AMC to the slums allowing individual household level water supply and sewerage connections in the notified slums and (iii) the Slum Networking Programme (SNP).

In Surat, the SMC was implementing four types of slum development programme: (i) slum rehabilitation on serviced lands, (ii) in-situ slum redevelopment (demolishing the whole or part of a slum and

redeveloping it) (iii) in-situ slum up-gradation (extending basic services and assisting households to upgrade their dwelling unit) and (iv) slum improvement, in which the SMC is proactively extending basic services to all slums not identified for displacement, under the provision 63/2 of the Gujarat Municipal Act which states that 10 per cent of the municipal budget can be utilised for economically weaker sections.²⁰ Thus, services in the Surat slums are now much better.

Four slums in our Ahmedabad sample (see section 5) were chosen because they have been improved under the SNP, which has so far covered some 60 slums and 13,000 households in the city.²¹ Introduced in 1997–8, the SNP is a partnership between the private sector and local government through the mediation of an NGO, which also acts as a community mobiliser and facilitator. Its aim is to extend individual household-level infrastructure in slums along with a 'no demolition guarantee' of ten years. The programme has two components: improvement of the physical environment²² and community development for post-project maintenance of infrastructure.²³ In some slums, the community development component has included increasing women's agency. This has had lasting impacts on communities and enhanced their sense of tenure security.

¹⁹ A notified slum is one on the list of the urban local body for the purpose of extension of services.

²⁰ Information collected from the SMC Website, www.suratmunicipal.gov.in, (accessed 29 July 2008) and from a meeting with Mr. R.P.Patel (Dy. Town Planner), Slum Upgradation Cell, SMC

²¹ Based on data obtained from MHT and Saath, both NGOs implementing the SNP in Ahmedabad.

²² This component contains the following seven facilities: (1) water supply to individual households, (2) sewerage to individual households, (3) individual toilets, (4) roads and paving, (5) storm water drainage, (6) street lighting and (7) tree plantation.

²³ This component consists of the formation of neighbourhood groups, women's groups (Mahila Mandal) and youth groups (Yuvak Mandal) with the active involvement of NGO(s).



4 Methodology

4.1 Approach to the study

There has been little research into tenure security in research on Indian cities, including the two we chose for our case studies. To understand what slum residents consider 'tenure security', we decided to visit a large number of slums in both Ahmedabad and Surat, and to carry out unstructured discussions with them with regards to the history of their settlement, what documents they hold to prove their residency in the slums, how they procured these documents, and their expectations with regards to slum development policy. This also meant that we moved physically around the city to identify slum locations and different types of slum and other informal settlements. We did not interview pavement dwellers and squatters as they are definitely 'insecure' with regards to their dwelling space.

From these exploratory visits we learned that the level of tenure security in slums is based on the possession of different documents. We had discussions with local government officials about their slum development programmes, referred to briefly in section 3, and then with NGOs in each city. The Ahmedabad SNP is well documented (See Acharya and Parikh 2002, Joshi 2002, Dutta 2002) so we did not have to discuss it with anyone. We did, however, document the process of mobilisation of slum residents in two settlements in Ahmedabad, the findings of which are not presented here.²⁴ Subsequently, we had to choose which wards and which slums in those wards we would canvass using our structured questionnaire, which is discussed later in this section.

The research consisted of multiple stages: (i) secondary data from the local authority on list of slums in the selected wards, along with the data on their land ownership, level of services, whether earmarked for demolition or not, whether on reserved land or not, and presence of a development organisation was obtained; (ii) few slums were then selected for personal visit to verify the secondary data and hold preliminary discussions with the residents; (iii) final list of slums for detailed survey were identified (iv) discussions with the residents on tenure status, development issues, their aspirations, etc. were held to understand the question of tenure and vulnerability of the dwellers and also on development issues in the selected slum; and (v) finally a questionnaire was canvassed to solicit information on living conditions, education and health status, employment status, coping during disasters, and the residents' awareness and participation.

²⁴ Two articles on community mobilisation can be found at <http://www.spcpt.ac.in/publications.aspx?pg=cue&sub=pub>.

4.2 Constructing tenure security in Ahmedabad and Surat

Based on discussions with slum dwellers and local government officials in both cities, we have tried to construct the continuum of tenure security described in sections 2.1 and 2.2 in relation to our research locales.

Those allotted a dwelling unit in the BSUP housing or sites and services scheme have *de jure* tenure. Gujarat does not have state tenure regularisation legislation. If it decides to take national government funds for RAY, it would have to frame new legislation. Hence, all other slum development programmes, including the SNP, give *de facto* tenure rights. The SNP extends a ten-year 'no eviction guarantee', and no specified period of lease. Hence it gives *de facto* tenure security. We call it a strong *de facto* tenure security, as the slum is not expected to be evicted. However, a Public Hearing on Livelihood and Habitat Displacements in Ahmedabad (Our Inclusive Ahmedabad 2010) found that a few slums on government land had been demolished after the SNP in order to implement city-level projects. Many slums in Ahmedabad are on private land and not under local government control. These have a strong or high *de facto* tenure. In Ahmedabad, other programmes extending basic services in the slums have led to weak *de facto* tenure status. In Surat, slum redevelopment and slum up-gradation have created high *de facto* tenure status. Tenure security among slum dwellers is therefore higher in Surat than in Ahmedabad.

4.2.1 How slums have come to be on private land

After the enactment of the Urban Land Ceiling and Regulation Act (ULCRA) 1976, private owners holding land in excess of the permitted amount divided their land into sub-plots which they sold to low-income. The purpose of the legislation was to prevent the monopolisation of land and make land available to public agencies to house the urban poor. Residents believe the sale agreements, made on a stamp-paper or by issuing receipts through affixing revenue stamps, to be legal transactions as they are unaware of land transactions documents. Similarly, land in the peri-urban areas has been sub-plotted by its respective owners and sold to low-income buyers without obtaining a non-agriculture (NA) permission from the designated competent authority or any development permission. The third category of land that has come into the informal housing market is that reserved for public purposes in the city's Master Plan. Before such land is acquired for public purpose by the



competent authority, this too is sub-plotted and sold off. Intermediaries or developers (operating in the informal market) are involved and are given power of attorney to carry out sale transactions on behalf of the private owner. In effect these are informal settlements, but many of them are also classified as slums by the local government. Such settlements have high perceived security or high *de facto* tenure.

There are also squatters on private land where there is an absentee landowner(s) or there is conflict between the landowner and inheritors. Dwellers who are able to live for long periods on such land also attain high *de facto* tenure security. Thus, duration of stay and state inaction in the case of private land give high *de facto* tenure security to the dwellers. Whichever process led to slums being developed on private land, since 2000, dwellers have been served with property tax bills in an effort to increase local government revenue. Settlements that lacked them have been provided with basic services under any of the three slum programmes discussed in section 3.

4.2.2 Categories of tenure on public land

Slums on public land, mainly owned by local and state government, might have developed as squatter settlements on their own or through capture by locally powerful people such as politically-connected landlords and local politicians. These slums fall under three categories of land tenure; high *de facto*, weak *de facto* and insecure tenure. High *de facto* tenure exists where the landlord is powerful, the settlement has been existence for a long period of time, and the majority of dwellers possess any and whichever of the following documents the local government accepts as proof of their residency: (i) BLP (below poverty line) or APL (above poverty line) ration card, (ii) 1976 photo ID card, (iii) election card issued to eligible voters, (iv) electricity bill with residential address, (v) driving licence with residential address, (vi) property tax bill or payment receipt, (vii) bank passbook with residential address, and (viii) any other document accepted by the local government. Pressure from the slum communities themselves can cause the local authority to extend the list.

If some dwellers hold any of these documents and the local government has extended basic services to the settlement, residents have some perceived security of tenure, which we call weak *de facto* tenure security. If the slum has not been covered under local government basic services programmes and the majority of dwellers do not possess any of the documents listed above, the

settlement has insecure tenure. Slums on the 'right of way' of existing or proposed roads also have insecure tenure, but residents who have any of the above-mentioned documents proving residence are eligible for rehabilitation. All slums on public land could be under reservation for a public purpose in the city's Master Plan, but not all come under the hammer because they are not of any priority use by the local government. Such land may qualify for *de jure* tenure. However, as Gujarat has no state tenure regularisation policy, the slums are categorised as having strong *de facto* tenure, weak *de facto* tenure and insecure tenure. We have not researched slum communities rehabilitated in public housing.

We also found that slum dwellers have a higher perception of security if there is an NGO intermediary present in the slum. This is particularly true in Ahmedabad, where NGOs have initiated SNP.

4.2.3 Factors affecting perceived tenure security

This discussion suggests that the level of perceived tenure security or *de facto* tenure is constructed by various factors listed in Table 1 below. In Vasna ward in Ahmedabad, three categories of tenure security have been constructed through a combination of factors listed in Table 1.

Table 1 Levels of tenure security in Vasna

Factors constructing tenure	High <i>de facto</i>	Weak <i>de facto</i>	Insecure
External agency intervention	Yes		
Land document	Yes	Yes	
Land reservation in master plan	No	No	Yes
Administrative instruments	Yes	Yes	
Entitlement extension	Yes	Yes	Yes
Extension of basic services	Yes	Yes	Yes
Duration of stay	Yes	Yes	Yes

In the case of slums in Ahmedabad's Amraiwadi ward, the tenure status is decided by land ownership. Based on our discussions with local communities, as well as on the processing of quantitative data, we found that slums on private land had no threat of eviction and therefore had high *de facto* tenure security compared with slums on public (mainly AMC) land, which were threatened with eviction as they did not fit with the city's Master Plan and were located on land earmarked for public use other than housing for economically weaker section (EWS).

In Surat, there is no such notion of tenure security. The



²⁵ The mid-1980s to the beginning of this century saw a spate of communal violence resulting in segregation of the Hindu and Muslim population (Mahadevia 2007). Very few wards in the city have mixed communities. Vasna ward is on the boundary of the Hindu ward and adjoins a ward with a majority Muslim population. These communal divisions and city-managed infrastructure often have implications for public policy implementation. However in this paper, we have not gone into detail of this dimension of public space in Ahmedabad.

²⁶ The 1998 slum estimate is from the Swarna Jayanti Shehri Rojgar Yojana (SJSRY) survey; the 2001 estimate is from the AMC, as given in Ahmedabad's City Development Plan (<http://jnurm.nic.in/missioncities.htm>).

²⁷ The number of households in a slum was calculated through a survey conducted by SEWA and SAATH. The total slum population has been calculated based on a family size of five. As per 2001 census figures, 439,843 people live in slums, however this includes only those slums which have clusters of more than 60 houses.

²⁸ A city in the image of a developed country city.

²⁹ As per the data from the SMC.

³⁰ The limits of both the cities was expanded in 2006, through a state government order.

³¹ From our field work.

SMC is evicting slums on public land for infrastructure projects and rehabilitating them, formerly in sites and services schemes within the same ward and now in BSUP housing. Those not to be evicted have high *de facto* tenure security at the current time. Hence, we do not find any significant relationship between tenure security and outcomes with regards to improvement in living conditions, income and assets and indicators of human development.

4.3 The research locales

We limited our research to the cities of Ahmedabad and Surat in Gujarat to reduce the impact of differences in urban and housing policies across different states. Urban development in India is decided at state level. As a result, national level programmes get implemented differently across different states. Even state-level policies and programmes are implemented differently at city level, depending on the historical trajectory of the city, the local political economy and local leadership, which makes for the possibility of an interesting comparison process. Indeed, Ahmedabad and Surat are very different cities. Ahmedabad is an old industrial centre which has now transformed into a service economy. Ahmedabad is the largest metropolis of Gujarat, India's second most industrialised state (Hirway and Mahadevia 2005). Local conflict has segmented the city into Hindu and Muslim areas (Mahadevia 2007).²⁵ The city is home to several large NGOs, some of which have engaged with slum communities since 1997–8 as part of the innovative Slum Networking Programme (SNP).

From the late 1980s to late 1990s, Ahmedabad experienced severe crises, during which the cotton textile mills that had been its main economic base, closed down, displacing a large section of the labour force from the formal to the informal sector (Mahadevia 2002). The retrenched workers shifted to the power-loom industries, halving their wages, and to self-employment. In 1990–2000, 37 per cent of men and 65 per cent of women were self-employed (Mahadevia 2008) without any social security. An estimated 41 per cent of the city's population lived in slums in 1990 (ASAG 1992). A more recent estimate gives the figure as 26 per cent,²⁶ and the 2001 population census figure is 13 per cent (Office of the Registrar General & Census Commissioner, India 2005: 22). A primary survey of the slums by Mahila Housing Trust (MHT) on behalf of the Ahmedabad Municipal Corporation (AMC) in early 2000 states that there are around 710 slums in the city, housing around 0.9 million people.²⁷

Surat, which is situated on the coast and at the mouth of a delta, was an old trading town for the British (when they ruled India). It is now Gujarat's manufacturing hub. Whereas Ahmedabad is a stabilised city, Surat is a city of migrants and rapidly expanding. Whereas Ahmedabad has aspired to become a 'world class city',²⁸ since the economic reforms of 1991. Surat joined the 'globalising cities' bandwagon more recently in 2005.

Surat is Gujarat's second largest city and the tenth largest in India, with a population of 3.8 million in 2006 and an area of 324 sq km^{29,30}. From 0.47 million in 1971, the city's population had increased to 1.48 million in 1991 and by 2001 had almost doubled to 2.8 million. Thus, the 1991–2001 population growth rate of the city was 6.6 per cent per annum, when in the rest of India the urbanisation rate was just 2.75 per cent per annum. The high rate of in-migration, and hence population growth, is on account of small-scale, labour-intensive industries such as diamond-polishing, power-loom manufacturing and synthetic textiles in the industrial areas developed by the state government. While the diamond polishing units employ intra-state migrants the power looms employ inter-state migrants. Many of the migrants are single males³¹ particularly those who are inter-state. Post-1991, the Surat region has attracted large capital-intensive industries such as a petrochemical plant, steel mill, gas-based power plant, fertiliser plant and heavy water plant.

As per the data from the Surat Municipal Council (SMC), 17.1 per cent of the city's population is living in 397 slums, constituting 1.4 million people in a city with a population of 3.8 million. Besides the slums, peri-urban areas have very large informal settlements for low-income migrants, developed through the subdivision of agricultural land by private developers on a commercial basis and in violation of planning regulations. Slums and such commercial small-plot informal settlements house largely migrants. Until a few years ago, both the slums and the commercial informal settlements lacked basic services, a water supply, sanitation, paved roads and street lights. But now the SMC has taken to extending basic services to all the slums within the city except those to be relocated. There are no NGOs present in the city, nor any formal workers' organisations. If the local state was not proactive, living conditions in the city's slums would be Dickensian.

4.3.1 Selection of wards and slums

Three different locations were selected for the study: Vasna and Amraiwadi wards in Ahmedabad, and



Varachha ward in Surat. Vasna ward is in west Ahmedabad, a middle-class and more developed segment of the city. Amraiwadi ward is in east Ahmedabad, the industrial segment of the city, which is facing economic crises on account of the city's de-industrialisation in the 1990s. Because Vasna residents have new employment opportunities, their incomes and quality of life are better than those in Amraiwadi. Whereas Vasna slums have migrants from Gujarat's neighbouring states, Amraiwadi slums also have migrants from north Indian states where women do not go out of the house to work. The two Ahmedabad wards were selected because one or more slums there had been selected by NGOs for housing upgradation, infrastructure extension or microfinance programmes. Varaccha ward in Surat was selected because it had many slums, some of which had improved services following interventions by the Mahila Housing Trust (MHT) on behalf of the SMC. Unlike the two Ahmedabad wards, Varaccha has intrastate migrants.

In Vasna ward, six slums were selected, and 553 samples were drawn from a total of 3,514 households. NGO intervention has played a dominant role in extending *de facto* tenure security in this ward. Two of the slums have been developed under the SNP programme,³² the MHT has a presence in one,³³ and the development NGO Saath has begun working with the community in another³⁴ through forming women's savings groups.

Seven slums were selected in Amraiwadi ward, from which 437 samples were drawn.

In this ward, there is no significant intervention by an external agency except in one slum in our sample where MHT has organised women for the SNP. This intervention is only to extend physical infrastructure, not for long-term community development.³⁵ Thus, shelter security is defined by land ownership as explained in section four above. Ironically, slums on private land offer a higher degree of security than slums on public land. The shelter security here is on account of 'left to their own devices'.

³² Pravinnagar-Guptanagar had an intervention by Saath, and another NGO, Jadibanager, assisted by the MHT.

³³ Sorainagar.

³⁴ Mangal Talaav Chhapra.

³⁵ See the case study on Sanjaynagar in Amraiwadi by Bhatt and Shah (2010).

³⁶ As per the data from the SMC, Surat is divided into seven zones. East ward, in which Varaccha ward is located, has the largest proportion of slums.

of the slums were facing eviction, even those on public land, except one on private land in which the residents have gone for litigation against the owner on receiving an eviction notice from him.

4.4 Analysis

The analysis has three stages; (a) identifying tenure variables, (b) descriptive analysis from the bivariate tables by tenure categories in Vasna ward and by land ownership in Amraiwadi ward and (c) bivariate logit regression to test the strength of relationships between individual tenure variables with the four categories of output variables. Although in theory we have given a long list of tenure variables, we had to statistically verify if these indeed explained the data sets and for which we carried out factor analysis. The output variables (those impacted by tenure variables) are divided into four categories indicating: (i) living conditions, (ii) human development, (iii) economic status such as employment, income and assets, and (iv) entitlements.



5 Tenure or the lack of it and impacts

The research findings are organised by their research locales: first Vasna ward, followed by Amraiwadi ward, both in Ahmedabad, and then those of Varaccha ward in Surat.

5.1 Vasna ward, Ahmedabad

The factor analysis identifies that six variables³⁷ had an Eigen value of more than 1.0 and explained the data set (Table 2). NGO-related factors together explained 30.5 per cent of the variance, suggesting that the presence of NGOs, the Saath and MHT were the most important factors influencing tenure security, as well as the outcome variables related to living conditions, education, economic status and access to entitlements. Years of stay, land ownership, payment of property tax and possession of informal documents of house or land transactions were other important variables explaining the data set variance of about 8 to 6.5 per cent each. It has to be noted that these variables are the independent variables in our hypothesis and are the defining achievement with regards to other variables. Hence these have been selected as independent variables for further statistical analysis.

Table 2 Factors explaining data variance among variables, Vasna, Ahmedabad

S. No	Variables	Initial Eigen values		
		Total	% of Variance	Cumulative %
1	NGO intervention in slum development	3.183	18.722	18.722
2	NGO intervention in mobilising savings	1.997	11.747	30.469
3	Years of stay more than 20 years	1.426	8.388	38.857
4	Public land ownership	1.358	7.991	46.848
5	Payment of property tax	1.265	7.439	54.287
6	Informal house document	1.098	6.459	60.746

5.1.1 Investment in improving household conditions

The first direct impact of improvement in tenure status is household investment in improving their shelter conditions. This improvement is incremental: temporary roofs are made permanent, walls constructed of temporary materials are replaced with permanent

materials, and so on. The shelter upgrading priorities in low-income settlements are: (i) repairing a leaking roof; (ii) converting mud walls into brick walls with cement mortar; (iii) tiling floors; (iv) connecting to a water supply; (v) building individual toilets; (vi) connecting to electricity supply; (vii) extending the house, and (viii) buying a new house or hut. The benefits of each of these improvements are: (i) roof repairs save or protect the quality of goods, especially for home-based producers; (ii) brick walls with cement mortar save the recurring expense of repairing walls after intense rain or flooding; (iii) tiled floors improve productivity for home-based workers; (iv) water connection saves time and clean drinking water reduces illness and saves expense on healthcare, making income available for other purposes such as education, income-generation and buying durable assets; and (v) house extension is useful for expanding home-based production, renting out space to earn additional income, and keeping the extended family together.

The different variables indicating improved shelter conditions with an increase in tenure security can be seen in Table 3.³⁸ In this ward, 54 per cent of households in the insecure tenure category lived in *katcha*, or temporary houses, while the proportion in strong *de facto* tenure slums is 32 per cent. Overall, 42 per cent of slum households surveyed lived in *katcha* housing, indicating a great need to improve housing conditions. Conversely, 42 per cent of households with strong *de facto* tenure and just 24 per cent with insecure tenure had a *pucca* (permanent) house. The availability of basic services also improves with improved tenure status; 90 per cent of households with strong *de facto* tenure had an individual water supply from the AMC, with only 4 per cent depending on common public taps. Conversely, among households in the insecure tenure category, only 19 per cent had individual water taps provided by the AMC, with 52 per cent depending on common public taps. While all households in strong *de facto* tenure slums had access to toilets, 2 per cent with insecure tenure and 5 per cent in the weak *de facto* tenure category had no toilet access and hence were defecating in the open. Among the households with access to toilets, 94 per cent of those in the strong *de facto* tenure category and 69 per cent in the insecure tenure category had an individual household toilet. Thus, even insecure tenure category households had managed to build individual toilets through the AMC schemes mentioned earlier. In slums in the insecure tenure category, 18 per cent of households used community toilets constructed by the AMC.

³⁷ Table 2 shows the results of the component factor extraction among the households in the sample in Vasna. The table also gives the respective Eigen values and percentage of variance for the factors. The rule of thumb here is that only factors with Eigen values of more than 1.0 should be used in further analysis. This criterion of identifying factors that explain the variance in the data was chosen because of the relatively large number of variables. It shows that six variables had Eigen values greater than 1.0 and together explain 61 per cent of the variance in the data set.

³⁸ These results have been published in the IDS Bulletin (Mahadevia 2010).



**Table 3 Outcome indicators by tenure status, Vasna, Ahmedabad**

Indicators	Tenure			Average
	Strong <i>de facto</i>	Weak <i>de facto</i>	Insecure	
Living conditions				
Housing quality – % katcha houses	32	39	54	42
Housing quality - % pucca houses	42	39	24	35
% households with individual water supply from the AMC	90	29	19	45
% households depending on public taps for water supply	4	18	52	26
% households not having access to a toilet	0	5	2	2
% households having individual toilet for the household	94	86	69	82
% households using community toilets	1	1	18	7
Human development				
% males literate	81	84	72	78
% females literate	58	59	55	57
% male children going to school	72	89	81	81
% female children going to school	69	85	77	79
Economic status				
Average per capita income per month (Rs.)	908	895	744	842
Work participation rate – male	54	50	52	52
Work participation rate – female	27	19	33	27
% males employed as casual labourers	51	58	82	64
% males in private services	34	18	16	23
% males employed in social, financial and government services	2	1	0	1
% females employed as casual labour	34	41	41	39
% females in private services	53	34	48	47
% females employed in government services	1	1	0	1
% households saving	33	17	23	24
Average savings per month (Rs)	231	196	122	198
Entitlements				
% households having ration card	85	88	73	82
% households having voter ID cards	95	95	88	92

Notes: Katcha = houses built with temporary roof and wall materials; Pucca = houses built with permanent roof and wall materials

5.1.2 Literacy

In Vasna, the literacy rate among households with some *de facto* tenure is higher than households without any tenure security. Male and female literacy rates among the households living in insecure settlements are 72 per cent and 55 per cent respectively. For households living in settlements with strong *de facto* tenure security, the rates are 81 per cent and 58 per cent (Table 3). We do not find any difference between households with strong and weak *de facto* tenure security conditions as far as adult literacy is concerned.

5.1.3 Employment and income

Male and female work participation rates do not show any relation to tenure category in this ward, but quality of

employment does. There is a very high incidence of casual labour, which in India is an unskilled, low-wage activity and hence an indicator of poverty (Dubey and Mahadevia 2001; Dubey and Gangopadhyay 1998). Among men, the incidence of casual employment increases with tenure insecurity; 82 per cent of employed men in settlements with insecure tenure worked as casual labourers, whereas 51 per cent of men in settlements with strong *de facto* tenure security did so. In fact, the incidence of employment in private sector services, where higher skill levels and regular work are required, is high among settlements with strong *de facto* tenure security; 34 per cent of men and 53 per cent of women were working in these jobs. In contrast, 16 per cent of men and 48 per cent of women in



settlements with insecure tenure were working in private services. Higher security of tenure makes more of a difference to male employment than female employment.

There is a strong positive correlation between tenure security and income in Vasna. The per capita income of households in slums with strong *de facto* tenure is Rs. 908, while in households in slums with weak *de facto* tenure it is Rs. 895, and for households in insecure tenure status it is Rs. 744 (Table 5). The proportion of households with savings is highest among the slums with strong *de facto* tenure (34 per cent). This is partly because better employment options mean they have higher incomes, but also because NGOs have organised savings schemes. NGO intervention in savings has also resulted in a higher proportion of households in insecure tenured slums having savings (23 per cent) than those in weak *de facto* tenure slums. However, the amount saved depends upon per capita income: the higher the per capita income, the higher the monthly savings per household.

5.1.4 Entitlements

About 18 per cent of surveyed households in this ward do not have a ration card and only 19 per cent have a below poverty line (BPL) card. The incidence of ration cards is higher among the households with some *de facto* tenure status. While 85 per cent and 88 per cent of households in the strong and weak tenure categories respectively had a ration card, 27 per cent of households in the insecure tenure category had no ration card at all. Further, slums with insecure tenure are where households with low per capita income and hence high poverty are found. It is here that the largest proportion of households without any ration card were found, meaning that they would be missed out of any development programme. Further, just 19 per cent households had a BPL card in all the surveyed slums together, also indicating mis-targeting of subsidised schemes and facilities. However, the availability of voter ID cards is only weakly related to tenure status, given that 92 per cent of eligible voters had a voter ID card.

Table 4 Bivariate logit regressions, Vasna

Dependent variables	Independent variables									
	NGO intervention in development		Duration of stay more than 20 years		Public land ownership		Property tax bill/receipt		Any document of house/ land	
	% change	Sig.	% change	Sig.	% change	Sig.	% change	Sig.	% change	Sig.
House quality is pucca or semi-pucca	5.1	0.907	102.4	0.188	-73.6	0.241	47.6	0.433	931.7	0.000
More than one room in dwelling unit	108.9	0.057	33.3	0.195	-48.6	0.512	113.7	0.068	9.4	0.820
Public agency supplying water	252.0	0.001	117.0	0.148	-	-	16.3	0.730	89.2	0.162
Availability of toilet	375.1	0.204	79.2	0.649	715.5	0.999	323.8	0.279	-	-
Sewer line present	385	0.035	-24.2	0.772	-99.2	0.002	45.0	0.587	1412.6	0.012
Independent bath space	141.5	0.051	40.8	0.916	-89.9	0.066	90.8	0.170	431.5	0.000
Literacy above 65 per cent	11.2	0.775	4.4	0.924	-	-	25.2	0.575	24.4	0.562
More than one person working in a family	102.2	0.073	17.4	0.740	-60.6	0.353	33.5	0.499	32.0	0.490
Household head non-casual labourer	65.0	0.239	9.6	0.862	-56.6	0.424	21.1	0.688	195.7	0.015
Household head regularly employed	27.8	0.552	154.2	0.081	-100.0	0.999	10.8	0.823	360.4	0.000
At least one casual labour in the household	-9.1	0.803	-39.9	0.259	24.3	0.999	1.3	0.975	-46.5	0.114
Household income of more than Rs. 2,000	46.8	0.375	425.2	0.020	-85.3	0.115	57.0	0.336	165.4	0.030
Per capita income of more than Rs. 650	48.8	0.313	133.8	0.068	-60.2	0.358	58.7	0.302	7.8	0.849
Savings	-11.6	0.802	23.5	0.199	-15.3	0.879	140.8	0.093	245.6	0.017
More than 4 assets	51.2	0.491	991.6	0.035	-88.2	0.070	73.7	0.399	443.7	0.014
Food expenditure as % of expenditure less than 50	54.0	0.395	39.9	0.602	-84.4	0.107	52.5	0.472	4.3	0.933
Having BPL card	-63.4	0.056	-66.6	0.060	168.4	0.471	8.5	0.883	-17.1	0.707
Having voter ID card	39.3	0.617	-82.3	0.269	31.4	0.999	35.0	0.662	245.4	0.099
Having ration card	-42.6	0.302	-17.5	0.766	607.0	0.999	380.3	0.004	119.2	0.166

Note: Cells shaded pink are significant relations



5.1.5 Impact of tenure variables

Logistic regression analysis uses the techniques of multiple regression analysis to research situations in which the variables are categorical. Since many of the variables in the data set are dichotomous, bivariate analysis* has been carried out to observe and measure the impacts of tenure and variables constructing tenure on the outcome indicators. The results for Vasna ward are presented in Table 4. The dependent variables of outcome are regressed over the independent or tenure security variables to find the strength of the relationship. Instead of regressing the outcome variables over the composite tenure variable, we have looked at the relationship of individual tenure variables with the outcome variables, as individual tenure variables have differential impacts on outcome variables. The findings of the bivariate logit regression for slums in this ward are presented below.

As already mentioned, NGO intervention in slum development is the most important independent variable, explaining 18.7 per cent of the variance in the data set.

This tenure variable has a significant and positive relationship with living condition variables, namely size of dwelling (number of rooms), water supply by a public agency, the availability of a toilet facility, sewer line connection, and availability of independent bath space. All these results are significant at a level of more than 80 per cent. If a household is living in a settlement which has NGO intervention, the likelihood of a dwelling having more than one room increases by 109 per cent; of getting water from a public agency by 252 per cent; of having a toilet facility by 375 per cent; and of having a sewer connection and independent bath space by 385 and 141 per cent respectively.

NGO intervention in slum development also improves economic status and has a positive and significant relationship with the number of employed people in a household, the household head having non-casual employment, household income being more than Rs. 2,000 per month, per capita income being more than Rs. 650 per month, and food expenditure as a proportion of expenditure to be less than 50 per cent. The likelihood of improvement in these variables is 102 per cent, 65 per cent, 47 per cent, 49 per cent and 54 per cent respectively. These relations are significant at between 90 and 60 per cent. However, this tenure variable does not have any significant impact on the literacy rate. The likelihood of possessing a BPL and ration card decreases by 64 per cent and 43 per cent respectively, with a level of

significance of 95 per cent and 70 per cent respectively if there is NGO intervention in the slum development.

A duration of stay of more than 20 years, which explains 8.4 per cent of the variance in the data set, also has a strong positive relationship with variables of living conditions, namely having a house that is of *pucca* or semi-*pucca* quality (improving by 102 per cent), having more than one room in the dwelling unit (improving by 33 per cent) and having water supplied by a public agency (improving by 117 per cent), with significance levels up to 80 per cent. The duration of stay is not related to (nor has any impact on) the availability of water from the local urban body, availability of a toilet at household level and presence of sewer line in the settlement. This means that these outcomes are influenced by other factors that construct the level of tenure security, namely NGO presence in the slum development. In other words, if there has been no external agency intervention, the slum is not likely to get access to local government basic services. Hence, an external agency triggers local government intervention in this ward.

However, the economic status of a household is positively impacted by the duration of stay. Duration of stay is positively and significantly related to regular employment of the household head (by 154 per cent), household income more than Rs. 2,000 (by 425 per cent), per capita income more than Rs. 650 (by 134 per cent), household savings (by 24 per cent), and having more than four assets (by 992 per cent). The relationships are significant up to the 70 per cent level. Duration of stay has a significant (at 75 per cent level) negative relationship with at least one member of the household employed as casual labour, the incidence increasing by -40 per cent. It is generally understood that households experience economic mobility with increasing years of stay in a city. Economic mobility is followed by housing mobility, indicating improvement in quality of housing. But, access to public facilities may not increase with duration of stay if there is no active public policy to extend facilities to all the slums. This is what we observe in Vasna ward.

With economic mobility, the incidence of poverty is expected to go down, but access to entitlements is expected to go up. Duration of stay has a negative and significant impact on the holding of a BPL card (at 94 per cent). This is self-explanatory, as BPL cards are only meant for those below the poverty line. This finding does not show that there is gross mis-targeting of the entitlements for access to subsidised facilities. This is not new in India; errors of exclusion and errors of inclusion are

*See appendix 1





large in India, as far as BPL cards are concerned (Hirway 2003, Jhabvala and Standing 2010). Even possession of a voter ID card is negatively but significantly (at 74 per cent significance level) related to duration of stay. This is contrary to our understanding and therefore could be a freak result.

It is interesting to observe that the independent variable of public land ownership with the outcome indicators are all negative, indicating that the slums on public land do not experience any improvement in living conditions or economic status and have an insignificant relationship with access to entitlements. For example, if a slum is on public land, the possibility of having a *pucca* or semi-*pucca* unit decreases by 74 per cent, of a sewer line connection by 99 per cent, independent bath by 90 per cent, more than one person working in a family by 61 per cent, household income of more than Rs. 2,000 per month by 85 per cent, of having more than four assets by 88 per cent and food expenditure less than 50 per cent of total expenditure by 84 per cent. The poorer a household is, the higher the share of food expenditure in total expenditure.

This indicates that households living on public land are more vulnerable to eviction because they do not possess any documents to support their residency. This observation contradicts the general understanding in literature that the slums on public land have a higher level of tenure security than slums on private land (Durrand-Lasserve and Selod 2007). It also indicates that the local state is not distributing welfare and also is under pressure to use public land to raise financial resources for infrastructure projects or for commercial purposes to earn income. Hence, it is not extending *de jure* tenure to slum households living on its own land, as should be the case.

The impact of property tax is positive and significant on the number of rooms in a dwelling unit (by 114 per cent), availability of a toilet (by 324 per cent), independent bath space (by 91 per cent), household income of more than Rs. 2,000 per month (by 57 per cent), per capita income of more than Rs. 650 per month (by 59 per cent), household savings (by 141 per cent) and households possessing more than four assets (by 74 per cent). The surprise result here is the 57 per cent possibility of an increase in at least one casual labourer in the family when the household receives a property tax bill, indicating this to be a freak relation. Lastly, the possibility of increasing access to a ration card increases by 380 per cent if the household has received a property tax bill or has its payment receipt. Thus, even a property tax receipt from

local government is very important for slum households as it gives them one type of legitimacy and thereby a claim over the local government.

Holding any house or land document, even of a quasi-legal status such as a stamp paper agreement of sale, extends some tenure security to households, leading to an improvement in the availability of a toilet by 89 per cent. This variable has a positive relation with many of the variables of economic status. The possibility of a household head not being a casual labourer improves by 196 per cent, household income being above Rs. 2,000 per month by 165 per cent, household savings by 246 per cent and the household possessing more than four assets by 444 per cent if the household has any of the quasi-legal documents showing house or land occupancy. Even the possibility of holding a voter card and a ration card improve by 245 per cent and 119 per cent respectively if the household holds a document related to the house.

This regression analysis shows that none of the tenure variables when regressed with the education-related variables show any significant relationship. Thus, in our Vasna study, we do not find that the education variables have to do with the level of security perceived by poor households. One probable explanation is that even slum dwellers send their children to private schools. Through our discussions with slum dwellers, we realised that the ward did not have public schools (namely municipal schools) and hence children were going to private schools nearby. They said that the quality of education in municipal schools was not good enough and were keen to spend money on their children's education. Private schools are not concerned with a household's legality in a city and admit whoever is willing to pay. This says a lot about the character of the local state in Ahmedabad, as argued earlier in the paper.

5.2 Amraiwadi ward, Ahmedabad

In Amraiwadi, only two variables had Eigen values greater than 1.0 and together explained 60 per cent of the variance in the data set (Table 5). Public land ownership explained 34.56 per cent of the variance, suggesting that this was the single most important factor determining tenure security, as well as all other outcome variables. Property tax payment was the other independent variable, which explained the data set variance of 25.7 per cent. Note that both these are independent variables in our hypothesis. Thus, indeed the variables of tenure are defining achievements with regards to other variables.

**Table 5 Factors explaining data variance among variables, Amraiwadi, Ahmedabad**

S. No		Eigen Values ³⁹	% of Variance	Cumulative %
1	Public land ownership	1.382	34.560	34.560
2	Property tax	1.029	25.727	60.287

Table 6 Outcome indicators by land ownership, Amraiwadi, Ahmedabad

Indicators	Land ownership			Average
	Private	Others	Public	
Living conditions				
Housing quality – % <i>katcha</i> houses	43.7	4.5	78.5	36.6
Housing quality - % <i>pucca</i> houses	4.9	24.1	1.5	12.6
% households with individual water supply from the AMC	94.2	80.9	95.6	88.6
% households depending on public taps for water supply	2.9	12.6	2.2	7.1
% households not having access to a toilet	1.0	0.5	5.9	2.3
% households having individual toilet for the household	83.5	80.4	91.9	84.7
% households using community toilets	15.5	19.1	3.2	13.0
Human development				
% males literate	73.9	69.4	57.3	66.5
% females literate	62.0	58.6	41.1	53.6
Economic status				
Average per capita income per month (Rs.)	778	592	572	642
Work participation rates - male	35.9	33.3	27.4	32.0
Work participation rates - female	16.6	13.5	22.0	17.0
% males employed as casual labourers	58.0	71.1	67.3	66.9
% males in private services	10.2	7.8	4.0	7.3
% males employed in social, financial and government services	0.0	0.0	1.0	0.3
% females employed as casual labour	81.6	65.1	88.0	78.4
% females in private services	5.3	4.8	0.0	2.8
% females employed in government services	0.0	1.6	0.0	2.3
% females in home-based work	7.9	1.6	0.0	2.3
Entitlements				
% households having ration card	17.1	13.4	11.3	13.9
% households having voter ID card	18.8	16.5	15.8	17.0

Notes: *Katcha* = houses built with temporary roof and wall materials; *Pucca* = houses built with permanent roof and wall materials

5.2.1 Land ownership

The descriptive data is only for analysing the impact of land ownership on outcome variables (Table 6). Land ownership in a slum influenced the quality of house structure and to some extent access to services; 43.7 per cent of households on private land were *katcha*, whereas 78.5 per cent of households on public land were *katcha* (Table 6). Compared to slums in Vasna, the proportion of households living in *pucca* housing is very low in Amraiwadi (just 12.6 per cent). But nearly 89 per cent of

households in this ward received an individual water supply from the local government. The proportion of households depending on public water supply taps was somewhat higher (5.9 per cent) in slums on public land as compared to just 1 per cent in slums on private land. Access to toilets, however, is better in slums on public land than on private land. In the case of the former, 92 per cent had an individual household toilet, whereas in the latter this figure was 83.5 per cent. Thus, use of community-level toilets was higher in slums on private land than on public land.

³⁹ Only variables with Eigen values more than 1 are presented



Interesting to note is the very large difference in literacy rates between households on private land compared to those on public land. In the former, the male and female literacy rates were 74 per cent and 62 per cent respectively, whereas in the latter the rates were 57 per cent and 41 per cent respectively (Table 6). The male work participation rates (WPRs) were also higher in slum households on private land (36 per cent) than in the same on public land (27 per cent). But female WPRs were 22 per cent in slum households on public land, which was higher than the 16.6 per cent in slums on private land. We think this could be on account of higher incomes in slums on private land. Per capita incomes are much lower in Amraiwadi slums than in Vasna slums. But per capita incomes were highest (Rs. 778 per month) in slums on private land. On public land, the per capita income was Rs. 572 per month. The average income of slums on public lands is lower than the urban poverty line of Rs. 659.18 (per capita per month) for 2004–5 (Planning Commission 2009). Incomes are low in slums on public land for two reasons: low male WPR and the fact that nearly two-thirds of males are employed as casual labourers. In these slums, 88 per cent females worked as casual labourers and no women were working out of the home. Thus, slum dwellers living in slums on public land were in poverty, whereas those in slums on private land were above the poverty line. Lastly, while the proportion of households holding a ration card or having an electoral card is in general low, those living on private land had higher chances of getting access to these identity cards than those living on public land.

Table 7 Bivariate logit regressions, Amraiwadi

Dependent variables	Independent variables			
	Public land ownership		Property tax bill/ receipt	
	% change	Sig.	% change	Sig.
House quality is pucca or semi-pucca	-58.5	0.137	130.6	0.507
Independent bath space	-29.0	0.530	-92.5	0.073
More than one person working in a family	13.3	0.827	-53.8	0.539
Household head as non-casual labourer	16.4	0.800	502.9	0.231
Household head as regularly employed	-70.8	0.162	-88.0	0.286
At least one casual labourer in the household	11.4	0.818	-	-
Household income of more than Rs. 2,000	-90.6	0.014	-	-
More than four assets	-68.4	0.042	212.0	0.373
Having BPL card	-5.9	0.926	-	-
Having ration card	-35.5	0.127	-	-

Note: Cells shaded pink are significant relations

5.2.2 Impact of tenure variables

The findings of the bivariate logit regression for slums in Amraiwadi ward are presented below. Only public land ownership and a property tax bill or receipt has shown any relationship with the dependent or outcome variables, the former explaining 34.6 per cent of the variance in the data series and the latter 25.7 per cent. However, the outcome variables influenced by these two variables of tenure are very small. In other words, our bivariate logistic regression findings in Amraiwadi ward are not very robust.

However, whatever number of significant regression results we could observe, it is clear that like Vasna ward, in this ward also, public land ownership has negative impact on the living conditions as well as economic status. If the slum is on public lands, possibility of having pucca or semi-pucca dwelling unit decreases by 59 per cent, household head having regular employment decreases by 71 per cent, household income more than Rs. 2000 per month reduces by 91 per cent, and holding more than four assets reduces by 69 per cent. All these relations are significant up to 90 per cent. Further, even possession of a ration card reduces by 36 per cent in slums on public lands. Thus, as in Vasna, even in Amraiwadi, which is an industrial ward of the city of Ahmedabad, slums' location on public lands is at a great disadvantage. This is irrespective of whether the slum has a presence of NGO or not. There is an inherent attitude among the local government officials not to legitimise the residents squatting on public lands, fearing that they would stake claims on the city as well as on the land encroached upon.

The impact of property tax bill or payment receipts have freak results, as far as two variables are concerned, availability of independent bath space and household head employed as regular worker. The signs are opposite of what is likely. Holding property tax bill or payment receipt positively and strongly influence possession of more than four assets (improving by 212 per cent) and on household head not being a casual labour (by 503 per cent). This independent variable does not show any other relations. We cannot say much from the statistical results of this ward except that the slums on public lands are vulnerable to evictions and which has resulted in poor living conditions and high incidence of poverty represented by per capita income and household assets.



Lack of tenure security and sliding into poverty

Like all metropolitan cities in India, Ahmedabad is in the process of transforming into a global city, and has begun to implement infrastructure projects leading to large-scale displacement (Our Inclusive Ahmedabad 2010). Kankaria Lake Development Project is one of many ongoing projects. Located in south-east Ahmedabad amidst middle-class housing colonies, it is in the constituency of the state's controversial Chief Minister. Three slums and all the vendors eking out a living around the lake have been displaced. Among the displaced slums, two had been upgraded through the SNP.

'As the wheel turned, my fortune also turned for the better.'

About 2,000 people, including Chhanabhai Kanjibhai Chauhan and his family, have been displaced from their homes and lost their livelihoods. Chhanabhai Chauhan had been operating a small four-seater ferry wheel on Kankaria lake for about 35 years, and had lived with his family in Sindhi Colony near the lake for as many years. He earned about Rs. 5,000 to 6,000 per month, but in holiday seasons this went up to about Rs. 15,000. Since being displaced, his earnings have halved to a maximum of Rs. 3,000 per month. During demolition he and his family lost all their assets and all proof of residency and citizenship, and were denied a rehabilitation package. The family was moved to Ganeshnagar rehabilitation site (see Box on page 7), where they have no access to schools, primary health care or the public distribution system.

As well as losing his business, Chhanabhai Chauhan has to pay more protection money to the local police and officials to carry out his business. Transport to and from work costs him Rs. 60 per day, out of his daily earnings of about Rs. 100. Finally, to feed his family of seven he sold his income-generating assets, the ferry wheels, and now sometimes plies a bicycle rickshaw, lugging goods in the daytime heat for an additional income of Rs. 700 to Rs. 800 per month. The family goes to bed hungry every day. His wife says that over the last two years they have trained their children to survive on one meal a day.

To a lesser or greater extent, all the families who have been moved to Ganeshnagar rehabilitation site have been reduced to poverty. Those with health problems are lying unattended, children have dropped out of school, most are avoiding going to a doctor because of the prohibitive transport and health care costs, leading to some deaths. Some individuals have been left destitute, like 70-year-old widow, Fatimabibi, who survived on small jobs and the altruism of neighbours in her old settlement. Indubhen Lavgavane died of tuberculosis through a lack of medical attention after being dumped in Ganeshnagar. Her three sons, aged 12, 17 and 18 and a daughter of six have been left orphaned as they had already lost their father.

5.3 Varaccha ward, Surat

In Surat, the variance in data set is explained by variables of tenure as well as variables of housing quality (Table 8). Thus, the tenure variables alone do not determine the quality of life in Surat slums. This is because, as explained earlier, slums did not face the threat of eviction in the city at the time of our survey. All those listed for demolition were expecting alternative housing. Years of stay explained 18 per cent of the variance, followed by whether the rehabilitation of the slum in the same ward (13 per cent), property tax payment (13 per cent), housing quality (which is assumed to be an outcome variable, 11 per cent) and water supply by public agency (9 per cent). Since, the variables of living conditions, human development, economic status and entitlements are not influenced by the tenure variables; we have not carried out any further analysis of the household level data.

Table 8 Factors explaining data variance among variables, Varaccha, Surat

S. No		Eigen values ⁴⁰	% of Variance	Cumulative %
1	Years of Stay_20	2.132	17.766	17.766
2	Rehabilitation in same ward	1.608	13.402	31.169
3	Property tax	1.582	13.185	44.353
4	Type of housing	1.374	11.449	55.803
5	Water supply by public agency	1.083	9.025	64.827

⁴⁰ Only variables with Eigen values of more than 1 are presented



6 Conclusions

This study of slums in three locales in Ahmedabad and Surat, each with different socio-economic, institutional and policy contexts, indicates that active local state intervention in providing basic services nullifies the impact of tenure security on improvement in living conditions, and that, in the absence of the former, tenure security matters in improving living conditions, economic status and human development. Contrary to what was envisaged at the start of the research, the study does not find any strong link between tenure security and access to entitlements. The case for extending tenure security, even of a *de facto* nature – referred to as perceived security of tenure in the literature – emerges strongly from the study of slums in Ahmedabad. Further, the study finds that tenure security is created in different ways. External agency intervention has emerged as the strongest way to increase perceived security of tenure in the case of Ahmedabad. Otherwise, duration of stay – that is leaving the poor to their own devices – increases the perception of tenure security, albeit only if the slums are on private rather than public land. The slums on public land are most prone to displacement in Ahmedabad.

This study also indicates that *de facto* tenure security helps in enhancing living conditions, human development, economic status and access to entitlements and that there is no need to aim for legal tenure security in the first instance. There are number of ways through which *de facto* tenure security can be attained. Important among them are: the support of an external development agency; years of stay, where an external development agency is not present; and small steps by local government, such as the extension of basic services and a city-level resettlement policy in the case of unavoidable slum demolitions. Shelter security is a combination of all these efforts and these interventions can be made quickly rather than waiting for the granting of legal property titles. In fact, case studies of slum settlements show that the granting of legal property titles to slum dwellers on private land is a very complicated process.⁴¹ The question therefore is do we wait for property titles to be bestowed to the slum dwellers a la de Soto, or do we begin by extending *de facto* tenure security, which has the potential to improve quality of life and reduce vulnerabilities of the urban poor.

Generally, it is assumed that employment will lead to income and then to secure tenure. However, in our factor analysis, we do not find income explaining either the tenure variables or other outcome variables. But supply-side dynamics or policies, such as local state intervention (in the case of Surat), NGO intervention (in the case of

Vasna), and local government extension of property tax bills in all the three research locales, to some extent play a very important role in the outcome variables, that is, living conditions, economic status and social development. Duration of stay (non-interference by the local state in the slum settlements) has also shown positive impacts in the Amraiwadi and Vasna slums. We can therefore surmise that supply-side interventions of local state policies or external agency intervention, or even leaving slum dwellers to their own devices, would consolidate the tenure status of slum dwellers. In a hostile policy environment – as in urban India, where the neo-liberal state is becoming increasingly hostile to the poor and there is elite capture of urban land and resources – supply-side policy interventions are extremely important. Thus, if tenure comes first, it can have positive impacts on the lives of the urban poor.

This research on shelter security and social protection, has attempted to do the following:

It has attempted to first define tenure security in the context of cities in India. The research finds that tenure security is highly contextual and depends on the nature of the state. A welfare state attempts to extend shelter security through various development programmes for the slum, including guaranteeing occupancy rights to the dwellers. But when the state is instrumental and when government policies are for economic growth and not for distribution, the tenure security is constructed through many different means. It has been argued that in a democracy tenure security is constructed through clientelism. But that phase of Indian democracy seems to have passed. Mahadevia and Narayanan (2008) have shown in the case of Mumbai that elected representatives had vanished from the scene and were the most disinterested in extending support during the worst slum demolition phase of 2004–5. In Ahmedabad, too, there is strong support across political parties and their representatives for a large urban renewal project, the Sabarmati Riverfront Development Project, which (according to an affidavit filed in the Gujarat High Court by the displaced people's organisation) will displace 30,000 families. (There are varying estimates of those to be displaced, Our Inclusive Ahmedabad 2010.) Resistance by those affected, a high level of judicial activism, and interventions by concerned citizens have resulted in some rehabilitation. The local and state governments have very little to do in either framing policy or implementing it. The policy has been laid out by the Gujarat High Court, and is being implemented by a Committee appointed by the High Court under the

⁴¹ Independent of this research, at the Centre for Urban Equity, CEPT University, we have documented processes of getting permissions for the legal development of lands in Ahmedabad and Vadodara.





chairpersonship of the Chief Justice of the Gujarat High Court. In this way, the High Court expressed its lack of faith in the executive and legislative wings of the state.

But not all the slums are under demolition in Ahmedabad and Surat. The ones in prime locations beneficial to real estate developers are under the local government axe, but there are many on land that is of no importance to the real estate market. These continue to exist, and there are two prominent processes that have extended shelter security in these areas. One is community mobilisation for development, as in the case of some slums in Ahmedabad's Vasna ward. The other is where slums on private land in the informal market have been subdivided on account of urbanisation. Peripheral land markets are not of much interest to real estate developers. Gradually, such land gains access to local government public services and then, over more time, they gain quasi-legal status. The land ownership situation in such slums/settlements is messy. Often, it is not possible to trace the original legal owner. The local state does not have legal instrument to transfer such land to its own ownership, so the slum continues. Thus, in the situation of 'left to their own devices' or inaction on the part of the state, or a lack of ability by the state to access such land, poor communities gain *de facto* shelter security and build their lives and assets through such processes. We have found such processes in both Surat and Ahmedabad.

The state of Gujarat's partisan nature can be seen in the city of Ahmedabad's history of communal violence. Since 1995, the state leadership has been a right-wing Hindu party, accused now of engineering communal violence directed against Muslims in 2002. In fact, Ahmedabad has witnessed widespread communal violence since the 1940s which, according to Patel (2002), was engineered by affiliates of Rashtriya Swayamsevak Sangh (RSS), the parent organisation of various fraternal organisations of the right-wing Hindu party. This partisanship leads to the promotion of corporate interests over those of the people. Thus, the state's overall policy environment is not congenial to inclusive politics or inclusive policies, which is reflected in urban settings. Hence, there is limited scope for shelter security in Gujarat's urban areas, including in Ahmedabad and Surat.

In such an atmosphere of disempowerment and a partisan state, will leap-frogging the urban poor into a regime of private property, as is being proposed by the national government, work? Will it guarantee shelter security? Or will cleaning out the property titles make them more prone to gentrification? The current informal

and fuzzy property titles have at least extended *de facto* shelter security to the slum dwellers, as we see in the case of Ahmedabad. Another question is will local government be able to clean up the messy property titles? Experience shows that this will require drastic land legislation changes. In the absence of such a possibility, the local government may take a route of allocating public housing to be constructed under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) for slum dwellers. But that, at the moment, is not adequate and has no guarantee of being affordable to a large section of the population. Informal living will continue and, by delegitimising such settlements in public policy, people will live permanently under uncertainty and the threat of eviction, and thereby be denied citizenship and social protection. A better policy is to start with a gradual extension of shelter security and institute processes to empower poor communities to stake claims on the local state rather than pushing them to negotiate formal land markets. *De facto* tenure security will help in this goal.



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Appendix 1

The logistic regression assumes that the outcome variable, Y is categorical, but logistic regression does not model this outcome variable directly. For simplicity, we assume that Y is dichotomous, taking on values of 1 for positive outcome and 0 for negative outcome. In theory, the hypothetical, population proportion of cases for which Y = 1 is defined as $p = P(Y=1)$. Then, the theoretical proportion of cases for which Y = 0 is $1 - p = P(Y = 0)$. In the absence of other information, we would estimate p by the sample proportion of cases for which Y = 1.

Let:

$$P_i = \Pr(Y=1/X=x_i)$$

Then we can write the model:

$$\text{Log } (P_i/(1-P_i)) = \text{logit } (P_i) = \beta_0 + \beta_1 x_1$$

The parameter β_0 gives the log odds of an independent variable. In Table 1, for example, β_0 gives the log odds of households staying in the slum for 20 or less and β_1 shows how these odds differ for the household staying more than 20 years.

If we rewrite the model in terms of odds as:

$$(P_i/(1-P_i)) = \exp(\beta_0 + \beta_1 x_1)$$

Or in terms of the probability of the outcome occurring as:

$$P_i = \exp(\beta_0 + \beta_1 x_1) / (1 + \exp(\beta_0 + \beta_1 x_1))$$

Conversely the probability of the outcome not occurring is

$$1 - P_i = 1 / (1 + \exp(\beta_0 + \beta_1 x_1))$$



