

Getting land for housing; what strategies work for low-income groups?

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I. INTRODUCTION

Most papers in this issue of *Environment and Urbanization* are about the urban poor themselves as active agents in getting land for housing – either negotiating tenure for land they occupy or negotiating for new sites on which they can build. As Somsook Boonyabancha notes in her paper, the urban poor's drive for change, their energy and their capacity were never factored into official housing policies. When the potential contribution of the urban poor in resolving their land and housing issues is taken seriously, a great deal can be achieved, as the papers in this volume indicate.

II. BACKGROUND

Houses or shacks built on illegally occupied land have become such a common feature of urban centres in low- and middle-income nations that perhaps we forget the implications for their inhabitants:

- Usually, little or no legal protection against eviction, no rule of law and no police protection against crime.
- No access or only limited access to the infrastructure and services that we take for granted – not only no safe, sufficient, reliable piped water supply to the home but also no provision for sanitation, drainage and regular solid waste collection.
- No electricity – or electricity supplies that are illegal (and often unsafe).
- No possibility of a bank account.
- Dangerous or inconvenient sites (the occupation of less dangerous or more convenient sites would not be permitted), often with more accidental fires and more floods.

- No emergency services if suddenly faced with such fires or floods, or with acute illness or injury, and no insurance for homes and possessions lost or damaged.
- Often, a lack of a legal address means no access to government schools and health care centres; in some places, this also means not being able to get onto voter registers.

This is a life where the residents constantly face discrimination because of where they live; being a squatter means being looked down on, being ignored, being exploited – and being bulldozed when some government agency wants their land, or that land has become sufficiently valuable for real estate interests to press for its “redevelopment”.

III. CITY LAND MARKETS DO NOT DELIVER NEEDED LAND FOR HOUSING

The simplest explanation for this illegality is the gap between the cost of the cheapest “legal” accommodation and what large sections of the population can afford to pay. In most nations, cities concentrate new investments and thus also demand for labour. But legal urban land markets and the government regulations that influence them make no provision for the land needed for housing for most of those who live or move to urban areas in response to economic opportunities. In urban space, the land market

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is structured by the state (either explicitly or implicitly) because they determine the rules that govern land use; in so doing they define the scale of the supply of land and heavily influence its cost. In almost all cities, government agencies are also significant landowners. As the supply of formal, legal land for housing fails to provide for much of the population, so a vibrant informal land and housing market develops. But most of what this provides is housing options that are of very poor quality, and often in house structures that are illegal or on land sites that are occupied or built on illegally.⁽¹⁾ The end results of this are well known to readers of this journal, namely a high proportion of the population in most cities living in overcrowded tenements, cheap boarding houses and informal settlements, and a high proportion of these residents spending a large part of their income on renting accommodation. Perhaps not surprisingly, the second issue of *Environment and Urbanization*, in 1989, focused exactly on this – on the (mostly informal or illegal) housing and land sub-markets through which those with limited incomes get accommodation.⁽²⁾ The pavement dwellers and those who rent beds by the hour in dormitories in Mumbai are simply some of the more extreme manifestations of the mismatch between the physical concentration of economic opportunities (and the related high demand for urban land) and the availability of affordable reasonable quality accommodation.

IV. GOVERNMENT LAND POLICIES DO NOT ACT IN THE PUBLIC GOOD

All governments influence land markets and access to land for housing in a great range of ways – they allocate and use land that is publicly owned; they make land for housing available through their infrastructure and service investments; they influence land prices and availability through official rules and regulations, including building permits, land use specifications, plot sizes and how efficiently and transparently these are applied. The gap between the need for land for housing and its availability is matched by the gaps in official policy and what they deliver. The wording of constitutions, laws and official decrees often makes much of social justice and the social aspects of property rights, and of government commitment to meeting needs even in nations

where large sections of the urban population live in illegal settlements (see the discussion in the paper on the Philippines by John Iremil E Teodoro and Jason Christopher Rayos Co). So the issue at the centre of most of the papers in this volume is where and how is the need of low-income groups for land recognized by government and acted on.

The paper by Arif Hasan on proposals to upgrade the Karachi Circular Railway makes clear that the scale of evictions is greatly influenced by how government agencies choose to upgrade this railway. There are many encroachments on the land each side of the track that could be used for laying another line – but it is mostly the informal settlements within this encroachment that are threatened by the plans, even though most of the encroachment is from formal sector construction, including apartment complexes, factories and commercial plazas. There are many ways to design the (much needed) improvement of this railway while minimizing dislocations and evictions, but it is not clear whether the government agencies involved actually have any interest in doing so. And any cost-benefit analysis will be greatly influenced by whether the huge costs faced by those who are displaced are taken into account when reviewing the different options.⁽³⁾

The Karachi case also illustrates government use of cut-off dates as a way of limiting the rights of those in illegal settlements. While many governments have moved some way towards recognizing the importance to urban economies of those living in illegal settlements, and their rights

1. For one well-documented example, see the *Nairobi Slum Inventory* published by Pamoja Trust, Urban Poor Fund International and Shack/Slum Dwellers International (2008), which is described in the Book Notes section.

2. At least 60 papers published in previous issues of *Environment and Urbanization* focus on land for housing. Go to <http://eau.sagepub.com/> to see the range of papers that are listed if you click on "search for articles" for all papers with "land" in the title or in the abstract; more defined sets of papers are provided if the search is on "eviction" (19 papers), "land tenure" (11 papers), "upgrading" (24 papers) or "invasion" (8 papers).

3. This parallels the experiences in Nairobi and Mumbai, although here agreements were reached that limited the number of people who were displaced and provision was made to provide alternatives for them. See Patel, Sheela, Celine D'Cruz and Sundar Burra (2002), "Beyond evictions in a global city; people-managed resettlement in Mumbai", *Environment and Urbanization* Vol 14, No 1, April, pages 159–172; also Weru, Jane (2004), "Community federations and city upgrading: the work of Pamoja Trust and Muungano in Kenya", *Environment and Urbanization* Vol 16, No 1, April, pages 47–62.

relating to housing and services, they often use cut-off dates as a way of limiting this recognition. In Karachi, the Pakistan Railway Authorities have recognized that the informal settlements on their land have some legitimacy, but claim that only those formed before 1985 are legitimate. In the late 1970s, when the state government set up a special agency to regularize informal settlements on government land, initially this applied only to settlements formed by 1978; the cut-off date was later changed to 1985.

Another device used by governments to limit entitlements to land is the waiting list – as explained in the paper on Zimbabwe by Beth Chitekwe-Biti. Local authorities are meant to manage land allocations for residential developments, and local residents are meant to register to get a plot. In theory, allocations are then meant to be influenced by those who have been longest on the list and those with secure employment. But it is difficult and time consuming to obtain the necessary documentation to get on the waiting list, and payment and annual re-registration are required to remain on it. It is also clear that there is corruption in the assignment of land allocations. In another case of housing queue management in Botswana, young people asked if they could inherit their parents' place on the queue to improve their own housing opportunities – a reminder of the length of this process for many.⁽⁴⁾

V. STRUGGLES BY THE URBAN POOR

a. The struggle for housing is most often a struggle for land

The struggle for shelter by low-income groups is often a struggle for land – either getting land on which to build or getting tenure of land already occupied. Most papers in this issue are about such a struggle – that of the Homeless People's Federation in Zimbabwe in negotiations with local governments; of the residents of a long-established riverside community in Surabaya threatened with relocation; of the Karachi residents whose homes are threatened by the expansion of the Circular Railway system; and of the Homeless People's Federation of the Philippines to avoid displacements as a result of market pressures, infrastructure development and disasters. There are also papers on urban poor organizations' negotiations for land or land tenure in Sri Lanka

and Thailand, and a case study of an upgrading programme in Argentina that transferred land tenure to the inhabitants of informal settlements. What is noticeable, compared to struggles recorded some decades ago, is recognition by the urban poor that government needs to be brought into the solution. The focus is no longer on large carefully organized land invasions – which, in particular nations or cities for particular periods, did allow large numbers of low-income groups to get land for housing.⁽⁵⁾ Two other papers focus more on land market changes brought about by urban development – one in a village on the periphery of the booming city of Gurgaon in India, the other in inner-city Lahore in Pakistan.

b. Some successes to report

Perhaps surprisingly, several of these papers report success in urban poor groups' negotiations for land or land tenure – despite their very limited incomes and thus capacity to pay. In the cases in Thailand, Zimbabwe, the Philippines, Sri Lanka and Indonesia, success is related in part to the organization of the urban poor groups (through federated savings groups). This also explains the many successful initiatives in Cambodia, as described in the paper by Somsak Phonphakdee, Sok Visal and Gabriela Sauter, on how the Urban Poor Development Fund supports a growing number of community-based savings groups and provides loans and grants for land acquisition as well as for upgrading, house building, income generation and food production. This fund also supports community organizations to develop better relations with government agencies.

The community organizations and their federations usually need a lot of tenacity to cope

4. Kalabamu, Faustin T (2006), "The limitations of state regulation of land delivery processes in Gaborone, Botswana", *International Development Planning Review* Vol 28, No 2, pages 209–233.

5. See Cuenya, Beatriz, Diego Armus, Maria Di Loreto and Susana Penalva (1990), "Land invasions and grassroots organization: the Quilmes settlement in Greater Buenos Aires, Argentina", *Environment and Urbanization* Vol 2, No 1, April, pages 61–73; also Peattie, Lisa (1990), "Participation: a case study of how invaders organize, negotiate and interact with government in Lima, Peru", *Environment and Urbanization* Vol 2, No 1, April, pages 19–30; Arévalo T, Pedro (1997), "May hope be realized: Huaycan self-managing urban community in Lima", *Environment and Urbanization* Vol 9, No 1, April, pages 59–79; and Barbosa, Ronnie, Yves Cabannes and Lucia Moraes (1997), "Tenant today, *posseiro* tomorrow", *Environment and Urbanization* Vol 9, No 2, October, pages 17–41.

with the many setbacks and delays; it often takes years of negotiation for agreements to be reached. This tenacity is illustrated very strongly by the Homeless People's Federation in Zimbabwe, as described in Beth Chitekwe-Biti's paper. Despite all the economic and political difficulties their members have had to face, including massive eviction programmes, the federation has continued to present government with an alternative and practical way of dealing with land and housing issues. The federation recognizes that it has to demand a different set of relationships with the state – not paternalistic policies with very little real consultation but rather, an agenda they develop and determine. What the federation and the local NGO that supports them (Dialogue on Shelter) have learnt is to manage this set of relationships, build a collective coherent voice across its membership, build and manage alliances with other organizations that are working towards the same goals and constructively engage government in a set of very tangible outcomes as opposed to abstract demands for rights. This has enabled the federation to build a non-confrontational relationship with the state that has allowed it to interact more equally in partnerships with local authorities, where the politics are less contested. The federation recognizes that the situation in Zimbabwe is in a state of flux, and when greater stability is achieved these alliances might have to be renegotiated. But this renegotiation can be carried out from a platform that is informed by current experiences and some successes.

Of course, being organized is no guarantee of success. The groups in Karachi threatened with eviction by the railway expansion are organized through the Network of Railway Colonies (which, in turn, is a member of the All Pakistan Alliance for Katchi Abadis (informal settlements). But in all the cases mentioned above, the urban poor organizations and federations are organized. They are also actively engaged in offering local government (and sometimes landowners) partnerships to address land or land tenure issues and clear (costed) plans for what needs doing. Again, this is no guarantee of success, but it certainly proved important in many instances where urban poor groups did get land or land tenure. Developing these plans may also require considerable research by the urban poor organizations – for instance, careful surveys of vacant land to see what might be both

appropriate and affordable (or available through negotiation), and detailed maps and household enumerations in informal settlements, which are needed for upgrading and land tenure transfer. All this also required urban poor organizations to convince local governments, local politicians and civil servants that they should work together. Once organized, the groups were able to identify strategies that proved more successful in getting their voice heard and their proposals accepted.

Organized urban poor groups can also work in the market – combining their savings and financial skills to negotiate an affordable price with the owner of the land they currently occupy, or searching for legal land sites that they can buy and on which they can build their homes. Here, what narrows the gap between what they need and what they can afford is a whole range of ways to cut costs – smaller plot sizes (although this often has to be negotiated with the authorities), incremental building (so costs are spread over time), negotiating credit to allow land and building costs to be spread over a number of years, and careful use of subsidies. Sometimes it requires forms of tenure that are not ideal but that bring down the price – for instance, negotiating 20–30 year leases rather than ownership. The paper by John Iremil E Teodoro and Jason Christopher Rayos Co, looking at how savings groups from the Homeless People's Federation of the Philippines find and purchase land, describes how usufruct arrangements can have advantages over leases. Somsook Boonyabancha's paper on Thailand is particularly interesting in this regard, in that the national government agency that she headed (the Community Organizations Development Institute) supported and empowered hundreds of savings groups formed by those living in illegal settlements to find and negotiate the solution that worked best for them. Sometimes this involved returning part of the land they occupied to the owner in return for tenure of the rest of the land. This involved considerable inconvenience as a proportion of house structures were lost, and agreement had to be reached among all the inhabitants of how to re-block and rebuild on the land they did get. But it enabled them to get secure tenure and much improved infrastructure. In this particular case, this was done within a citywide process in which all urban poor communities were engaged. Much greater scale is achieved where this kind of engagement is supported by flexible finance,

not through ever larger-scale initiatives but rather, by the multiplication of hundreds of locally specific, community-driven solutions.

All initiatives to upgrade informal settlements or find land on which to build new houses involve trade-offs between what is desired and what is possible (and affordable). In the case of externally financed upgrading programmes, decisions about these trade-offs and what can be afforded are so often made by professionals, thinking that they know best. But so much of the failure or limitations of upgrading and new site development is because the trade-offs did not suit the residents. In the Baan Mankong programme in Thailand, and in the other papers in this issue that concern initiatives developed by the urban poor federations and local governments, it is the residents and their organizations that make the trade-offs. They also manage the upgrading process, which helps address the incoherence of many upgrading programmes where responsibility is divided between many different government agencies that never coordinate their work.

VI. UPGRADING AND LAND TENURE

In some nations, there now seems to be widespread recognition within local and national government that “slum and squatter upgrading” is an important and legitimate way to improve housing and living conditions for low-income groups. This often includes provision to support the transfer of land tenure to the occupants – as described in the papers on Argentina, Thailand, Indonesia, Sri Lanka and the Philippines. Perhaps the possibilities for the community organization formed by the residents in Surabaya to negotiate support for upgrading rather than relocation were in part due to a 40-year history of support for upgrading in Surabaya.⁶

The upgrading and land tenure programme in Thailand is notable for its scale and for the extent of government support for low-income groups to develop their own solutions and negotiate with landowners to achieve this. Between 2003 and 2008, this national upgrading and secure tenure programme supported 512 initiatives involving 1,010 communities. Community organizations that formed around savings groups could draw on soft loans to develop their own local solutions in terms of location, price and tenure, and to negotiate with the

landowners. So location, building design and cost implications were based on their choices. Infrastructure subsidies were available to support the upgrading.

In the Philippines, as John Iremil E Teodoro and Jason Christopher Rayos Co describe, there has also been support from national government for residents of illegal settlements to negotiate the purchase of land from the owners through the Community Mortgage Programme. This has certainly benefited very large numbers of low-income residents, although long waiting lists to secure funding have delayed local improvements; furthermore, as the programme is also targeted at communities at risk of eviction, there are many others left with insecure tenure and no source of funding to purchase the land. The paper describes a range of community-led land acquisition initiatives by homeowners associations that belong to the Homeless People’s Federation of the Philippines, including direct purchase and usufruct, as well as one funded by the Community Mortgage Programme.

Another issue raised by several papers is how to protect residents from market pressures when their settlement has been upgraded. The upgraded home with good infrastructure and secure tenure brings multiple benefits, but it can also mean increased costs for services (such as water and electricity) and, in some cases, liability for local taxes that low-income households have difficulties affording. In addition, successful upgrading programmes boost the value of homes, especially if they are in a valuable location and the inhabitants get legal tenure. This will make the housing attractive to higher-income groups and perhaps encourage residents to sell. One possibility is to vest land ownership with the whole community – but this could prevent residents who need to move elsewhere from doing so and may discourage their investment in their home. In the Thai programme described above, where land was purchased, land tenure must remain collective for the 15-year period during which the communities are repaying their land and housing loans. Where land tenure was achieved through leasing public land, this will continue to be a collective lease. This does not prevent people from choosing to move, but they have to sell

6. Silas, Johan (1992), “Environmental management in Surabaya’s kampungs”, *Environment and Urbanization* Vol 4, No 2, October, pages 33–41.

their land and housing through the cooperative and in doing so, they get back their investment in their home but not any speculative profit.

Somsook Boonyabancha's paper discusses the importance of collective land ownership for these schemes – although in cases where land tenure is owned by the community they can choose to shift to individual ownership once the loans are repaid. This collective ownership, underpinned by the collective capacity developed by the residents, also provides lower-income groups with some protection from market forces. It protects them through the vulnerable period during which they have to afford utility bills and loan repayments. Cooperative land tenure also supports equal relations between all members – each has an equal share in the land. The agreement reached among all the inhabitants in developing the housing also allowed the design to reflect innovative mixes of private and shared space, especially where space was very constrained.

One other market-related issue is the choice of housing form. The two upgrading initiatives in Moratuwa described in the paper by Celine D'Cruz, Gordon McGranahan and Upali Sumithre includes one that involves the construction of multi-storey housing. This is unusual in that most upgrading schemes have been on sites where existing housing located on existing plots could be upgraded – with incremental improvements to the housing (which also makes it more affordable for those with low incomes). As the paper discusses, for informal settlements in areas with high land values, one increasingly common proposal has been redevelopment by commercial builders, with the former inhabitants rehoused in part of the new housing stock. For many informal settlements, densities are too high to allow the upgrading of existing shelters and plots without displacing a proportion of the population (especially the tenants). For instance, Dharavi in Mumbai has a density that will need multi-storey housing if everyone is to be rehoused and space provided for livelihoods (although this need not imply high-rise; this could be accommodated within a mix of 2–5 storey buildings).⁽⁷⁾ The paper on Moratuwa discusses the implications for cost and for community control and management that the construction of multi-storey buildings implies. It need not involve a loss of community control, although it is far more demanding with regard to the need for agreed collective decisions by all residents in (for instance) managing

contracts with builders and financing through collective loans. In addition, in this instance, the government was only willing to transfer land ownership to the community if they vacated a quarter of the plot and returned it to the government. It is likely that, increasingly, governments will be attracted to “upgrading schemes” in valuable locations, which allow a proportion of the costs to be met by allocating part of the site to commercial developments. The redevelopment plan for Dharavi, which sought to allocate development rights to international companies, with no consultation with residents and with no guarantee that everyone would be rehoused (or provision made for their livelihoods), is simply an extreme example of this. Not surprisingly, there was energetic opposition from residents (and many professionals) and fairer upgrading solutions were sought. Papers in recent issues of *Environment and Urbanization* have reported on this struggle⁽⁸⁾ and as this issue of the journal was going to press, an open letter to the chief minister of the state of Maharashtra was once again pointing to the disastrous implications for Dharavi's residents of the proposed redevelopment plan.⁽⁹⁾

VII. TENURE AS THE SOLUTION?

The many cases noted above, where residents of illegal settlements obtained tenure, add to a long history of examples of governments providing secure tenure to the residents of particular illegal settlements – or of the inhabitants of these settlements negotiating such tenure. Over the last four decades, there has also been growing recognition that upgrading needs to sort out tenure for the inhabitants – many of the earliest initiatives did not – although as the Argentine case studies highlight, this can be a slow, difficult and expensive process. But with a growing number of

7. Patel, Sheela and Jockin Arputham (2007), “An offer of partnership or a promise of conflict in Dharavi, Mumbai?”, *Environment and Urbanization* Vol 19, No 2, October, pages 501–508; also Patel, Sheela and Jockin Arputham (2008), “Plans for Dharavi: negotiating a reconciliation between a state-driven market redevelopment and residents' aspirations”, *Environment and Urbanization* Vol 20, No 1, April, pages 243–254; and Patel, Sheela, Jockin Arputham, Sundar Burra and Katia Savchuk (2009), “Getting the information base for Dharavi's redevelopment”, *Environment and Urbanization* Vol 21, No 1, April, pages 241–252.

8. See publications in reference 7.

9. For the full text of the letter, see www.dharavi.org/.

positive experiences of upgrading from the 1970s onwards, the importance of “secure tenure” came to be accepted. This reached the point where it was promoted as “the solution” to urban poverty by Hernando de Soto.⁽¹⁰⁾ The extravagant benefits that he claimed would result from the provision of land title both to those who got the title (as this released dead capital) and to the wider economy (and government revenues), and the apparent simplicity of this “solution”, led to glowing endorsements of this approach from many world leaders.⁽¹¹⁾ The fact that there were 30 years of experience with land titling programmes that lent little support to de Soto’s claims went unnoticed. So did the more careful commentaries on the benefits of land titling and tenure that went back to the 1960s.⁽¹²⁾ The review of land titling programmes by Geoffrey Payne, Alain Durand-Lasserve and Carole Rakodi describes how most have not produced the benefits that de Soto claimed they would. Investment in land and housing, access to formal credit, and municipal revenues have not increased noticeably more than under other tenure regimes, including those that permit many unauthorized settlements, and there is no significant evidence of poverty levels being reduced. Titling does provide increased tenure security – but many alternative forms of tenure, including those in many informal settlements, also provide high levels of security. In addition, in many nations, land titles do not necessarily protect people from eviction and expropriation of their land. Land titling often fails to increase access to credit, and low-income households that obtain titles are often as reluctant to take out loans as banks are to lend to them. Titling also does not necessarily improve infrastructure and services provision, and many settlements have obtained improved provision without titles. One puzzle is why de Soto’s book and ideas received such acclaim from so many world leaders (and may indeed continue to do so). Perhaps because the “solution” he promoted appeared so simple and universal?

VIII. NECESSARY AND SUFFICIENT CONDITIONS

The papers in this issue, and many in previous issues, suggest that the best route to a better deal on urban land (and housing) for the urban poor is through representative organizations. In most of the cases elaborated in this volume,

this organization is around community-managed savings in which women have central roles. They develop a collective capacity to come up with proposals and to seek better deals – either within the market or with local governments (or often with both). In particular, the benefits of savings are demonstrated when these organizations secure land or land tenure, as they are then able to develop the site and their homes – sometimes with the help of development assistance. This shows government agencies what they are capable of, and may lead to partnerships and more land allocations,⁽¹³⁾ or more agreements on transferring tenure for land already occupied. As noted earlier, there is also a range of other methods through which they develop their proposals – for instance, surveys of land sites suitable for housing and enumerations, and maps of the settlements for upgrading. It is neither easy nor automatic that they will get positive responses from government; but where they do get positive responses, the scale of what can be achieved increases dramatically, especially where government agencies can learn how to support this process (as they have in Thailand through CODI and in part in the Philippines through the Community Mortgage Programme). This also suggests routes for international funders, who could provide the kind of support that CODI provides to low-income communities in Thailand direct to urban poor organizations and federations; most such federations have set up their own urban poor funds through which such funding could be channelled (as described in the paper on the Urban Poor Fund in Cambodia). Of course, the similar tools and methods used by the different federations is no coincidence, as they have long learned from each other and supported each other and are part of Shack/Slum Dwellers International.⁽¹⁴⁾

10. de Soto, Hernando (2001), *The Mystery of Capital*, Black Swan, London, 276 pages.

11. See, for instance, the list of endorsements at <http://www.ild.org.pe/books/mystery>.

12. See, for instance, Turner, John F C (1968), “Housing priorities, settlement patterns and urban development in modernizing countries”, *Journal of the American Institute of Planners* Vol 34, pages 354–363; also Turner, John F C (1976), *Housing By People – Towards Autonomy in Building Environments*, Ideas in Progress, Marion Boyars, London, 162 pages.

13. Manda, Mtafu A Zeleza (2007), “Mchenga – urban poor housing fund in Malawi”, *Environment and Urbanization* Vol 19, No 2, October, pages 337–359.

14. For more details, see <http://www.sdinet.co.za>.

Oddly enough, drawing on these experiences results in some recommendations for development assistance that are almost as simple as those of de Soto – that international agencies find ways to listen to, work with and support the urban poor groups' own organizations as they develop their capacity to undertake initiatives and develop better relations with local government. Also, to support urban poor groups to learn from each other and to provide finance that they can draw on as and when they need it. It would be nice if the world leaders who rushed to endorse de Soto moved to endorse this position. Certainly, as most of the papers in this issue show, there is a stronger evidence base to support its effectiveness.

IX. CLIMATE CHANGE MYTHS

Three papers in this issue address climate change issues, and each challenges widely held myths. The first, by Cecilia Tacoli, explains that migration should be understood as adaptation (i.e. sensible, thought-out responses by individuals, households and communities to climate change) not as "a problem" to be avoided (as it is so often portrayed). Of course, this parallels how rural to urban migration should be understood within development – not as an "urban problem" but rather, as a logical response to where economic opportunities are concentrated, as economies become wealthier. The second paper, by Tom Chance, shows the enormous progress that has been made in our capacity to de-link high quality homes with large carbon footprints for heating, cooling, hot water and appliances. He describes the Beddington Zero Energy Development in London, a high density residential development that accommodates a mix of income groups and combines homes and workplaces. This building not only dramatically reduces carbon dioxide emissions per person but also reduces water use and the carbon footprint of materials used in its construction. But as the paper describes, this alone does not reduce residents' carbon footprints to a "fair share" level (the average per capita emissions worldwide that would stop dangerous climate change), as this is also influenced by choices and behaviours outside their homes (for instance, the choice to fly on holiday) and by the provision (or lack) of lower carbon transport modes in the larger city. The third paper, by

David Satterthwaite, considers the implications of population growth and urbanization for climate change. It finds that there is little association between nations with rapid population growth and nations with high greenhouse gas emissions and rapid emissions growth. It is not the growth in population but the growth in the number of consumers and in their levels of consumption that drives the growth in greenhouse gas emissions worldwide. A significant proportion of the world's urban (and rural) populations have consumption levels that are so low that they contribute little or nothing to such emissions. If lifetime personal contributions to greenhouse gas emissions can vary by a factor of more than 1,000, depending on the circumstances into which individuals are born and their life possibilities and choices, it is misleading to see population growth as a driver of climate change.

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