



**Building resilient communities  
through upgrading**

David Satterthwaite,  
International Institute for  
Environment and Development  
(IIED)

# Building resilient communities through upgrading

- Good quality housing brings resilience to most climate change impacts
- To give an example

# Climate change adaptation and resilience at 33 Gauden Road, London



- 24 hour/day drinkable water & sanitation
- Housing meeting health + safety standards
- Paved roads; storm/surface drains
- Regular solid waste collection and drain maintenance
- Free Health care within walking distance
- Emergency services (fire, flood, injury.....)
- Insurance: home+possessions; safety net
- Warning of storms
- Political system to complain to if needed

Almost universal coverage/massive risk redn  
None done for climate change adaptation

# So resilience here through conventional development

- Conventional development also able to manage some increases in the frequency and/or intensity of extreme weather and other hazards to which climate change contributes
- But without urgent action to increase resilience, conventional development increasingly unable to protect cities and communities
- But what about cities and communities with few if any of the measures listed above to increase resilience
- What role for upgrading?



# Upgrading informal settlements

- Upgrading informal settlements has become a conventional response to improving housing and living conditions
- Nations where upgrading is no longer controversial; understood as something local government does & supports
- Now a 50 year history; see upgrading schemes in Jakarta and Lima in the 1960s

**Planning upgrading quite different from conventional planning - as the site is already occupied and much of the housing and site layout contravene official standards**

- Some upgrading - isolated examples; others part of national policies
- See also major city initiatives to extend piped water sewers and drains to informal settlements that are not counted as upgrading

# Does upgrading build resilience?

- More than a billion urban dwellers in informal settlements – and lacking what the IPCC termed risk reducing infrastructure and services
- Informal settlement upgrading should address this and so increase resilience
- But upgrading's contribution to increase resilience depends on the quality and scope of the upgrading
- And on relations with local government

# Forms of upgrading

- Upgrading that is actually eviction
- Rudimentary upgrading
- More complete upgrading
- Comprehensive upgrading
- Comprehensive community -led upgrading
- Comprehensive community-led upgrading with resilience lens
- Transformative upgrading



## Different forms of informal settlement upgrading

Forms of upgrading	What it involves
<i>Upgrading that is actually eviction</i>	Pushing residents out to rebuild; residents not able to access 'upgraded' dwellings
<i>Rudimentary upgrading</i>	Very basic interventions – e.g. community taps
<i>More complete upgrading</i>	Piped water and toilets in each home, electricity, paved access roads .. Little consultation with residents.
<i>Comprehensive upgrading</i>	Legal land title, full range of infrastructure and services. Support for house improvement and for enterprises. Consultation with residents.
<i>Comprehensive community-led upgrading</i>	As above but with community control as in upgrading supported by CODI and SDI affiliates
<i>Comprehensive community-led upgrading with resilience lens</i>	As above but with greater attention to assessing and anticipating future risk levels
<i>Transformative upgrading</i>	As above with attention to low carbon footprint added

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## Does informal settlement upgrading build resilience?

<b>Forms of upgrading</b>	<b>Contributes to resilience</b>
<i>Upgrading that is actually eviction</i>	Decreased resilience
<i>Rudimentary upgrading</i>	Very little
<i>More complete upgrading</i>	Many aspects of household and community resilience provided or enhanced
<i>Comprehensive upgrading</i>	As above. Can include identifying and acting on disaster risk reduction
<i>Comprehensive community-led upgrading</i>	As above but with community control as in upgrading supported by CODI and SDI affiliates; often partnerships with local government
<i>Comprehensive community-led upgrading with resilience lens</i>	As above but with greater attention to assessing and anticipating future risks and risk levels
<i>Transformative upgrading</i>	As above with attention to low carbon



# Assessing Upgrading

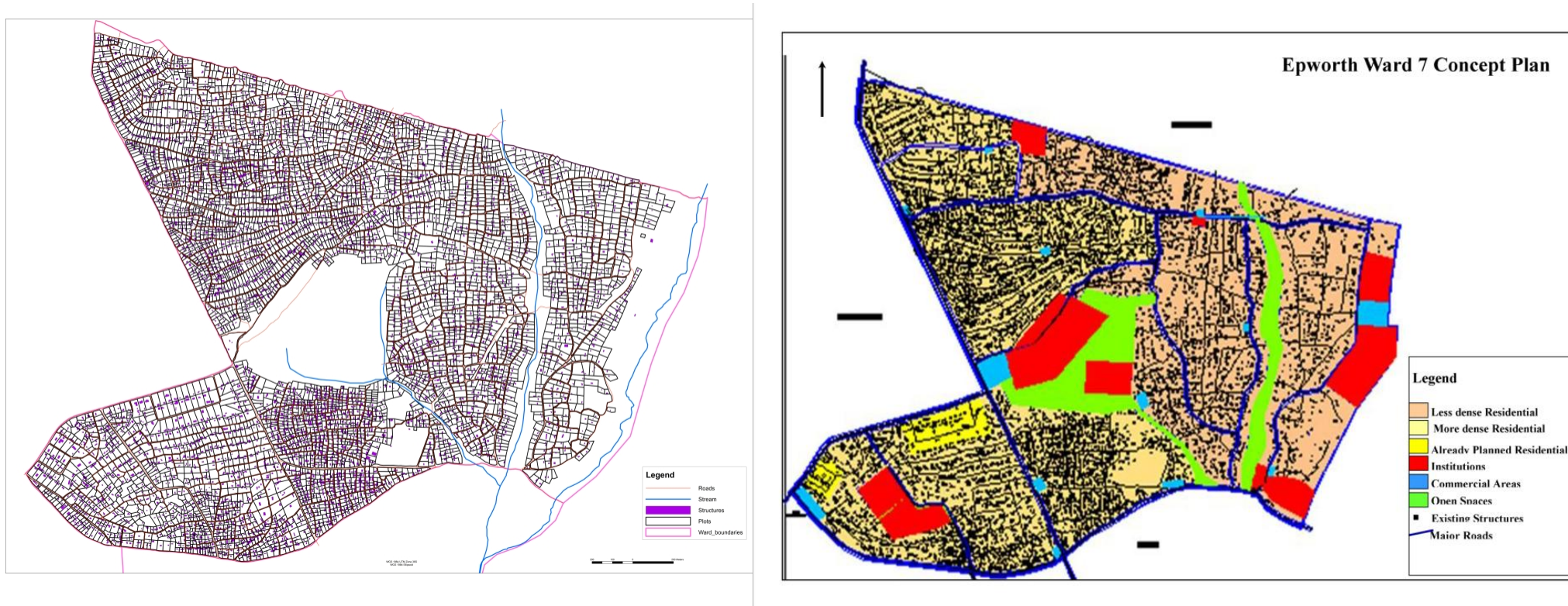
- **reducing hazards** *e.g. watershed management to reduce flood waters' speed & volume; protected water supplies when it floods*
- **reducing risk** *(e.g. good storm & surface drainage reaching everyone)*
- **reducing exposure** *(reducing number of people exposed to flooding through drainage & good land-use management)*
- **reducing impact** *(getting flood waters away, keep epidemics down, help people recover/rebuild & become more resilient to future hazards)*
- ***Remove the hazard and there is no group vulnerable to it***

# Planning for resilience in informal settlements

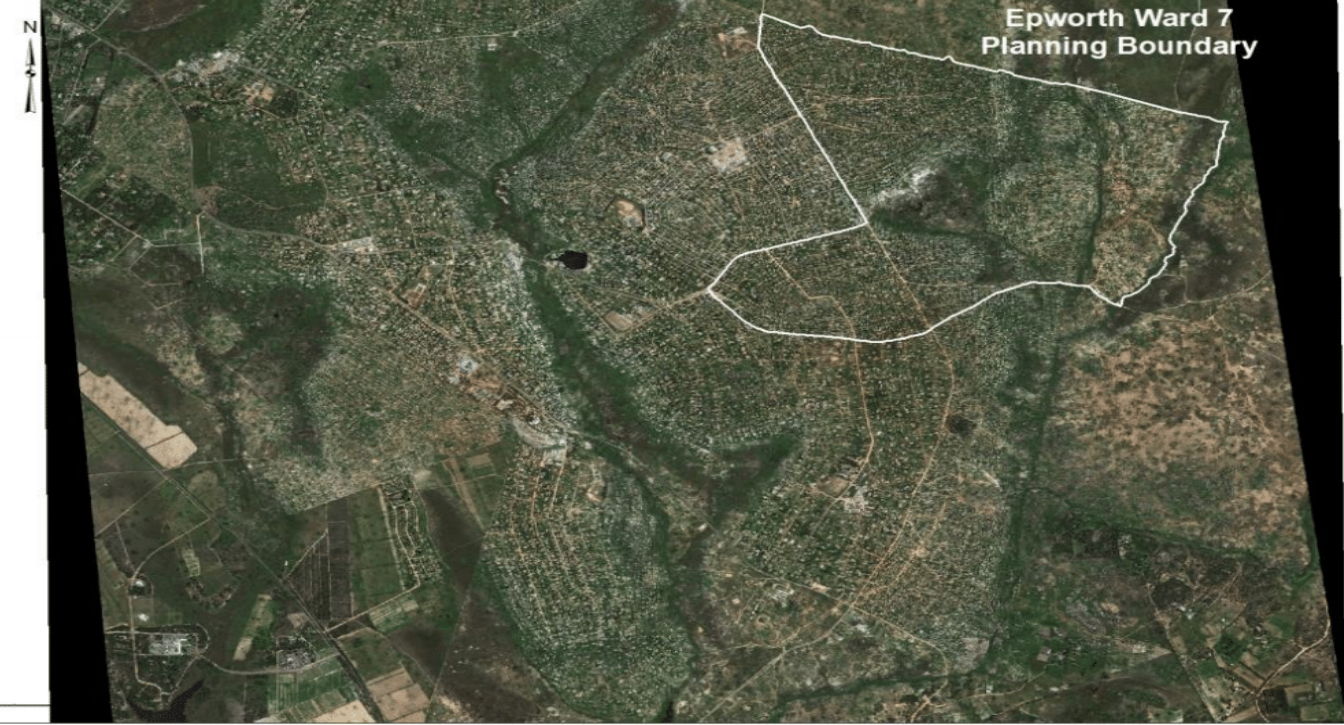
The 32 slum/shack dweller organizations that are affiliates of Slum/Shack Dwellers International have developed a capacity to undertake very detailed enumerations of informal settlements.

- They have done these and slum profiles in thousands of informal settlements in 450+ cities
- These enumerations provide the information base for planning upgrading initiatives and for negotiating with local governments.
- With detailed information on each household, including maps showing all plots and details of their problems and their priorities

# Epworth in Harare; informal settlement of Magada with 6,500 inhabitants



Chitekwe-Biti, Beth, Patience Mudimu, George Masimba Nyama and Takudzwa Jera (2012), Developing an Informal Settlement Upgrading Protocol in Zimbabwe - the Epworth Story, *Environment and Urbanization* Vol 24, No 1



satellite data supporting on the  
ground action, not replacing it

# Slum/squatter enumerations

- They engage all residents so everyone knows what is being done
- Their foundations are community savings groups; most savers and saving group managers are women
- They report back the findings to residents that then generates more discussions – and negotiated solutions (for instance on reblocking)
- They fill a large data gap for local governments



Slum/Shack  
Dwellers  
International (SDI)  
and the core  
methods for  
upgrading

# Conclusions

- Upgrading if done well transforms housing and living conditions and contributes much to resilience
- Getting title or a formal address also opens other possibilities e.g. bank account, insurance ....
- But successful examples of upgrading usually include (and depend on) much better relations with local government
  - *Including all departments*
- These usually include partnerships with local government
  - *Big pipes and small pipes*
- Many innovative partnerships between informal settlement dwellers and local governments include measures to increase resilience
- These changed relationships providing the foundation from which other climate change issues can be addressed

# Informal settlements and inclusion

- Inclusion in what:
  - In infrastructure systems (e.g. connection to water mains and paved roads)
  - Services (e.g. access to government schools)
- Governance
  - In informal settlement (representative community organizations)
  - At city scale; community organizations coming together to negotiate with and work with city government
- Inclusion for whom