

Housing for Low-income Groups in Ho Chi Minh City between Re-Integration and Fragmentation

Approaches to Adequate Urban Typologies and Spatial Strategies

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Summary

The metropolitan region of Ho Chi Minh City has been the greatest beneficiary of the ongoing transitional process in Vietnam, but this has been accompanied by a sharp rise of social polarization and spatial fragmentation. This paper analyzes the housing sector as an example of the complex dynamics of the transitional urban development. One of the highest income-housing price ratios in the world excludes large parts of the population, especially rural-urban migrants, from access to formal housing and has aggravated housing inequalities in general. New ideas on the provision of housing for low-income people are presented. Hereby, the concept 'Low Rise – High Density' for adequate urban typologies and spatial strategies is promoted. This comprehensive approach, based on proven strategies for sustainable urban development, is adapted to local culture, minimizes financial expenditure, considers socio-economic needs and provides environmental feasibility. A strategy towards re-integration, also requires the participation of all relevant stakeholders and the stronger incorporation of bottom-up initiatives and of residents' real-life expertise into public planning. Spatial strategies should be specifically developed concerning the redevelopment of residential areas in the inner city and housing in the areas of urban expansion as well as in the surrounding provinces.

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1 Introduction

The recent WTO entry of Vietnam marked the successful conclusion of the country's integration into the world economy and was a significant milestone of a gradual transitional process from a centrally-planned economy to a market-oriented economy since this process was started in the mid-1980s. The opening-up towards global capital and the adoption of an export-orientated industrialization policy has resulted in continuously high rates of economic growth, a huge decrease of the national

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poverty rate² and has paved the way for the development of a modern consumer society, driven by a growing urban middle class.³ The multidimensional impacts of this policy have led to heterogeneous development dynamics, which are driven by multiple forces and actors. Within this context, social, economic and spatial aspects of transition are interrelated.

The biggest urban agglomeration of Vietnam, Ho Chi Minh City (HCMC), became the country's most significant target region for flows of foreign direct investments (FDI). This engine of economic growth has mostly benefited from the ongoing transitional process. Here, the highest average per-capita incomes are found, which at over US\$2,000 per capita are more than triple the Vietnamese average. However, nowhere else in Vietnam is such a distinctive degree of polarization as well as fragmentation of urban society to be encountered (Taylor 2004; Waibel 2005^A).⁴ The most recent Vietnam Standard Living Survey has actually revealed an increase of urban poverty 6.6% to 10.8% between 2002 and 2004, the first such increase since the survey was started in the early 1990s (CIEM 2006: 91).

Within this paper, the analysis of the housing sector in the metropolitan region of HCMC serves as an example of the complex dynamics of the transitional urban development in Vietnam. Based on knowledge gained through the research work of an interdisciplinary consortium within the research initiative on 'Sustainable Development of Mega-cities of tomorrow' of the German Federal Ministry of Education and Research, new ideas on the provision of housing for low-income people will be given. The strategies, developed from the view of disciplines such as social sciences, geography, planning and architecture, refer to the redevelopment of residential areas in the inner city, housing in the areas of urban expansion as well as in the surrounding provinces. All in all, the balance of urban growth and redevelopment in the metropolitan region of HCMC is to be promoted.

2 Population Growth and Spatial Expansion

The transitional policy on a national scale led to an increase of the urban population in Vietnam from 19.8% in 1989 (NIURP 1992: 18) to 27.0% in 2005, a figure that is still low compared to other Southeast or East Asian countries (GSO 2006: 31). It can be safely assumed that the actual percentage of urban population in Vietnam is

² The reduction of the poverty rate (measured by international standard) from 58.1% in 1993 to 24.1% in 2004 can surely be labeled the greatest success of the Doi Moi policy on a national scale (CIEM 2006: 91).

³ Matthaes (2006: 15) says that the urban middle class of Vietnam, earning between 251-500 US\$ per month per household has increased in Hanoi and Ho Chi Minh City from about 30% in 1999 up to 55% in 2006. Almost 50% of these strata of society now own a mobile phone and 35% own bank accounts, for example.

⁴ Within the municipality of Ho Chi Minh City, the GDP per capita in PPP US\$ of the richest 20% of the population is 11 times higher than the GDP per capita in PPP US\$ of the poorest 20% of the population (NCSSH 2001: 90).

higher, as migrants lacking legal residential status are not included in these official figures, and because urban spatial expansion has often transgressed into formerly rural areas, with the respective administrative adjustments lagging behind. Over the last 15 years, approximately, HCMC has experienced a population increase of 60% from 3.92 million permanent residents in 1989 (NIURP 1994: 19) to 6.24 million permanent residents in 2005 (Statistical Office of HCMC 2006: 17). Adding to this, it is estimated that approximately 1.9 million migrants are living in HCMC and the surrounding provinces as temporary residents or commuters (Waibel 2005^B).

Thus, the settlement area has more than doubled in the past 20 years. The population of HCMC has mainly increased within the suburban districts on the periphery, where an uncontrolled urban sprawl has developed. From 1999 to 2005, the suburban districts like District 12 (+77%), Thu Duc (+64%), or Binh Tan (+58%) registered the highest rates of population growth within the municipality of HCMC (Gurby/Huong 2002: 9; Statistical Office of HCMC 2006: 17). The rural-urban migration to HCMC, and to a much lesser extent, suburbanization processes stemming from the core city, are primarily responsible for this development. One of the main reasons for migration has been the prospect of generally better income opportunities in the urban region for mostly unskilled workers (UNDP/UNPF 2005: 3ff.). Such opportunities could be found in the emerging factory compounds and Industrial Zones, and also in the informal economy. In most cases, the migrants initially found shelter in the widespread so-called boarding houses, rental and shareable small housing units, which are generally considered to be a transitional housing solution and are in many cases overpriced. The boarding house units and the individual houses were mostly erected spontaneously and often completely lacked technical infrastructure and transport connections. This has resulted in precarious living conditions for the inhabitants and in environmental problems for the city. Urban development and the partly illegal occupation of land have sometimes proceeded chaotically (Quang/Kammeier 2002: 374). The risks of unrestrained settlement development lie in the extensive land consumption due to uncontrolled growth and severe infrastructural deficiencies.

With the de-facto emergence of a metropolitan region, HCMC has even expanded beyond its administrative borders into great parts of the surrounding provinces like Dong Nai, Binh Duong, or Bia Ria – Vung Tau. The main catalyst for this process has been the erection of numerous Industrial Zones and factory compounds in these provinces, which have attracted several hundreds of thousands of migrants. A mega-urban region is coming into existence, compromising more than 10 million inhabitants⁵ but still lacking many of the institutional arrangements required for coherent development. However, this mega-urban region can not yet be labeled poly-centric, because it is still strongly dominated by the core city of HCMC.

⁵ In 2005, the population of the province of Dong Nai was 2,193,400 people, of Binh Duong 915,200, of Ba Ria – Vung Tau 2005: 931,000 (GSO 2006: 30).

3 The Challenge of Redevelopment

In contrast, the inner districts of the core city of HCMC registered a significant decrease of population density between 1989 and 2005⁶ due to the conversion of housing space into business space following the growing demand and the delayed development of a Central Business District (CBD) (Waibel 2004^A). In a development resembling the urban restructuring due to transition in China, the inner city began to feature vast possibilities for shopping, leisure, consumption, and the urban built environment became more distinctly global and modern in appearance. The main actors in this development process have been state or local private companies, and more importantly, transnational corporations; e.g., international hotel and retail chains. Furthermore, suburbanisation processes have reflected on inner-city development, as wealthier inhabitants moved to the luxurious new urban areas, especially to the south and the east.

In particular, the insufficient infrastructure in the inner-city marginal settlement areas resulted in unacceptable living conditions for the inhabitants and environmental problems even for the inner districts. The public administration reacted to the pressing demand for renewal of these areas with various upgrading and resettlement programs, supported by international donors like the World Bank. Displacement processes have been common, as poorer inhabitants were out-priced, marginal settlements along the canals were demolished and the population was resettled to other areas. (Waibel 2006^B; Wüst/Bolay/Du 2002). Evidence from two inner-city upgrading programs shows that the resettlement process destroyed the inhabitants' social and economic networks in many cases and therefore often the basis of their income. Still today, many of the households are struggling with existential financial problems (Waibel 2006^B: 2). Therefore, the resale of subsidized apartments at (higher) market prices has been very common. Most of the resettlement housing projects in HCMC have a unit resale rate of 70-100% within the first three years (VeT 2002: 14).

Further efforts in Ho Chi Minh City which aim at the improvement of the inner-city housing situation usually deal, however, only with certain technical fields or are so spatially limited that they have no effect on the level of the overall city. Upgrading strategies can therefore not be allowed to end with the implementation of single pilot projects but rather they must be applied comprehensively.

4 Housing Market in Transition

The transition toward a market system for the allocation of urban space has resulted in economic competition for urban space. At the same time, the commodification of

⁶ Between 1989 and 2005, there was a population decrease of -22% within District 1, of -19% within District 3, and of -14% within District 5 (Cholon) (NIURP 1994: 19; Statistical Office of HCMC 2006: 17).

space over several land use reforms (the first Law on Land was established in 1987) that allow land use rights to be traded (JBIC 1999: 72), led to a transfer of state resources into private hands (Waibel 2006^A: 47). Although land in Vietnam can not be privately owned as it is officially the collective property of the people, the so called 'land use rights' introduced through the land law in 1993 can be traded and serve as a socialist equivalent to the concept of land property.

Urban development is now particularly influenced by land markets. As in China, land use rights have become the major drivers for the physical development of the mega-urban region. Consequently, the distribution of housing and land has been marketized. The continuous withdrawal of the state as the supplier of housing and the far-reaching abolition of a subsidy-oriented housing policy for the lower-income population, coinciding with incentives for people to build their own houses, have set off a housing boom in Vietnam's metropolises. The marketization has led to a diversification of housing production in terms of quality, scale, and cost of housing, and has fostered the emergence of new actors, such as private enterprises, foreign investors, and individual households, as buyers or builders in the housing market. During the 1990s in particular, private households were the biggest and most important producers of living space (Quang/Kammeier 2002). Besides formal housing production, up to 80% of the total private construction took place without any regulation or permit, due to the weak political control of free-market forces and the deficient planning and licensing system in Vietnam. In HCMC, it is estimated that more than 50% of residential buildings were built without an official permit (Phat 2002: 5). Further, a severe backlog of land use certificates has developed as the HCMC authorities have offered only 25 percent legal land deeds for total 979,000 households up to the year 2002 (Lanh 2002: 3).

The unclear and incalculable land policy of these years, which coincided with a remarkable lack of legal land rights allocations as well as overlapping institutional planning competencies in terms of land use and property, led to an artificial shortage of land and of land use rights, respectively, in HCMC, and to a sub-optimal use of scarce land resources. This, in contrast to the importance of building costs in other countries, is one of the main causes for the high real estate and housing prices in HCMC. Another important reason is the fast economic growth, especially of the private sector, which resulted in improvements in living standards and income, and consequently increased demand for real estate for housing and business (CIEM 2006: 72). Also, the gradual emerging of market-based mortgage credit system supported this. Moreover, consumption was not longer the only motive for buying a house in the course of the economic development. House ownership became a status symbol, a way of defining oneself, and an investment for the future (Phe, Huong Hu 2002). Furthermore, policy measures like the reduction of taxes on transfer of land use rights and on registration fees for real estate transactions significantly increased the transaction volume of the market. When the real-estate market reached its peak in 2003, financial speculation played a decisive role. As Vietnamese citizens at the

time were reluctant to deposit money in banks, where interest was low, or to invest it in the new stock exchange, purchasing real estate or apartments was a favored option for capital investment (cf. without author VNS 26/7/2006; Thang 2005: 30). These factors caused a speculation bubble in the housing market (Waibel/Schnepf-Orth 2004).

Since 2004, the real estate market has remained stagnant, especially in the segment of moderately priced houses and apartments as well as in the market for small building plots and scattered houses. Policy measures like Decree 181/2004/ND-CP (dated October 29, 2004) which prohibited the subdivision of real estate into small plots and the sale of land with no building projects, aggravated this situation by forcing the investors to complete the building of houses and to provide the necessary infrastructure (CIEM 2006: 77). Since 2003, both the transaction volume and the prices have considerably fallen in this market segment, prompting the Vietnamese media to speak of a 'frozen market' (CIEM 2006: 73f.). The owners of real estate do not want to sell, because they would incur a loss, and are hoping for better days, with hopes being pinned especially to emerging new perspectives for HCMC after the country's accession to the WTO in November 2006. On the demand side, the incentive for buying real estate is low because prices are still exorbitant and unaffordable for many, and a further decline is expected (cp. without author VNN 26/07/2006). Thus, potential sellers and potential buyers have adopted a 'wait-and-see' strategy. As a result, Vietnam has one of the highest income housing price ratios in the world.

5 Access to Housing

This situation mainly penalizes low-income⁷ or poor households that require housing not for speculation or investment, but as a place to live. Although housing space in HCMC has increased by over 3 million m² on average during the last years and an average of per capita housing space of 14 m² has been reached (from 9 m² in 1992/1993; State Planning Committee/GSO 1994: 246; GSO 2004: 174), the rapidly rising demand for housing has not been met (Van Hiep 2005: 1). Low-income households are generally not able to compete on the housing market, and for many of them, access to legal housing has become unaffordable in recent years (Thang 2005: 30). Population growth and the influx of migrants have led to a critical demand for urban land for housing and development, as a result of which land values, even in peripheral areas, increased significantly. These developments, combined with the lack of legal land titles, can adversely affect all existing slums and squatter-

⁷ According to Le van Thanh, a scientist at the Institute of Economic Research/Urban Studies Section in Ho Chi Minh City, a low-income household in Ho Chi Minh City has a maximum total income of 2,500,000 VND/month (approximately US\$150). Given the average urban household size of 4.8 people[0] in the two lowest-income quintiles in Ho Chi Minh City (according to the GSO Living Standards Survey 2002), this would amount to 520,000 VND/month per capita.

occupied land. Even if they do not face a direct threat of eviction, the urban poor and their residential areas are thus exposed to the full force of the market without much protection. Also, any upgrading of the low-income areas leads to dramatic changes in housing prices, as there is a strong tendency to eventually replace low-income areas with more upmarket urban developments, leading to displacement processes (Verschure et al 2006: 27).

So far, local and international property companies have overwhelmingly invested in the construction of housing for high-income groups (these being the only ones who can afford to buy land on the market at high prices), and are strictly profit-oriented. For example, there is currently a huge demand for high-end serviced apartments, and achievable prices are three times higher than attainable prices for low- and mid-market premises (Detry et al. 2006: 12). Furthermore, catering to this clientele means that construction and sales are accelerated due to less interference from the municipal administration (Lanh 2003: 9). The prospects of profits in the upper market sectors have brought 121 internationally-invested property projects to HCMC so far (DPI 2006). With a total volume of over US\$5.5 billion (1988-2005), the FDI in this sector has even exceeded that of the industrial sector in HCMC.

Therefore, the majority of current housing construction activities in HCMC are concentrated in large-scale urban expansion projects at the city's periphery in the south (Saigon South) and the east (the long delayed New City Center Thu Thiem project). These areas were previously undeveloped, being predominantly marsh land. Here, completely new urban districts and comprehensive housing projects are being created that display a conceptually integrated, coherent functionality, and housing, technical, and social infrastructure are being developed in a coordinated manner, similar to other metropoles in Southeast Asia (Kraas 2004: 39). The driving forces of this development are mostly international investors, who have contributed to a general internationalization of the real estate market.

The Saigon South Project, for example, is being realized by a joint-venture company established by the Taiwanese Central Trading & Development Group (CT&D) corporation and the Vietnamese Tan Thuan Industrial Promotion Corporation (IPC), under the auspices of the People's Committee of HCMC. CT&D holds a 70% stake in the joint venture's legal capital (Waibel 2004^B). This public-private partnership structure has become quite common in Vietnam and is leading to a privatisation of urban development as the domain of foreign companies, as well as to continuing profits for the state side, which normally contributes real estate to the joint venture.

The 'parallel city' Saigon South, just 4 km south of the existing inner city (Gotsch 2002: 9), a model of internationally standardized town planning, will provide housing for approximately 500,000-1,000,000 inhabitants (Waibel 2004^B: 11). The target groups are well-situated exile Vietnamese (Viet Kieu), managers from western industrialized nations and neighboring Asian Tiger countries, as well as the rapidly growing Vietnamese middle class, which mostly consists of successful businessmen

and beneficiaries of transition and the introduction of Doi Moi reforms. Several gated communities have been established there. As in Hanoi and other Southeast or East Asian metropoles, the erection of large-scale urban expansion projects dominated by private companies promotes socially highly selective suburbanisation processes, which increase tendencies towards inclusion and exclusion within the urban society (Waibel 2006^A). All in all, the development of the new urban areas has aggravated housing inequality.

Tab. 1: Overview of the two largest urban development projects in HCMC

	Saigon-South – Phu My Hung New City Center	Thu Thiem – New Urban Center
location	HCMC, District 7, Nha Be District	HCMC, District 2
total area	409 ha	737 ha
est. population	appr. 500,000-1 mill. (entire Saigon-South)	appr. 130,000
total investment	appr. US\$ 240 mill.	appr. US\$ 600 mill.
investor	Central Trading & Development Group, Phu My Hung Corporation (PPP – Vietnamese government 30% + private investor from Taiwan 70%)	Thu Thiem New Urban Center Management Authority (100% foreign ownership, joint ventures, business cooperation contracts)
housing-typologies	detached and semi-detached villas, townhouses, condominiums	high-rise condominiums, row houses, villas (3.5 mill. sqm residential use of 6.2 mill. sqm total floor space)

Source: Own compilation based on data from the Phu My Hung Corporation and the Department of Planning and Investment HCMC (DPI), www.phumyhung.com.vn, www.thuthiem.com.vn.

Within the existing core city, most housing construction takes place in the historically developed neighborhoods of the inner city and in informal marginal settlements. While some buildings are upgraded, in most cases, demolition is followed by new construction, displacing the original low-income residents in favor of new and sometimes exclusive housing compounds. Up until now, this urban renewal process has not lead to wholesale, large-scale demolition of entire neighborhoods, as has been the case in other Asian mega-cities.

However, the emerging residential high-rises have the appearance of implants in the existing structure, both in terms of their typology and with regard to socio-economic aspects.

The housing projects in the inner city as well as the urban expansion projects with their typological diversity and with their high standards can be seen as islands of modernization and urban renewal. On the city level, these projects are contributing to a mosaic of various land uses, which are increasingly fragmented.

Consequently, the social-spatial polarization of social groups within the metropolitan area is growing significantly.

The inadequate access of low-income groups to housing can not only be researched on the city level. As mentioned before, a mega-urban region has emerged in the course of transition. Comparable to the regional division of labor in the Pearl River Delta in China in the 1980s and 1990s, when Hong Kong was in the same position as HCMC is now, the surrounding provinces of Dong Nai, Binh Duong, and Bia Ria – Vung Tau increasingly serve as the industrial backyard of the metropolis. Suburban industrial development gives the housing issue a regional dimension. Therefore, regional strategies need to be developed.

6 The Regional Dimension and the Need for Regional Strategies

The economic power of the mega-urban region consisting of the municipality of HCMC and the surrounding provinces of Dong Nai, Binh Duong, and Bia Ria – Vung Tau is tremendous. Although this region only has 12.3% of Vietnam's total population, it has received about 50% of all available FDI capital in Vietnam (up to October 20, 2006; VEA 2006^A: 58). Tab. 1 shows that in some of the neighboring provinces, FDI flows now are even higher than in HCMC. This trend has actually increased in the last years.

Tab. 2: FDI-Flows

Province	FDI 1988-2003		FDI 2004		FDI 2005	
	No. of projects	Total capital in Mill. US\$	No. of projects	Total capital in Mill. US\$	No. of projects	Total capital in Mill. US\$
Ho Chi Minh City	1.715	1.425,5	178	694,5	296	899
Binh Duong	804	3.867,7	148	726,3	181	833,4
Dong Nai	582	7.514,6	91	878,2	108	1.153,2
Ba Ria-Vung Tau	144	3.709,1	21	61,2	14	740,3

Source: *Statistical Yearbook Viet Nam & Ho Chi Minh City 2004, 2005, 2006*.

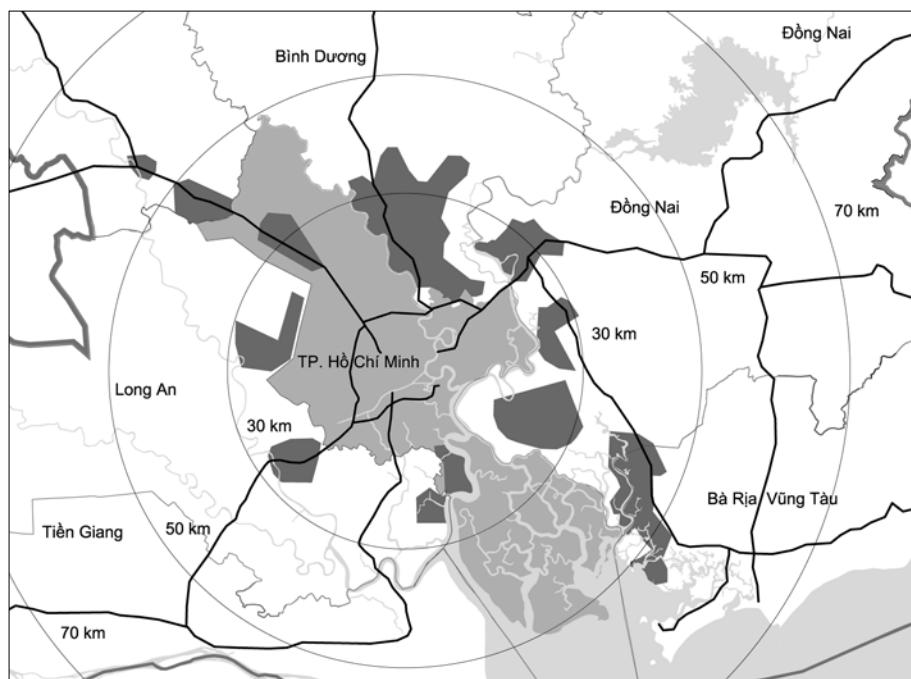
Looking at the sectoral structure of FDI, it can be observed that HCMC increasingly receives more FDI in the tertiary sector, whereas the FDI flows into the surrounding provinces are still strongly dominated by the industrial sector. This assessment is well supported by the fact that the Industrial Zones (IZs)⁸ of these three provinces have been able to attract about three-quarters of all FDI capital invested in Vietnam's

⁸ Currently, there are 71 Industrial or Export Processing Zones in Vietnam, which have been established to channel foreign direct investments and which initially also served as demarcated laboratory spaces for testing market economy conditions. These are the core areas of export-led industrialization in Vietnam, where transnational companies take advantage of the abundance of cheap labour in Vietnam.

IIZs (VEA 2006^B: 52). Over 280.000 laborers employed in the Industrial Zones⁹, most of them migrants from rural regions, are working and living in these three provinces.

Figure 1 shows that the large industrial estates in the mega-urban region of HCMC are situated in the surrounding provinces directly at the border of the metropolis. In choosing this location, the provincial authorities apparently want to make use of the proximity to the core city of HCMC.

Fig. 1: The regional distribution of industrial areas in the mega-urban region of HCMC



Source: Own figure based on data from Nikken Sekkei Ltd. (Conceptual Structure of future HCM Metropolitan Area – draft).

However, the establishment of Industrial Zones and industrial parks is typically done without elaborating a general regional concept. Evidently, there is competition between several authorities on different spatial levels: between provinces, between districts, and between municipalities. Most of the Industrial Zones are functionally isolated due to their design. Several Vietnamese authorities have criticized this de-

⁹ Including the IZ workers of Ho Chi Minh City, over two-thirds of the 600,000 labourers nationwide are concentrated here.

velopment. 'There is no general planning of Industrial Zones [...] so the distribution of Industrial Zones is not organized well' (SIUP South 2005: 52).

As the Industrial Zones and industrial parks are usually designed without a coherent effort to make housing opportunities available for factory workers, most of these laborers have to resort to living in the above-mentioned boarding houses, with mostly precarious living conditions. In Dong Nai province alone, about 100,000 migrants live in these often sub-standard boarding houses (VNS 2004). This has created serious new housing problems in the neighborhood of these areas, and in many cases has led to rampant theft, prostitution, and drug use there (VNS 2004).

The competition between the administrative units for FDI, intensified by the ongoing decentralization process, increases the risk of failed investment, as has been the case in the implementation of Industrial Zones or the construction of new deep-water harbors or large residential areas. The prevailing thinking in the administration, which largely follows the structures of sector-specific programs, may be an obstacle to spatially integrated approaches. The lack of coordination between administrative regions among themselves and sector planning issues are not, however, a specific problem of the HCMC Metropolitan Region. 'Insufficient integration of sector policies is one of the main shortcomings of the current approach to planning' (World Bank 2006: 142; see also Quang 2003: 40; CIEM 2006: 84). As a consequence, the existing industrial parks on the periphery and in the hinterland need to be integrated into multifunctional settlements. Therefore, residential areas and services have to be developed nearby. Future industry parks and residential areas must be designed in such a way as to be spatially balanced. Furthermore, it is required that Regional Plans and Master Plans be developed as comprehensive plans. Currently, responsibility for their preparation and implementations is spread over a range of ministries with limited coordination and cooperation. (Wilson, Lawrie 2005: 3, in MOC/VUF 2005). The implementation of spatial plans also needs to be enforced. The directive approach has to change to a strategic approach: The function of spatial plans in a market economy is to be a legal framework for private investment in the urban fabric. But private investment cannot be enforced in this context. There is a general need for proactive involvement and cooperation of state and non-state development actors in the planning, formulation, and implementation of development activities (Quang 2003: 42). Last but not least, the needs and wishes of target groups already have to be examined at an early planning stage.

One particularly essential step towards improving the housing conditions for low-income groups in the mega-urban region of HCMC would be better synchronization of the development of industrial and residential areas (Bose 2007: 13). It will not be possible to provide adequate housing for low-income households in the future without a functionally coordinated housing concept on the regional and neighborhood levels, as well as on the typological level.

7 Approaches to Building Typology and Construction: The Concept "Low Rise – High Density" for Sustainable Urban Growth

In view of the lack of housing for low-income groups, new approaches are necessary for sustainable building typologies and neighborhood models which are part of an integrative planning approach. Here the specific requirements for architecture as well as for urban planning must be formulated that are oriented to three fundamental goals: minimized financial expenditure, environmental feasibility and consideration of the social needs while simultaneously ensuring a minimum standard of living. The central question is which criteria are to be fulfilled by building typologies and neighborhoods in order to provide sustainable and feasible housing to low-income households. The requirements form the basis for new housing standards that have to be implemented in the field of private investment as well in state-run housing programs. Tendencies of the increasing awareness of the state's responsibility to low-income and therefore low-cost housing can be observed based on newly implemented programs like the 'Social Housing Program' (revised Housing Law MoC 2006; VeT 2002: 13).

7.1 Development of a flexible urban structure

Providing a long term strategic planning for the city's development and at the same time a flexibility that cities need in rapidly changing societies, the new neighborhoods need a flexible urban structure to enable different housing typologies according to current and future demands. The urban tissue of roads and technical infrastructures are to be developed as durable long-term investments for the city. A balance between adaptability and robustness should be basic to all built structures. They should be solid, but at the same time flexible for multiple functions. The infill of the buildings is chiefly the residents' responsibility. Variability is necessary to support different demands and life-styles as well as different income and occupational groups (Kendall, Teicher 2000: 181).

7.2 Compatible mobility

New and existing neighborhoods have to be developed with the aim of the "City of Short Distances" to reduce traffic and therefore to reduce investment and follow-up secondary costs for infrastructure.

This aim requires the spatial coordination of urban functions such as living, working, education and leisure time. The location of a sustainable neighborhood must therefore be oriented to the availability of places of employment, social facilities and retail infrastructure, or respectively, these functions must be integrated in the sense of a balanced use mix (Bonin 1995: 21).

7.3 Optimization of technical infrastructure

A sufficient provision of technical infrastructure (street network, water supply, sewer system, electricity, telecommunications) is essential for a sustainable urban neighborhood but also represents a large financial burden for the public budget. High density reduces the costs of technical infrastructure and thereby the investment cost per unit. Densified row house structures or five- to six-storey apartment houses reduce the expenditure for the construction and maintenance of the technical infrastructure by 50% to 75% compared to detached houses (Bonin 1995: 22).

7.4 Socially mixed neighborhoods

Housing and urban development policies should strive to integrate the poor into surrounding communities rather than segregate them. To this end, mixed-income communities should be encouraged where different housing options are available to different groups of society. By proximity to low- and middle-income households, the wealthier population may benefit from the locally available pool of cheap labor and the poor may benefit by more easily finding employment or by providing services to the richer households. Thus, a win-win situation can be created for all residents. Reality demonstrates, however, that high-income households often object to living in proximity to low-income households. An obligation by the investors to reserve 20% of their housing stock for low-income households has therefore in the meantime been rescinded in Hanoi (Lan 2006). With regard to the Vietnamese lifestyle, neighborhood strategies should be demand-oriented. Therefore attention should be paid to a balanced social mixture, such as only low- to middle-income households or middle- to high-income households within a settlement (Lan 2006).

The situation in Ho Chi Minh City, as mentioned above, needs to define standards on the housing level as well. Based on an examination of the existing parameters for housing construction, it is possible to define the requirements for building typologies that are adequate to fulfill the needs of low-income households and that are appropriate to their capabilities

7.5 Minimizing construction, operating and maintenance costs

The financial expenditure for the construction and maintenance of high-rise buildings (more than 10 storeys) is between one third and one half more than the comparable costs for low-rise buildings (EC Harris, Knight Frank 2004: 5). Additional substantial construction cost savings of up to 20% can be achieved by prefabrication of major structural members and extensive use of standard components. Low-cost, second-hand and locally available construction materials should be developed and utilized where possible. With a high degree of construction by the owners themselves, another 25% reduction of the construction costs is possible (Metzger 2002:

141). Construction and maintenance activities by the buyer or renter are, due to technical reasons, only possible in low-rise buildings.

7.6 Adaptation of building typology to climatic conditions

Constantly high energy costs that are necessary for cooling living space originate, among others, primarily from building typologies inappropriate to the climatic conditions in tropical and subtropical regions. A minimization of the specific need for cooling and of the corresponding energy costs can be attained with traditional constructive details (e.g. natural forced ventilation), appropriate building materials and an optimization of the relationship between surface area and building volume (A/V ratio) (Thomas 2003: 50). Building typologies that permit a high horizontal densification based on row structures and addition of units, like the back-to-back row house optimize the A/V ratio. In contrast detached and semi-detached houses are featured by an insufficient ratio.

7.7 Maximal flexibility for altered use requirements

"Sustainable" dwellings must be versatile enough to permit a wide range of different uses within the basic structure, they should offer flexibility for individual preferences and ideally they should be able to adapt to the different life phases of its occupants (BMI 1999: 86). Row houses offer to a certain extent the advantage of individual modifications in the usable space (e.g. addition of one storey). The typology allows the concept of so-called core housing in which a parcel is provided with the most important technical utilities and therefore with a minimal standard of amenities. The living space is then partly constructed by the owners in self-initiative, dependent on individual need and financial capabilities (Metzger 2002).

7.8 Analogy to traditional forms of living and working

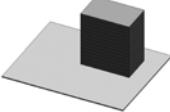
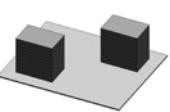
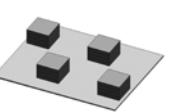
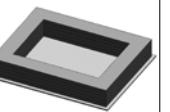
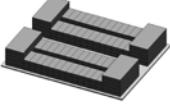
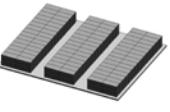
In the context of formal employment the model of separate living and working spaces based on the western model has established itself both in the Vietnamese middle- and upper classes as well as in lower income households. However, a majority of low-income people generates its income completely or partially from informal activities. A space suitable for working in one's own house or in immediate proximity to public space plays a decisive role (Martin, Kennel 2006: 3). The traditional Vietnamese typology, a variation of the shop house¹⁰ common throughout Southeast Asia (Tjoa-Bonatz 2003), combines living and working in a flexibly

¹⁰ The term "shop house typology" refers to the variation of the shop house common in HCMC: a flat-roofed row house on a parcel approximately 3-4 m wide and 12-20 m deep that is usually accessed from the narrow side and constructed with fire walls on the remaining three sides. Depending on the location, this type serves exclusively commercial uses (e.g. hotels in the inner city) or housing (on the periphery). Traditionally and predominantly today as well the ground floor is used for income generation (shop, workshop) and the upper stories as living space (Martin 2001: 32f.).

usable space that usually extends throughout the entire ground floor. This space allows its inhabitants to pursue informal employment and permits, e.g. with a storefront, the sale of products.

The requirements for sustainable typologies favor buildings with a small number of storeys (max. 5-6 storeys) and suggest renouncing high-rise buildings. The requirements for the layout of a sustainable neighborhood result in a need for high density. Both are possible. In the concept 'Low-Rise – High Density' the requirements mentioned are summed up and at the same time it is proven that high density can be achieved not only with high-rises but also with horizontal forms of densification.

Fig. 2: Possible urban density on an 8,000 sqm-site dependent on building typology

high-rise	small high-rise	urban villa	linear building	block perimeter structure
covered area levels total floor space	1.000 sqm 15 levels 15.000 sqm	covered area 10 levels 12.000 sqm	covered area 4 levels 5.184 sqm	covered area 5 levels 17.100 sqm
site coverage ratio floor area ratio	0,13 site coverage ratio 1,88 floor area ratio	0,15 site coverage ratio 1,50 floor area ratio	0,16 site coverage ratio 0,65 floor area ratio	0,43 site coverage ratio 2,14 floor area ratio
				
				
				
				
comb. row house/ apartment building	back-to-back row house	row house	semi-detached house	detached house
covered area levels total floor space	5.240 sqm 3-5 levels 19.440 sqm	covered area 3 levels 16.200 sqm	covered area 3 levels 10.260 sqm	covered area 2 levels 3.024 sqm
site coverage ratio floor area ratio	0,66 site coverage ratio 2,43 floor area ratio	0,72 site coverage ratio 2,03 floor area ratio	0,43 site coverage ratio 1,28 floor area ratio	0,19 site coverage ratio 0,38 floor area ratio

Source: Own figure.

A typological response must therefore not be discovered anew. The traditional Vietnamese shop house or tube house fulfills most of the requirements. With minor constructive variations of this typology, decisive individual solutions can be achieved that are appropriate to the financial and social needs of the inhabitants. This flexibility poses the decisive advantage in comparison to multi-storey apartment houses. A high utilization of the property parcel, sometimes up to 100%, as well as reduced construction and maintenance costs are significant economic advantages. With its extensive reduction of the building's surface areas in an urban context, the shop house is astonishingly well adapted to the predominant climatic conditions (Schramm 2005: 45).

8 Consequences for Implementation of the Concept

The main task is to optimize the shop house as a possible housing typology for lower-income households and to combine it with other typologies in the context of a sustainable neighborhood. At the same time, a new type of thinking is necessary on the part of the local actors. Private investors but also the political decision makers usually follow the current trend toward high-rise housing. Careful argumentation is necessary in order to convince the local stakeholders of the concept's feasibility and to bring about a departure from the currently dominant philosophy of building.

9 Participation and Planning

Still, public planning and administration in Vietnam are highly dominated by hierarchical and formalistic elements (Dixon 2004: 112) of the end-of-pipe type.¹¹ For example, the current master planning methods are rigid, non-participatory and generally discourage formal non-state contributions in urban planning (Quang/Kammeier 2002: 386). These top-down elements are adversely influencing the quality of developments and are contributing to the strong rift between 'good planning' and an unsustainable reality.

For example, the state authorities have previously widely ignored the high degree of flexibility in self-organized, informal housing and the potential for an active participation of the residents in the construction process. In addition, the private sector has not been encouraged enough to provide low-income housing for the poor via incentives and tax breaks. Also, the wide range of public-private partnerships for the efficient use of urban land has not been tested, so far (Payne 1999). Furthermore, the potential of self-help concepts or enablement approaches has not yet been fully utilized.

However, the sustainability of urban and housing development is highly dependent on a successful and continuous interplay of all actors. This applies to all types of urban development that envisage sustainability in the complex sense of incorporating social and economic as well as environmental aspects and embedding it in a dynamic cultural and political context. Consequently, the inclusion of all relevant actors and their capacity to act within a collaborative approach as well as an adequate institutional framework are commonly (UNDP 2006) seen as vital success factors of sustainable housing and neighborhood projects.

As a consequence of the field work, it seems advisable to follow a planning and building methodology that is strictly bound to commonly accepted principles of space use, to incorporate public and commercial space and to allow a step-by-step process of adaptation to a changing socio-economic environment by providing hard infrastructures (urban tissue), changeable but robust core structures (support sys-

¹¹ Planning that is centred on the end result rather than on the process and on integrating the context-dynamics into planning. See also OECD glossary (<http://stats.oecd.org/glossary/detail.asp?ID=793>).

tems) and highly variable infills which can be changed easily. Of vital importance seems to be the coupling of housing policies with employment support to ensure that low-income people will have adequate income not only to subsist but also to sustain the housing improvement process over the long-term.

The field work has, however, also highlighted the importance of developing strong local institutions, preventing undesired changes in the principles of use, guaranteeing maintenance and setting a framework for local self-government. It was shown that the existing institutional arrangements can provide a good framework for this local participation regarding building, maintenance, and space use, as long as they are open to debate on all demands of the residents. In the Vietnamese context, where the development of a civil society still remains only rudimentary, it seems advisable so far to incorporate mass organizations such as the Vietnam Women's Union, for example, in order to establish community-based saving and credit schemes. However, community participation and the use of social capital to leverage resources must also be tempered with caution, as experience has shown that often the only beneficiaries are squatter elites or the most aggressive members of the community groups (Kraas 2004: 37; Buckley/Kalarickal 2005: 241).

Finally, the capacity for local debate, increasingly important in reducing bureaucratic elements of planning, were found to be vital for enhancing the awareness of all actors to the success and failure and to the eventual sustainability of neighborhood development.

10 Conclusions

To recapitulate, the characteristics of HCMC's recent urban development correspond best to the type of urbanization process that Kraas (2004: 31ff.) has identified as 'urban restructuring due to transition', one of four main current types of urbanization in Southeast Asia.¹² This development type is distinguished by the emergence of a property and real estate market, urban renewal and modernization processes, tertiarization, increasing socio-economic disparities, the revaluation of trading and industrial areas, displacement and marginalization processes, the expansion of informal settlements, the development of gated communities, and – last but not least – the shortage of housing space. Of course, urban change in HCMC is driven by multiple forces and actors, and is affected by interrelated social, economic, and spatial aspects of transition. Thus, the housing market is a vivid example for the complex dynamics of the transitional process.

¹² Besides the development type of 'urban restructuring due to transition', the types 'planned urban development', 'partially planned urban development', and 'loosely-directed urban development' have also been identified. Of course, no isolated forms of one single development type exist. Ho Chi Minh City, for example, also exhibits elements of the 'partially planned urban development' and 'loosely-directed urban development' types, such as socio-economic polarization, socio-economic fragmentation, increase of public-private partnerships or urban expansion.

As happened in China, the recent WTO entry of Vietnam will increase the impact of globalization and aggravate the market-driven development dynamics (Wu/Ma 2006: 192). The metropolitan region of HCMC has an opportunity to reap maximum benefit from this development, but also bears the risk of an even stronger increase in fragmentation. It would be desirable if the future urban development would follow the vision of a 'Re-integrating City' as developed by Coy/Kraas (2002: 147f.). This requires – among others – a strategy of renewal, which includes the participation of all relevant stakeholders with their often strongly divergent particular interests. One aspect of this vision is the stronger incorporation of bottom-up initiatives and of residents' real-life expertise into public planning.

To balance urban growth, there is a need for better coordination of spatial planning between the different provinces and municipalities in the mega-urban region of HCMC. Local participation has to be strengthened to promote implementation of plans. Capacity-building efforts by the relevant stakeholders play an integrative role in this context. A huge problem of spatial planning in the HCMC Metropolitan Region (as well as in the country as a whole) remains the absence of comprehensive planning. A new housing policy for the HCMC mega-urban region would first need to strengthen horizontal coordination among the various administrative departments and agencies. As part of a comprehensive urban management package, the problem of the lack of land use rights finally has to be tackled.

As shown, the success of housing projects for low-income groups is very much dependent on the physical layout of the planned settlement. Housing units have to be constructed in a way that low-income people can afford them (Buckley/Kalarickal 2005: 236-237). Furthermore, housing and neighborhood typologies should adapt to the traditional living forms in HCMC and be demand-driven. The described urban typologies illustrate general criteria for the physical and social layout of a neighborhood for low-income households. These criteria are flexible and applicable on different sites. However, the formulation and implementation of an exemplary housing project on the neighborhood level is an indispensable component for testing the typological requirements mentioned and for developing implementation strategies for the political, social and economic feasibility of the concept (see also: Payne 1999: 218).

The inclusion of non-state partners and interdisciplinary expertise from the outside seems to be required to ensure the implementation of a more sustainable housing policy in Ho Chi Minh City.

References

- BMI, Bayerisches Ministerium des Innern (1999): *Siedlungsmodelle Bayern*, München
Bonin, Imke (1995): *Wohn-Dichte Zwei Komma Null*, Kassel 1995 (Schriftenreihe des Fachbereichs
Architektur, Universität Gesamthochschule Kassel, Vol. 22)
Bose, Michael (2007): "Regionale Strategien für eine nachhaltige Wohnungspolitik in Ho Chi Minh City,
Vietnam", in: *Pacific News* Nr. 27. S. 11-13

- BTC – Belgian Technical Cooperation (ed.) (2002): *Feasibility study on Sanitation and Urban Upgrading of Tan Hoa – Lo Gom Canal Basin*. Report (draft) Vol. 1 – Executive summary, Redhill, Surrey
- BTC – Belgian Technical Cooperation (ed.) (2006): *Tan Hoa – Lo Gom Canal Basin Urban Upgrading and Sanitation Programme*. (<http://www2.btcctb.org/thlg>), last accessed: 14th of January 2007
- Buckley, Robert M. M./Kalarickal, Jerry (2005): "Housing Policy in Developing Countries: Conjectures and Refutations", in: *World Bank Research Observer*, Vol. 20, No. 2, pp. 233-257 (<http://ssrn.com/abstract=873741>), last accessed: 14th of January 2007
- CIEM, Central Institute for Economic Management (2006): *Vietnam's Economy in 2005* (A reference book). The Publishing House of Political Theory, Hanoi
- Coy, Martin/Kraas, Frauke (2003): "Probleme der Urbanisierung in Entwicklungsländern", in: *Petermanns Geographische Mitteilungen*, 147, 2003, 1, pp. 32-41
- Detry, Felicitas et al (2006): *Serviced Apartments in Vietnam*. Unpublished Report, Heilbronn
- DPI, Department of Planning and Investment of Ho Chi Minh City (2006): *Economic Overview – FDI*. (<http://www.dpi.hochiminhcity.gov.vn/invest/html/eco3.html>), last accessed: 14th of January 2007
- EC Harris LLP/Knight Frank LLP (eds.) (2004): *High-rise residential towers*, London
- GOS, General Statistical Office of Vietnam/UNPF, United Nations Population Fund (2005): *The 2004 Vietnam Migration Survey: Major Findings*, Hanoi
- Gotsch, Peter (2002): "Saigon-Süd: Parallelstadt im Süden – Zu den Produktionsmechanismen und Typen einer neoliberalen Stadt", in: *TRIALOG 75, Zeitschrift für das Planen und Bauen in der Dritten Welt*, 4/2002, pp. 9-13
- GSO, General Statistical Office of Ho Chi Minh City (2006): *Statistical Yearbook of Ho Chi Minh City 2005*, Ho Chi Minh City
- GSO, General Statistical Office of Vietnam (2004): *Results of the Survey on Households Living Standards 2002*. Statistical Publishing House, Hanoi
- GSO, General Statistical Office of Vietnam (2006): *Statistical Yearbook 2005. Socialist Republic of Vietnam*. Statistical Publishing House, Hanoi
- Gurby, Patrick/Huong, Le Thi (2002): *Ho Chi Minh City: a future megacity in Vietnam*, Bangkok
- Hiep, Nguyen Van (2005): *The track records and challenges of housing problem in Ho Chi Minh City at present up to 2010*, Ho Chi Minh City
- JBIC, Japan Bank of International Cooperation (1999) (ed.): *Urban Development and Housing Sector in Vietnam*. JPIC Research Paper No. 3
- Kendall, Stephen/Teicher, Jonathan (2000): *Residential Open Building*, London and New York
- Kraas, Frauke (2004): "Aktuelle Urbanisierungsprozesse in Südostasien", in: *Geographica Helvetica* Jg. 59 2004/Heft 1, S. 30-43
- Lan, Do Thu (2006): *Statement at the Informal Meeting: Presentation on the Research Project 'The Balance of Urban Growth and Redevelopment in Ho Chi Minh City'*. Ministry of Construction, Hanoi
- Laan, Duong. (2003): *Housing Development in Ho Chi Minh City. Case Study: Bong Sao Residential Area Project*, Ho Chi Minh City
- Martin, Volker (2001): "Die Häuser von Saigon", in: *StadtBauwelt* 36/01, 28. September 2001 (92). p. 30-39
- Martin, Volker/Kennel, Corinna (2006): *Die Balance von Stadtwachstum und Stadterneuerung in Ho Chi Minh City – Nachhaltige Wohnungsbaustrategien für Megastädte von morgen*, Cottbus (Forum der Forschung, BTU Cottbus, Vol. 19). pp. 171-176
- Metzger, Roger (2002): *Low-Cost Housing in Vietnam – Core-Housing in Binh Hung Hoa, District Binh Chanh, Ho Chi Minh City, a Resettlement Option for People Living on the Than Hoa – Lo Gom River*, Lausanne
- NCSSH, National Center for Social Sciences and Humanities (2001) (ed.): *National Human Development Report 2001 Doi Moi and Human Development in Viet Nam*. The Political Publishing House, Hanoi
- NIURP, National Institute for Urban and Rural Planning (1992): *Data Book National – Urban*. Hanoi
- NIURP, National Institute for Urban and Rural Planning (1994): *Data Book Ho Chi Minh City*. Hanoi
- Payne, Geoffrey (ed.) (1999): *Making common ground – public-private partnerships in land for housing*, London
- Phat, Tran Kim (2002): "Overview of Housing for Low Income People in Ho Chi Minh City: Situation and Solutions". Paper presented on the ODAP Workshop No. 7 – Housing for Low-Income Groups in Ho Chi Minh City: Standards and Solutions, Ho Chi Minh City 18 October 2002
- Phe, Hoang Huu (2002): "Investment in residential property: taxonomy of home improvers in Central Hanoi", in: *Habitat International* 26, 2002, pp. 471-486
- Quang, Nguyen (2003): *Review of the Existing Planning System: Obstacles and Strategies Moving toward Innovative Planning Approaches, Case study of Ha Tinh Planning System*, Ha Tinh Province
- Schramm, Helmut (2003): *Low Rise – High Density, Horizontale Verdichtungsformen im Wohnbau*, Wien

- SIUP South, Southern Sub-Institute of Rural and Urban Planning (2005): *Present condition and future orientation in the HCMC Metropolitan Planning Region*, HCMC
- State Planning Committee and General Statistical Office (ed.) (1994): *Vietnam Living Standards Survey 1992-1993*, Hanoi
- Taylor, Philip (2004): *Social Inequality in Vietnam and the Challenges to Reform*. Vietnam Update Series, Singapore
- Thang, Hoang (2005): "Unfreezing the Property Market", in: *Vietnam Economic News*, No. 40/2005
- Thomas, Randall (2003) (ed.): *Sustainable Urban Design – An environmental approach*, New York
- Tjoa-Bonatz, Mai Lin (2003): *Vom Hofhaus zum Reihenhaus: das Shophouse im kolonialzeitlichen Penang, Malaysia*, Stuttgart
- UNDP (2006) (ed.): *Viet Nam Policy Dialogue Paper 2006/1: Deepening democracy and increasing popular participation in Viet Nam*, Ha Noi
- VEA (Vietnam Economic Association) (ed.) (2006^B): *Vietnam Economic Times*, Issue 149, July 2006, Hanoi
- VEA (Vietnam Economic Association) (ed.) (2006^A): *Vietnam Economic Times*, Issue 153, November 2006, Hanoi
- Verschure, Han et al. (2006): *Final Evaluation Report – Recommendations for Infrastructure & Resettlement Pilot Project Tan Hoa – Lo Gom Canal Sanitation and Urban Upgrading*, Ho Chi Minh City
- VeT (Villes en Transition) Vietnam/The French Embassy in SR Vietnam (2002) (Ed.): *Analysis of Low-Cost Housing Standards in Ho Chi Minh City – Review, Analysis and Recommendations for Specific Low-Cost Housing Standards*, Ho Chi Minh City
- VNS, Vietnam News (2004): "Industries fail to zone for housing", in: *Vietnam News*, 5th of July 2004.
- Waibel, Michael & Jordan, Rolf (2005): "Exportorientierte Produktionszonen in Malaysia und Vietnam – Regionale Disparitäten und Widersprüche im Planungsprozess", in: *Internationales Asienforum* (International Quarterly for Asian Studies), Vol. 36 (2005), No. 3–4, pp. 337–360
- Waibel, Michael (2004^A): "The Ancient Quarter of Hanoi – A Reflection of Urban Transition Processes", in: *ASIEN*, Nr.92, Juli 2004, pp. 30-48
- Waibel, Michael (2004^B): "The development of Saigon South New Urban Area. A sign of an increasing internationalisation and polarization in Vietnamese society", in: *Pacific News*, Nr. 22, Juli/August 2004, pp. 10-13
- Waibel, Michael (2005^A): "Vietnam – a New Asian Economic Tiger?", in: Waibel, M./Kreisel, W. (Hrsg.): *The Pacific Challenge. Development Trends in the 21st Century*, Göttingen, pp. 31-52
- Waibel, Michael (2005^B): "Sturm auf Vietnams Metropolen? Auswirkungen der Land-Stadt Migration auf die Siedlungs- und Wohnstrukturen", in: *Südostasien*, Nr. 3/2005, Jg. 21, pp. 12-14
- Waibel, Michael (2006^A): "The Production of Urban Space in Vietnam's Metropolis in the course of Transition: Internationalization, Polarization and Newly Emerging Lifestyles in Vietnamese Society", in: *TRIALOG – A Journal for Planning and Building in the Third World*, No. 89, 2/2006, pp. 43-48
- Waibel, Michael (2006^B): "Action Field 4: Housing market and provision – Status of housing policies in HCMC", unpublished Interim Report of the Research Project: 'The Balance of Urban Growth and Redevelopment in Ho Chi Minh City', Cottbus
- Waibel, Michael/Schnepp-Orth, Marita (2004): "Reiche werden Reicher und Arme haben keinen Zugang? Auswirkungen des neuen staatlichen Wohnungsbaus in Hanoi", in: *Südostasien*, Nr. 3, 2004, Jg. 20, pp. 6-8
- Wilson, Lawrie/Van, Pham Thi Khanh (2005): "Technical Assistance for Regional Planning in Vietnam", in: Ministry of Construction/Vietnam Urban Forum (2005): *Hanoi Capital Regional Planning*. Documentation of a workshop 21/11/2005, Hanoi
- World Bank (2006) (ed.): *Vietnam Development Report 2007 – Aiming High*, Hanoi
- Wu, Fulong/Ma, Laurence, J.C. (2006): "Transforming China's globalizing cities", in: *Habitat International* 30 (2006). pp. 191-198
- Wüst, Sébastien, Jean-Claude Bolay and Thai Thi Ngoc Du (2002): "Metropolization and the Ecological Crisis: Precarious Settlements in Ho Chi Minh City, Vietnam", in: *Environment & Urbanization*, Vol. 14, No. 2, pp. 211-224
- Zhang, Tingwei (2000): "Land market forces and government's role in sprawl, The case of China", in: *Cities*, Vol. 17, No. 2, Elsevier Science Ltd., pp. 123-135
- Zhou Yu (2006): "Heterogeneity and dynamics in China's emerging urban housing market: two sides of a success story from the late 1990s", in: *Habitat International* 30 (2006). pp. 277-304