Carlos A. A. Bartesaghi Koc

carlosbarta3@hotmail.com c.bartesaghikoc@unswalumni.com IFaculty of Built Environment. Australian Graduate School of Urbanism (AGSU) University of New South Wales. Sydney – Australia

SQUATTER SETTLEMENTS AS SOCIAL CATALYSTS TOWARDS A SUSTAINABLE URBAN DEVELOPMENT: A POSITIVE LOOK AT THE CASE OF VILLA EL SALVADOR, LIMA-PERU

RESUMEN

Se ha estimado que más de 900 millones de personas viven actualmente en asentamientos marginales en países en vías de desarrollo (Montgomery 2005); fenómeno que se originó a partir de un acelerado proceso de urbanización desencadenado por una masiva migración urbana (Johansson et al. 2011). El propósito de este documento es determinar e identificar aquellos atributos, factores, estrategias y políticas necesarias para aumentar la capacidad de auto-mejora de estos asentamientos para lograr convertirlos en lugares menos vulnerables, más resistentes y ambientalmente más responsables. El Caso de es-

tudio de Villa El Salvador, ubicado en Lima-Perú, es analizado como evidencia de que las organizaciones de base y el modelo de 'Auto-ayuda' liderados por la propia comunidad son efectivos para un desarrollo urbano sustentable. Este análisis hace hincapié en la necesidad de cambiar la actitud hacia los 'Pueblos Jóvenes', descubriendo sus potencialidades para proveer vivienda asequible y desarrollo socio-económico para los más pobres. Las conclusiones intentan lograr un mejor entendimiento de esta problemática desde una perspectiva mucho más humana y positiva, con la esperanza de contribuir en el proceso de

acrecentamiento e integración urbana de comunidades segregadas; una visión que demanda la incorporación de los pobladores como los catalizadores sociales necesarios para lograr un futuro más equitativo y sustentable.).

PALABRAS CLAVES; BARRIADAS - PUEBLOS JÓVENES - AUTO-RENOVACIÓN - MODELO BOTTOM-UP - PLANIFICACIÓN SOCIAL - AUTO-VIVIENDA - DESARROLLO URBANO SUSTENTABLE, VILLA EL SALVADOR.

ABSTRACT

It is estimated that more than 900 million of the total population of developing countries is living in squatter settlements (Montgomery 2005); phenomenon originated from the accelerated process of urbanisation unleashed by the massive migration of the poorer from rural to urban areas (Johansson et al. 2011). The purpose of this paper is to determine and identify those attributes, factors, strategies and policies necessary for boosting the upgrading capacity of slums in order to turn them into less vulnerable, more resilient and environmentally-oriented places. The case study of Villa El Salvador, a slum located in Lima-Peru,

is analysed as a supporting evidence of effective grass-roots management and as an exemplary self-help model led by residents and community organisations. This analysis emphasizes the necessity to change the attitude towards squatter settlements, by unveiling their potential to provide affordable housing and socio-economic development to the poorer. Conclusions are intended to gain a better understanding of this problematic from a more positive and humanitarian perspective, with the hope of contributing with the accretion process and urban integration of segregated communities; a vision that demands the incorpo-

ration of dwellers as the social catalyst needed to achieve a more sustainable and equitable future.

KEYWORDS: SQUATTER SETTLEMENTS - YOUNG TOWNS - SELF-UPGRADING - BOTTOM-UP MODEL SOCIAL PLANNING - SELF-HOUSING - SUSTAINABLE URBAN DEVELOPMENT - VILLA EL SALVADOR.

INTRODUCTION

TWO SIDES OF THE COIN

In 2008, for the first time in human history, urban areas were hosting more population than rural settlements, as a result of an exaggerated process of urbanization and migration across the world. These poor migrants opted to invade peripheral and vacant land of cities, inhabiting in self-made shelters, mainly made of discarded and precarious materials (Johansson et al. 2011).

This phenomenon, that have reshaped urban territories, created new urban models, and encompassed both positive and negative consequences, is globally called as the Squatter Settlement or Slum; however, it has received multiple names depending on their location such as pueblo joven or barriada in Peru, favela in Brazil, shanty town in South Africa and Chabola

in Venezuela (Sakay et al., Johansson et al. 2011). In terms of sustainable urban development and welfare of cities, these informal settlements signify a great challenge for urban planners, designers and decision makers due to their complex social implications and the important role they have demonstrated to play in defining the economy, spatial growth and evolution of many cities in developing countries (Pugh 2000, Neuwirth 2005). Although they differ on their attributes related to location, size, construction materials, land tenure and spatial morphology, they coincide in the factors that triggered their inception such as migration, informality, lack of affordable housing, exacerbated urbanization process and an unattended response from governments and authorities (Ulack 1978, Johansson et al. 2011). Whereas, many coincide that these slums are

serious threatens comprising sanitation, legal,

physical, aesthetical and environmental problems, some others recognise the possibility of regulate them to trigger positive urban changes to tackle the lack of affordable housing and infrastructure in particular distressed conditions (Ward 1976, Eckstein 1990, Chambers 2005).

Consequently, the study of these settlements is of extreme value if it is intended to plan and design more sustainable cities in the future. Thus, the purpose of this paper is to determine and identify those attributes, factors, strategies and policies necessary for boosting the upgrading capacity of slums and to turn them into less vulnerable, more resilient and more environmentally-oriented places. The case study of Villa El Salvador, a slum located in the left southern corner of Lima-Peru, is analysed as a supporting evidence of effective grass-roots management and as an exemplary model of self-help led by residents through community

organisations. Accordingly, the conclusions of this analysis will be elaborated from the review of this case and other literature, and also from personal experiences, and learning gathered in previous visits to this 'young town'.

Finally, this document emphasizes the necessity to change the attitude towards squatter settlements, by unveiling their potential to provide affordable access to housing and socio-economic development. Conclusions are intended to gain a better understanding of the problem of squatter settlements in many developing countries, those that should be addressed from a more positive and humanitarian perspective. This will definitely contribute with its accretion process and urban integration under a holistic or systemic approach, instead of perpetuating a segregating attitude.

This situation demands from us to put additional pressure on professionals and governments in order to start thinking not only out of the box, but perhaps thinking in a new box to cope with this phenomenon. This means, we need to implement new collaborative planning methodologies and strategies to shift the decision-making process by using settlers as the social catalyst needed to a more equitable and sustainable future.

THE SQUATTER SETTLEMENTS AND THEIR ROLE IN SHAPING THE SUSTAINABLE CITY IN DEVELOPING COUNTRIES

Over the last decade the world entered to the Urban Millennium in which for the first time in human history more people was living in cities than in rural settlements (Johansson et al. 201). In fact, UN-Habitat has estimated that more than 900 million of the total population of developing countries is currently living in slums or squatter settlements (UN-Habitat 2003 in Montgomery 2005); phenomenon originated from

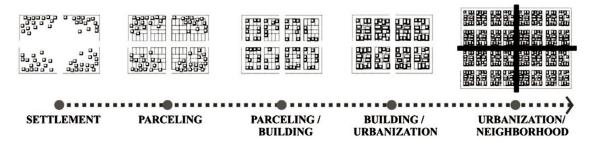


Figure 1. -Schematic representation of the urbanisation steps of the ascendant or informal planning model applied for squatters settlements in Lima-Peru. **Source**: Sakay et al.1999: Fig.2.

the accelerated process of urbanisation unleashed by the massive migration of the poorer. Nowadays, urban planning has to rethink the urban boundaries and characteristics of cities by considering the proliferation of informal settlements, those that usually locate in peripheral areas and occupy private and public vacant land. These have become into new urban models where newcomer migrants can satisfy their unattended necessities of shelter, employment, security, health, education and sanitation. (Ulack 1978, McElroy 2000, Chambers 2005, Johansson et al. 2011).

For a better understanding of the potential capacity of slums for shaping a sustainable future; firstly, it is necessary to point out that sustainable development criteria largely differ between developed and developing countries. These differences stem from the fact that in distressed conditions, socio-economic development is a more urgent issue to resolve in comparison to environmental aspects (Gibberd 2005).

Indeed, experts have identified that the most urgent challenges to overcome by the developing world in order to achieve a real sustainability are those related to the propagation of squatter settlements. Hence, aspects such as rapid population growth, uncontrolled urbanization, illegal land tenure, illiteracy, unhealthy living

conditions, lack of sanitation and infrastructure, economic uncertainty, and weak institutional governance should be priority topics in governments' agendas (UNEP 2002, Du Plessis 2007).

From the urban planning perspective, the 'Ascendant' and the 'Descendant' models have been established for a better understanding of this problematic by contrasting informal and formal planning approaches (Sakay et al. 2011). Whereas the formal urban planning or 'Descendent model' follows a pattern of Planning - Parcelling (provision of services) - Building and Settlement; the informal planning, contrarily proposes a reversed 'Ascendant pattern' starting from Settlement (Squatting), continuing with Parcelling - Building, and ending up with the Formal Urbanization (Figure 1) (Ibid.).

From this approach, authors such as Turner (1976), Mangin (1967), Sakay (et al. 2011) and Johansson (et al. 2011) coincide in indicating that the squatter settlement has demonstrated to be an 'Ascendant model', opposing radically to the traditional urban planning that in many cases is ineffective to propose feasible, tangible and effective solutions in well-established informal contexts. But, even though the ascendant model is capable to provide shelter straightforwardly, the major issue lies in the provision of infrastructure

services. This usually happens in the last step of the process, being one of the most relevant and decisive aspects that accelerates or delays the accretion and upgrading of a squatter community (Sakay et al. 2011).

When comparing both models, it can be observed that the top-down planning has shown to be more resilient to change and consequently less flexible, contrarily to the ascendant model that is capable to provide a development from below (Fisher 1984), generating new urban dynamics by itself (Neuwirth 2007, Sakay et al. 2011). Therefore, informal planning has proven to resolve many issues that the state apparatus cannot. Successful case studies worldwide indicate that squatters establish their own self-government, represented through grass-roots organisations, to gradually gather the necessary political relevance to attend their demands and legal rights (Pugh 2000, Neuwirth 2007). Hence, these community-based groups, rooted in the concept of mutuality, have been able to control land-uses, monitor land tenure and provide solutions for housing, services. transport and public spaces, as a response to the inaction of governments (Montgomery 2005, Neuwirth 2007).

These two distinctive planning approaches, demonstrate how polarised are the attitudes towards informal settlements (Ulack 1978). Negative perspectives persist in demonizing slums as places of human misery, where extreme poverty, illiteracy, chaos, hunger, high mortality, delinquency, and precarious health conditions are direct consequences of living in these informal conditions (Neuwirth 2007). However, these assumptions underestimate the real organizational (social), political, and economic power of these communities; having shown that while planners continue to focus on negative aspects, developing cities will not

be able to overcome their socio-economic and environmental problems (Mangin 1967, Neuwirth 2007, Johansson et al., Sakay et al. 2011).

On the contrary, from a positive attitude we should reconsider the roles of slums beyond their aesthetic and physical appearance, due to their value for the wider urban economy of cities (Pugh 2000, Montgomery 2005). Indeed, Neuwirth (2005, 2007) recognise them as vibrant and bustling places where all population work tirelessly to overcome their vicissitudes and that despite of their informal economies, slums could serve to reduce poverty and unemployment (Montgomery 2005)

With an appropriate guidance and technical management, they can be catalysts of urban change, capable of improving societal values such as sense of community, creating opportunities to access new economic markets, and generating new social dynamics for the whole city. To achieve this, it is required an inclusive and participative policy to improve the living standards of the poorer through low-cost self-housing, the provision of infrastructure, and more employment opportunities to fight delinquency and insecurity (Mangin 1967, Chambers 2005, Johansson et al., Sakay et al. 2011).

Security of land tenure, accessibility to affordable housing and access to politics are key aspects to bring squatters into the formality (Neuwirth 2005). In fact, a shift of their status from illegal invaders to legal owners grant them the security to continue investing, building and upgrading their houses and businesses. Nonetheless, methods for the formalisation of illegal tenure should be carefully studied in order to avoid plunging owners into unpayable mortgages used for purchasing the land (Montgomery, Neuwirth 2005).

Moreover, in many cases these efforts could be tarnished by corruption, fraudulent titles and illegal arrangements that might spark social conflicts between

squatters and authorities (Montgomery 2005.).

From an cological point of view, Neuman (2005) explains that sustainability should not be measured exclusively in terms of the urban form, physical characteristics and urban densities of cities, but more importantly in terms of the underlying environmental forces and processes that shape the real world in a constant interchange of energy and resources. From this holistic outlook, squatter settlements should be acknowledged as real sustainable communities when considering the practices and lifestyles of their settlers. These are mainly characterised by the use of massive transportation systems, use of local-scaled technologies, knowledge and resources, recycling of discarded materials for construction, empowerment of local labour and active community and collective participation.

It has been also said that the long-term success of squatter settlements is attributed to both its location and its age (*Ibid.*). As a result, the older is the settlement, the better located and the closer to the employment markets, services and amenities, and consequently the more integrated to the city (Mangin 1967, Johansson et al. 2011). Although there are no ultimate solutions to stop the squatting process worldwide, it has been proved that the faster the services and infrastructure are provided, the more developed and integrated the settlement is to the city (Sakay et al. 2011). In addition, the physical characteristics (i.e. topography, weather) are crucial aspects in defining the speed and coverage of the

In fact, it is necessary to consider cases where the geographic location and topography are strong impediments for implementing infrastructure networks as well as in case that these settlements are extremely vulnerable to climatic events and

infrastructure needed to boost their upgrading

(Ulack 1978).

natural disasters. As a result, further research to overcome these issues is required by focusing on topics such as alternative technology-scaled and indigenous solutions (Fisher 1984), GIS and remote sensing mapping, integration of green infrastructure in planning, delivery of resilient communities and collaborative planning as well as climate change mitigation and adaptation strategies.

To summarise, the fully integration of squatters communities into the legal and formal structures of the city is a relatively long-term process that demands the collaborative, mutual and active engagement of all stakeholders (Ulack 1978). Despite of the negative aspects that these communities encompass, a positive attitude is needed to provide them with stronger planning mechanisms and bodies to secure their land tenure, access to infrastructure and for avoiding arbitrary evictions; solutions that should arise from the same population instead of solely depending on top-down decisions (Neuwirth 2007, Sakay et al. 2011).

VILLA EL SALVADOR, FROM SQUATTING TO SELF-DEVELOPMENT COMMUNITY

As many developing cities, Lima-Peru has been shaped by squatters settlements since the 1950's (Figure 2a), a urban pattern that remains until nowadays as an unconventional model extensively disseminated as consequence of a lack of appropriate formal planning policies and mechanisms of control (McElroy 2000).

The migration process in Peru has concentrated the majority of newcomers in Lima due to several reasons. The primacy of the capital has been historically set up from the times of the colony and ratified by its privileged geographic location by the sea, the presence of the port of Callao and the great amalgam of cultural and employment opportunities (Lloyd 1980, Chambers 2005). But, it

was by the end of the 1960's that urban migration reached its peak when countless peasants decided to abandon the countryside as a result of the failed agrarian policy (Reforma Agraria) enforced by the former president Juan Velasco Alvarado, unfolding the first migration wave in the whole country (Swenarski 1989, Chambers 2005).

Then, a second wave happened some years later, when in the 1980's the terrorism¹ broke out across the country, forcing the survivors of abused and slaughtered indigenous families to seek refuge in the sandy lands and steeped hills of the capital's peripheries (Chambers 2005). To this situation was added the contemporary political centralisation encouraged by the government of Alberto Fujimori (1990-2000) giving rise to the birth of a myriad of Pueblos Jóvenes or Barriadas (slums) (Figure 2b) (Dosh et al. 2006) as a response to the inadequate -and almost non-existentplanning policies and the inability of public and private institutions² to provide affordable housing for the increasing population (Lloyd 1980). In spite of this atmosphere of despair and inequities, Villa El Salvador (VES), which is one of the biggest squatter settlements in Peru, tell us a different story: one of success and international recognition. This squatter community originated in the 1970's (Figure 2b) with only 500 families, those that increased up to 9000 in just few days. They invaded a sandy piece of land in the southern periphery of Lima and after forty years of existence is still receiving migrants coming from the highlands and provinces. Despite of being a squatter settlement, nowadays it has become in one of the most relevant and important districts throughout the country in terms of its GDP contribution (Gross Domestic Product) and

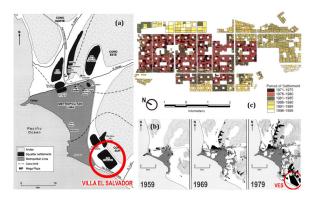


Figure 2: (a) (b) The squatter settlements of Lima and (c) The growth phases of Villa El Salvador masterplan. **Source:** McElroy 2000:Fig.3 & Chambers 2005 Fig.5 & 6

its Active Economic Population Index (Swenarski 1989, Bustamante 1993, McElroy 2000).

Villa El Salvador has been internationally praised, but behind its success, the self-management approach (Robinson 1988), the active community participation and the grass-roots management initiatives were the crucial aspects that secured its rapid upgrading and economic development (Swenarski 1989, Bustamante 1993).

In the absence of governmental action, squatters established an independent planning committee (also called junta vecinal [Fisher 1984]), locally named as CUAVES - Comunidad Urbana Autogestionaria de Villa El Salvador (Self-Managed Urban Community of Villa El Salvador) (Swenarski 1989, Bustamante 1993). Its implementation was an important step at the very beginning for securing the application of a very organized and hierarchized administration model that encouraged residents to actively participate in decision-making in a collaborative fashion (*Ibid.*). Indeed, experts highlight the instauration of this committee as one of the most important planning features of Villa El Salvador, encompassing high levels of grass-roots initiatives, communal work

¹ By that time, the most notorious terrorist groups were 'Shining Path' (Sendero Luminoso) and the 'Tupac Amaru Revolutionary Movement' (MRTA – Movimiento Revolucionario Túpac Amaru).

² Most of them struggling and dealing with the consequences of terrorism and the violence from domestic armed conflict.

(faenas) and cooperative ownership of land, emulating ancient Peruvian traditions dating back to the Incas times (Bustamante 1993, Ioris 2012). It has been said that the case of "Villa El Salvador was unusual because they had α (zoning) plan" (Dosh et al. 2006:43) that was elaborated by the CUAVES under a Bottom-up approach. This "Popular Integral Development Plan" (Swenarski 1989, Bustamante 1993) as they called it, is a regular pattern of checkerboard-like quadrangular subdivisions named 'residential groups', each one containing 16 independent blocks with 24 families per block allocated in equally-sized plots (Figure 2c) (Swenarski 1989, Mc Elroy 2000).

This model is characterised by a polycentric structure of mixed-uses and medium densities where each block has its own communal organization (leader), services (unions, youth groups, communal kitchens), facilities (health, education, social), squares and public spaces distributed conveniently to promote a walkable and networking community³ that was entirely self-built during designated communal labor days (faenas) (Swenarski 1989).

Furthermore, this plan possesses additional features that make it very versatile and flexible. This is viewed as a time/space model that has given way to continual urban transformations and adaptations (Mc Elroy 2000). Horizontal subdivision of plots were subsequently followed by the vertical superposition of other uses; achieving varied land-use hybridisations such as mechanic workshops or groceries stores operating in ground floors and owners' residencies locating in upper levels (Chambers 2005).

Hence, Swenarski (1989:2) qualifies this model as "an unprecedented experience of a

bottom-up democratic structure", adapted to population's necessities, being a lesson that should be applied and replicated in other cities with similar conditions worldwide. Similarly, it is acknowledged that the accelerated accretion process of Villa El Salvador was propitiated by the constant self-housing consolidation that improved on time thanks to Non-Governmental and private support (McElroy 2000).

By the end of the 1990's, some efforts were made to control and keep an eye on the illegal housing, that was rapidly spreading out across the country, by the creation of a Commission on Formalization of Informal Property (COFOPRI - Comisión de Formalización de la Propiedad Informal) in 1998 (Dosh et al. 2006). Even though this commission aimed to grant squatters with formal titles and propitiate self-housing by providing them with legal opportunities to get banking loans, it was also intended to implement a cadastre database analysis and create a more complete housing inventory (building heights, construction material, demographic distribution and urban densities) for planning purposes (Mc Elroy 2000, Dosh et al. 2006). Nevertheless, the complex political climates and the public opinion at that time had opposed reactions that led to COFOPRI's decommission. While some defended the incorporation of the 'sleeping capital' represented by informal housing into the formal economy of the country (Hernando de Soto in Neuwirth 2005 and Dosh et al. 2006), others ascribed this to private vested interests aimed to invigorate the real estate markets and banks.

In the particular case of Villa El Salvador, it was even said that COFOPRI was used by the former president Fujimori as a political tactic for the manipulation of the electorate, due to the significant number of population living in the district (Dosh et al 2006).

From an economic point of view, Villa El Salvador has shown a close relationship between the municipal administration and the grass-roots organisations. Moreover, planning strategies were sufficiently skilful to deal with the prevailing 'informality' context that was also used as an opportunity to develop a new economic model. This encouraged local entrepreneurship and private industries; organising the population in federations, unions and business organisations designated to work in specific industrial, commercial and agricultural zones located aside from the residential areas (Robinson 1988, Bustamante 1993).

Nowadays, Villa El Salvador's industrial park has become in one of the most important in the country that initially originated in small workshops or at homes (Swenarski 1989). This influenced enormously in the rapid provision of infrastructure that facilitated its consolidation and integration to the formal economic markets of the city. Moreover, this economic model facilitated better household's income while reduced pressures on the housing, mobility, employment and infrastructure demands (Ulack 1978, Bustamante 1993, McElroy 2000).

Surprisingly, Villa El Salvador of today is quite different to the first squatter settlement of the 70's (Figure 3). After a long and constant process of self-upgrading, it can be noticed that this Pueblo Joven is a model that demonstrates how underlying social and economic processes were masterly incorporated in a highly participative planning process. This plan originated in the state, but it was entrusted to the settlers for their management and improvement. Undoubtedly, Villa El Salvador is an example of success towards self-sustainability and community development, but it will continue to be dependent on its settlers' pervasive persistence and desire of self-improvement.

³ Concept and characteristics of walkable communities are described in Ritchie *et αl.* 2009.



Figure 3: Villa El Salvador in 1970 (left) and nowadays (right).

Source: Roberto Gutierrez and www.insidelima.wordpress.com

Supporters Manage Resources Decentralize Production Development Pragmented Building Industry

Providers

Figure 4.1: Differences between the Provider and Supporter models by Nabeel Hamdi. The questions mark explains the possibility of combining both models in the future. Source: Johansson et al. 2011: Fig. 2.6.

UNDER DIFFERENT OUTLOOKS: UPGRADING MODELS, SELF-HELP COMMUNITIES AND SOCIOECONOMIC DEVELOPMENT

Almost every city in the developing world has to deal with the squatter settlement phenomenon, where upgrading and redevelopment appear to be the more affordable options to counteract the 'eradication policies'. These are encouraged by some planners and governments worldwide, those that fundament on ideas that originate as an aversion to the poor (Mangin1967,Yap et al. 2010,Johansson et al. 2011).

This aversion has erroneously led to the majority to consider the eviction, demolition and relocation as final solutions. Nonetheless, such policies are not fully effective to reduce poverty and to fight against the proliferation of slums; on the contrary, forced evictions have proved to create more poverty, forcing dislodged squatters to invade new vacant land elsewhere and start from zero once again (UN Millennium Project in Montgomery 2005).

Squatter communities need to be considered as fixed parts of the formal city and their settlers

need to comprehend this fact with the support of planners and decision makers. It is not just a matter of deny, evict and displace them, because this create more social disruptions and increases public expenditures (Neuwirth 2007). Indeed, Turner (1976) and Sakay et al. (2011) coincide in considering young towns as vital organisms that define the city's urban functions, generating new dynamics that could be managed to shape the cities of tomorrow.

In this context of dichotomies, two upgrading models, the 'provider' versus the 'supporter', arises from contradictory point of views (Figure 4). The provider model (top-down), generally associated to the modern urban planning, advocates that slums should be razed and replaced with new repetitive houses, those that residents are not able to adequate beforehand according to their necessities and concerns; excluding the community from the decision-making and the planning process (Johansson et al. 2011).

On the contrary, the supporter model also called self-help or bottom-up model, empowers residents to be involved in the design of their built

environment, with the technical and economic support of non-governmental, public and private partners; envisioning self-help communities that understand the socio-economic and natural processes that evolve over time (*Ibid.*).

In this sense, professionals and governments should intermediate not only to propose top-down solutions that mostly depend on the political agenda; but on the contrary, bottom-up strategies that can be maintained over time, ensuring these are not being influenced by momentary political climates (Yap et al. 2010, Johansson et al. 2011). Even though there is no single solution for squatting, both models could be merged at some extent and be adapted to particular and specific conditions (Johansson et al. 2011). Similarly, Turner (1976), whom is attributed the self-help model, and Lobo (1992) emphasise the positive replications of the self-help approach in achieving a more sustainable development by providing tenure possibilities, low-cost and affordable housing, as well as better access to sanitation and services, giving dwellers the capacity to build their own communities at their pace (Mangin 1967,

Fisher 1984). Furthermore, the residents' feelings and strong attachments to the place alongside their 'sense of community' are motivations that encourage them to improve and look after their environment and nature (Pugh 2000, Johansson et al., Sakay et al. 2011).

In terms of socio-economic development: "Slums are not only a place where people live, but also a place where people work to make a living" (Johansson et al. 2011:32). This assertion can be corroborated in the case study of Villa El Salvador, which success depended on the community and neighbourhood organisations (or juntas vecinales) that voiced the popular clamour for the improvement of their living standards (Fisher 1984, Chambers 2005).

As a result, new planning approaches should contemplate to shift the development of slums by using their community bodies to lever the infrastructure growing and the physical improvement of the whole city as a sum of different components and not just as disaggregated parts (Gilbert et al. 1984). This unconventional outlook challenges us to apply more sensitive and humanitarian attitudes. Only then, and after the provision of technical support⁴ and know-how, these settlements will be more resilient, while they are also extremely flexible to confront future urban and climatic challenges (Pugh 2000).

This valuable know-how should be provided by professionals with a serious commitment in developing a city that needs to learn how to cope with the squatter settlement phenomenon, instead of implementing international models that do not understand the socio-economic and physical aspects of each settlement in particular. In this sense, future research and technical practices should be focused on topics such as remote sensing technologies, demographic and

CONCLUSIONS

The aim of this paper was to gain a better understanding of the problem of squatter settlements in many developing countries addressed from a more positive and humanitarian perspective. Detractors of positive visions need to recognise that these settlements are inevitably a legitimate form of urban development in the developing world that demands the attention of governments and professionals.

The future of these segregated communities lies in their settlers' ability to work in cooperation with authorities in order to implement 'ascendant or supporter models' as the case of Villa El Salvador. However, this model has demonstrated to be successful only if it is entrusted to wellorganized community organisations to lever the self-housing, the infrastructure growing and the socioeconomic development towards self-sustainability. Indeed, many experts coincide that the bottom-up model is an unconventional approach that should be examined more closely to be used for delivering new urban dynamics, patterns and processes.

Although the upgrading process of a squatter settlement depends on many aspects such as its location, age, proximity to economic markets and employment as well as the provision of infrastructure and housing, it is also important the commitment and willingness of residents, authorities and professionals to cooperate to find affordable solutions in conjunction, and not in a segregated way.

This signifies that the education on planning should be focused on preparing professionals in the use of grass-roots organizations and community participation to produce new knowhow and strategies that propitiate a development from below. Nowadays, squatter settlements seem to be a feasible way to provide the poorer with shelter straightforwardly, even so they need of appropriate guidance and mechanisms to turn them into effective self-help communities. In summary, this vision demands the inclusion of dwellers as the social catalyst needed to achieve more sustainable and equitable cities.

spatial databases, GIS-based mapping analysis and the development of new urban and housing policies (*Ibid.*).

⁴ Mentioned as indigenous technical knowledge in Fisher (1984).

REFERENCES

- BUSTAMANTE B., A., (1993), 'Popular participation, property rights and subversion: the case of Villa El Salvador in Lima, Peru. (Perspectives in Comparative Law III)', Capital University Law Review, Vol.22(4), p.925-938.
- CHAMBERS, B. (2005), 'The Barriadas of Lima: Slums of Hope or Despair? Problems or Solutions?', *Geography*, Vol.90 (3), pp.200-224.
- DOSH, P., LERAGER, J., (2006), 'Surprising trends in land invasions in metropolitan Lima and Quito', Latin American Perspectives, Vol.33(6), pp.29-54.
- DU PLESSIS, C., (2007), 'A strategic framework for sustainable construction in developing countries', Construction Management and Economics, Vol.25 (1), p.67-76.
- ECKSTEIN, S., (1990), 'Urbanization revisited: Inner-city slum of hope and squatter settlement of despair, *World Development*, Vol.18(2), pp.165-181.
- FISHER, J., (1984), 'Development from below: Neighborhood improvement associations in the Latin American squatter settlements', Studies In Comparative International Development, Vol.19(1), pp.61-85.
- GIBBERD, J., (2005), 'Assessing sustainable buildings in developing countries the sustainable building assessment tool (SBAT) and the sustainable building lifecycle (SBL)', Proceedings of the world sustainable building conference, Tokyo, p. 1605–12.
- GILBERT, A., & WARD, P., (1984), Community participation in upgrading irregular settlements: The community response', World Development, Vol.12(9), pp.913-922.
- IORIS, A. A. R., (2012), 'The geography of multiple scarcities: Urban developmentand water problems in Lima, Peru', *Geoforum*, No.43, pp.612–622.
- JOHANSSON, L. & JOSEFSON, E., (2011), 'From Different Perspectives A Case Study of a Slum Area in Bhubaneswar, India', Diploma Work for Master's Degree Blekinge Institute of Technology.
- LLOYD, P. C. (1980), 'The "young towns" of Lima: aspects of urbanization in Peru', Cambridge University Press, Cambridge Cambridgeshire; New York.
- LOBO, S. (1992), 'A house of my own: social organization in the squatter settlements of Lima, Peru', University of Arizona Press, Tucson, Arizona.
- MANGIN, W., (1967), 'Latin American Squatter Settlements: A Problem and a Solution'. Latin American Research Review, Vol.

- 2, No. 3, pp. 65-98.
- MC ELROY S. A., (2000), 'Examining in situ accretion: The acceleration of housing consolidation in Villa El Salvador', Revista Geográfica, No. 127, pp. 147-181.
- MONTGOMERY, M. R., (2005), 'Robert Neuwirth: Shadow Cities: A Billion Squatters, a New Urban World, Population and Development Review, Vol. 31, No. 2, pp. 373-376.
- NEUMAN, M. (2005), 'The Compact City Fallacy', Journal of Planning Education and Research, Vol. 25, pp.11-26.
- NEUWIRTH, R., (2007), 'Squatters and the cities of tomorrow', City: analysis of urban trends, culture, theory, policy, action, Vol.11 No.1, pp.71-80.
- NEUWIRTH, R., (2005), 'How shantytowns become real cities'. Fortune, Vol.152(8), pp. 59-62.
- PUGH, C., (2000), 'Squatter settlements: Their sustainability, architectural contributions, and socio-economic roles', *Cities*, Vol.17(5), pp.325-337.
- ROBINSON, E., (1988), 'Upstart Shantytown of 1960s Now Is Major Peruvian City; Upbeat Constituency Finds Pressure Pays', *The Washington Post*, [Washington, D.C] 26 Dec 1988: a33.
- SAKAY, C., SANONI, P. & HANAZATO, T. (2011), 'Rural to Urban Squatter Settlements: The Micro Model of Generational Self-Help Housing in Lima-Peru', *Procedia Engineering*, Vol.21, pp.473-480.
- SWENARSKI, L., (March 16, 1989) 'Peru's model self-help town: Villa El Salvador has won international praise for its effective grass-roots management', The Christian Science Monitor, Vol.81(76), p.12.
- TURNER, F. C. J., (1976), 'Housing by People. Towards Autonomy in Building Environments', London, Ed. Marion Boyars
- ULACK, R., (1978), 'The Role of Urban Squatter Settlements', Annals of the Association of American Geographers, Vol.68(4), p.535-550.
- UNEP, (2002), 'Agenda 21 for Sustainable Construction in Developing Countries', United Nations Environment Programme, UNEP- CSIR Building and Construction Technology, Capture Press, Pretoria.
- WARD, P. M., (1976), 'The Squatter Settlement as Slum or Housing Solution: Evidence from Mexico City', Land Economics, Vol. 52(3), pp. 330-346.
- YAP, K. S. & DE WANDELER, K., (2010), 'Self-help housing in Bangkok', *Habitat International*, 2010, Vol.34(3), pp.332-341.