

Environment and Urbanization

<http://eau.sagepub.com/>

The role of community architects in upgrading; reflecting on the experience in Asia

Chawanad Luansang, Supawut Boonmahathanakorn and Maria Lourdes Domingo-Price

Environment and Urbanization 2012 24: 497

DOI: 10.1177/0956247812456125

The online version of this article can be found at:

<http://eau.sagepub.com/content/24/2/497>

Published by:



<http://www.sagepublications.com>

On behalf of:



[International Institute for Environment and Development](http://www.iied.org)

Additional services and information for *Environment and Urbanization* can be found at:

Email Alerts: <http://eau.sagepub.com/cgi/alerts>

Subscriptions: <http://eau.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - Oct 12, 2012

[What is This?](#)



The role of community architects in upgrading; reflecting on the experience in Asia

CHAWANAD LUANSANG, SUPAWUT BOONMAHATHANAKORN
AND MARIA LOURDES DOMINGO-PRICE

Chawanad Luansang has been working as a community architect for 11 years and is a co-founder of OPENSOURCE, based in Thailand. He has been coordinating and organizing the work of community architects in the ACCA programme, along with Supawut Boonmahathanakorn, and was instrumental in forming the Asian Community Architects Network (CAN) in June 2010, after a gathering and sharing of experiences among technical professionals.

Address: ACHR, 73 Soi Sonthiwattana 4, Ladprao Road Soi 110, Bangkok 10310, Thailand; e-mail: chawanad@hotmail.com

Supawut Boonmahathanakorn is a co-founder of Konjaibaan, a group of architects working with communities in Thailand on housing, the environment and heritage. He has been coordinating and organizing the work of community architects in the ACCA programme, along with Chawanad Luansang, and was instrumental in forming the Asian Community Architects Network (CAN) in June 2010.

Address: ACHR, 73 Soi Sonthiwattana 4, Ladprao Road Soi 110, Bangkok

ABSTRACT This paper describes the role of community architects in the upgrading programmes supported by the Asian Coalition for Community Action (ACCA), illustrated with examples that include a bamboo bridge project in Davao and a toilet project in Digos (the Philippines), a community-driven land allocation system in Gopalganj (Bangladesh), and upgrading developed by a savings group in a landless community in Hlaing Tar Yar township (Myanmar). Drawing on the authors' experiences working as community architects, it also reflects on how to integrate social and physical change in communities in order to effect broader changes in society. The paper discusses the merits of community architecture and identifies what makes a good community architect, and describes the Community Architects Network (CAN) that has been formed and how it encourages architectural schools to incorporate knowledge and experience from community architects into their curriculum.

KEYWORDS citywide / community architecture / physical and social transformation / upgrading

I. INTRODUCTION: COMMUNITY ARCHITECTS IN THE ACCA PROCESS

This paper reflects on the authors' experiences working as community architects in the implementation of the Asian Coalition for Community Action programme (ACCA),⁽¹⁾ which aims to support a process of citywide upgrading of informal settlements in 150 Asian cities. The process requires the involvement of a range of professionals such as community architects and other technical professionals, para-professionals and community-based builders. The ACCA programme recognizes that communities are the primary players in the design and implementation of projects that address the issues of land, infrastructure and scale in their cities, in collaboration with their city authorities and other stakeholders.⁽²⁾

Alongside the implementation of the ACCA programme, a parallel process was created to open up space for more Asian architects to work with communities on their upgrading projects. Financial support from the Rockefeller Foundation was used to organize workshops, exchanges, training, meetings, etc. to strengthen the network of community architects, to open up venues for sharing and mutual learning, and to

BOX 1

"... for our ACCA process, the work of the community architects is becoming a very important process. You've got to find technical professionals who can translate what the poor community groups would like to plan for themselves, and show this plan of the transformation in which people are the key essence of the process. If a community architect can help explain that transformation process properly, to the larger society, it becomes a kind of empowerment. Once people are involved in the measuring of their own settlements and the gathering of information about other settlements around the city, they are part of a new learning process and become active actors in that process."

SOURCE: Somsook Boonyabancha at the ACCA meeting in Georgetown, Penang, Malaysia, September 2011.

support their work on the ground. This was instrumental in the formation of the Asian Community Architects Network (CAN) in June 2010, after a gathering and sharing of experiences among technical professionals and community leaders and builders from 23 countries. The community architects play a significant role in the ACCA programme, as Somsook Boonyabancha points out in Box 1.

This paper begins with a discussion of the important roles that community architects can have in enabling communities to realize their visions in the implementation of development projects such as those being pursued under the ACCA programme. It then discusses what steps could be followed in the process of social transformation and gives examples from different Asian countries. The paper concludes by summarizing the lessons and recommendations for advancing effective community architecture in the ACCA process and for drawing in architectural schools into this process.

II. LEARNING TO WORK IN A PEOPLE-DRIVEN CHANGE PROCESS

a. How did we arrive at this unconventional kind of architecture work in communities?

i. Different beginnings

The involvement and the changing roles of community architects in Asia saw different beginnings, emerging from different social contexts and triggered by different situations and opportunities that have evolved over the last few decades. Community architects from the 1970s and 1980s grew their roots in the political activism of the period in their own countries, and this was especially so in Thailand and the Philippines. They came from a strong generation of protesters and idealists in a period governed by political or military dictatorships, and this political activism was a direct reaction by people who were unhappy with the state of affairs.

The community architects of the 1990s may not have been fuelled by the same kind of political activism bred from the repressive regimes of the 1980s and earlier, but they were faced with and went through an equally challenging period of striking polarities. These included issues such as rapid urbanization vs. associated massive evictions, and rapid

10310, Thailand; e-mail: architect_ponce@hotmail.com

Maria Lourdes Domingo-Price started working with communities in Tondo, Manila in 1986 while part of a student architect group called the University of the Philippines Task Force-Arki. For about six years she worked (and for some time lived) with community people in Tondo, helping with their housing project, and then with various communities in Phnom Penh, Cambodia through the Asian Coalition for Housing Rights and the UN Volunteer Programme. Since 2006, she has been supporting the various shelter initiatives of the Homeless People's Federation Philippines Inc. (HPFPI) and is part of the Community Architects Network. She also helped in the formation of HPFPI's technical arm, the Technical Assistance Movement for People and Environment Inc. (TAMPEI).

Address: Philippine Action for Community-led Shelter Initiatives Inc. (PACSII), 221 Tandang Sora Avenue, Quezon City, Philippines; e-mail: may_domingoprice@yahoo.co.uk; maydomingoprice@gmail.com

1. For a description of this programme, see the paper by Somsook Boonyabancha and Diana Mitlin in this issue of the Journal.

2. ACCA (2010), *107 Cities in Asia: Second Yearly Report of the Asian Coalition for Community Action Programme*, published by ACHR in both printed and electronic forms and downloadable from the ACHR website at www.achr.net, 48 pages.

economic growth in the early 1990s followed by a severe economic crisis in the late 1990s. While most architects took advantage of the attractive opportunities offered by urbanization, economic growth and market-driven development, a few took up the challenge on the opposite pole. They had important roles in supporting the (then largely expanding) community networks and urban poor movements towards more pro-poor city and community development solutions that included finding and developing alternatives to evictions. More recently, there have been increasing numbers of natural disasters across Asia, the tsunami of 2004 being the most noteworthy of the earlier ones. The humanitarian instinct to come to each other's aid in times of disaster motivated a number of professionals, including architects, to participate more in community reconstruction. This new generation of community architects had an important role in supporting people-driven rehabilitation efforts by the poor, who, although the most vulnerable to and worst affected by disasters, possess incredible resilience in collectively rebuilding their lives and communities.

ii. Common denominator

Despite the differences in social context and periods from which community architects of the last four decades have emerged, they are all searching for something beyond higher incomes and the enhancement of technical skills. This deeper exploration has led them to work with poor communities, and they seek to empower the disadvantaged who have least opportunities to control their own environment and who normally cannot afford to employ architects.⁽³⁾ Community architects are also commonly bound by the desire to contribute to society by becoming part of the larger process of change. This social commitment translates into direct involvement in issues that immediately affect the poor and vulnerable, and more specifically in helping communities find solutions to achieve better shelter, cities and environmental conditions.

b. Architects are in the business of looking for solutions and physical transformation

ACCA programme experience has shown that of a number of different professionals, it is usually architects and planners who work most easily with communities in the physical transformation of the built environment. This is because community architects are trained to think beyond the conventional concerns of building design. It is in the nature of their profession to "design" – to transform from "what is" into "what it could become"; and they are trained to look for concrete physical solutions. However, traditional architecture can also be remote and unresponsive to community needs if the end users are not part of the design process, and this has been the case in a number of situations.

This kind of skill, possessed by technical professionals such as architects and planners, gives them an advantage over other activists such as NGOs and social workers. Although the latter contribute a lot to supporting important activities such as savings and preventing evictions, they are more likely to be at a disadvantage when it comes to addressing community issues related to the physical infrastructure. Even

3. Towers, G (1995), *Building Democracy – Community Architecture in the Inner Cities*, UCL Press, London, 272 pages.

communities themselves, that are vigilant at dealing with daily issues of survival and eviction threats, may also sometimes get used to “what is” and may not immediately see the need for a vision to move forward. Hence, the physical transformation aspect of developing communities and cities is the vision and the new dimension that community architects can bring into the people’s process, as noted in Box 1.

Architects are trained to see both form and function, and the interplay of both. They can envisage how a certain form (such as a community site plan, for example) can create a particular kind of culture, and what kind of social and economic activities this form could generate. Inversely, many architects are also trained to design, first and foremost, according to function. When community architects get involved in planning in a squatter settlement, they consider all the existing non-physical aspects such as the cultural, social and economic dynamics of the community, and design a form/plan that will enhance the positive and discourage the negative aspects of these dynamics. They are also able to recognize and appreciate the good elements that exist in a community, such as squares or small public spaces, which work very well.

In working with communities, community architects can help community members to think ahead further and plan on a long-term basis in terms of creating better living conditions and designing structures that will last, for later generations to enjoy. They can also help communities make the best use of their resources. Where communities sometimes have set notions of how development can be undertaken conventionally (for instance by bulldozing trees and flattening out the area in order to develop a housing site), community architects could help demonstrate new approaches, with people-centred and environmentally friendly aspects.

c. Learning to work in new ways as architects

Community architects as designers of “process”. The practice of architecture, whether working for the wealthy or for low-income groups, follows the same norm and core value of “consulting the client” as a vital step in the design process. So for architects, the process of getting to the product is as important as the product itself. Many architects believe that achieving a good design solution is defined by the quality and thoroughness of the steps taken to get there.

For community architects, this translates into the quality of the community process they facilitate, such as conducting community mapping and surveys, participatory planning and housing design workshops. Community architects continue to be challenged creatively to “custom-design” the planning or housing design process and modify participatory tools to suit the unique situation of each community, in order to come up with people-based solutions.

Learning to relegate power. As designers, architects and planners are generally trained to be the “creators”. Many have been educated and conditioned to aspire to create monumental pieces of work. Sadly, however, many settlements and cities in Asia are designed according to the vision and ideals of architects and planners, in which the poor usually do not feature.

This sense of power to create and sometimes impose one’s “vision” – of a city, a structure or monument, for example – is the very conditioning

BOX 2

“Once somebody becomes a ‘professional’, they develop a mental block! Then it becomes very difficult for them to work with poor communities. They feel themselves to be most important, most knowledgeable.

In our work in Karachi, we have given chances to interested professionals to work with communities, on housing or infrastructure or research projects. But suddenly, they leave when an opportunity comes up elsewhere.

To deal with this problem of fickle and short-term professionals, the OPP (Orangi Pilot Project) developed the concept of ‘para-architects’. These young people from the communities were trained to do things like surveying, levelling, mapping, some simple house design concepts, etc. And they started working with the communities – and they stayed! They were happy to do this work, they felt important and honoured and didn’t disappear like the ‘professionals’.”

SOURCE: Muhammad Younus from the Urban Resource Centre (URC) in Pakistan, Small Meeting of Community Architects, Bali, 21–22 October 2009.

that a community architect has to unlearn if he/she decides to work with communities. Learning to become mere facilitators of the process, and relegating to the people the power, opportunity and task of “planning and designing” can be difficult initially. It requires humility and a firm belief in what people are capable of doing.

Budget limitation as a challenge. An interesting challenge for both the community architects and the people is the usually limited budgets for implementing upgrading and housing projects. In the experience of the ACCA programme, small budgets are not an obstacle to implementing projects. The people work within those limits; they innovate, prioritize and become more creative in searching for lower-cost alternatives and re-using old building materials.

From community architects to para-architects. Another important challenge in working as a community architect is recognizing the fact that for a long time, poor people have often been architects of their own houses and communities, and so they possess inherent and indigenous planning and design skills. Historically, some of the most beautiful, practical and treasured housing around the world has been designed and built by non-professionals. An increasingly important role for the community architect is to acknowledge and help enhance the skills of more and more communities to become “para-architects” and “para-professionals”, who can take on the design, planning and other technical work such as surveying and mapping (Box 2).

d. How community architects can work in a people-driven change process

Community architects with a deep and sensitive understanding of their role in a people-driven process often try to find ways to make space and create tools by which the design as well as the implementation processes can become vehicles for empowering people.

Community architects can use the design process as a learning and facilitating process. They are more mindful to give the people space to discuss, decide and resolve issues that might come out of

the design or planning process, and for people to find ways of working together as a community.

The planning process for any project in a community is rarely without problems, and sometimes tends to spark off tensions and conflicts among the people. This is because new solutions such as upgrading and re-blocking bring about changes to the living arrangements and situations that people have become accustomed to. It may occasionally require some community members to give up part of their plot or house or land rights so that those who have less can have enough or so that more land can be freed up for roads and open spaces, for example.

There are two roles that the community architect can play. The first is to help the people absorb, visualize and appreciate the change that is going to take place. The architect can help soften the transition from "what is" to "what it could become". The second role is to provide space for people to discuss and decide for themselves and let them resolve issues and manage potential conflicts. It is important for the community architect to know when to step away and let people get on by themselves and when to step back in to steer discussions away from unproductive arguments towards positive ones.

In some community upgrading projects for example, some people may occupy large plots of land while others, with bigger families, may have very small pieces of land. These issues become apparent when the communities undertake mapping and surveys. Once these have been completed, the community starts to talk about making adjustments to the existing layout, to make plot sizes a little more equitable. But those with bigger plots may be reluctant to let go of some of their land, and so instead of proposing equal plot sizes, community members are left to explore and discuss how to redistribute the land depending on family size. In such situations, the community architect could help moderate the potentially explosive discussions so that an amicable decision can be reached. It often helps when there are bigger issues for a community to face – such as land security or infrastructure – because people learn to compromise; they also learn that it is important for everyone to collaborate if they want to achieve larger things. Senior people within the community can also play an important role in conflict resolution.

Community architects help the community visualize new possibilities and new solutions for community transformation.

Architects can quickly visualize a variety of solutions and design possibilities when they are presented with a "design problem or situation". Having this skill is an enormous help to them when guiding the people through the process of physical transformation of their community. In this way, they can help the community to generate options for development that are realistic.

In the same way, **community architects in effect help to facilitate people's thinking processes.** They try not to judge what option or solution may or may not be good for the community. Rather, they help the people follow through with how they think a certain solution could affect their way of life as a family and/or a community. They also constantly encourage the people to keep seeking the solutions that could work best for them, including building on, rather than dismissing, existing local solutions and practices. The architects may also create tools to help the people see the bigger picture of their community, in the context of the surrounding environment and the city as a whole, so that they develop solutions that are complementary to and not isolated from this big picture.

Community architects keep a horizontal relationship with people and try to break the professional–people gap. In a participatory planning process, the architect plays the role of “facilitator” rather than “decision maker”, and therefore their relationship with the community does not become a vertical or top-down one. Conversely, the community cannot demand from the community architect in the same way that they do from government agencies. As facilitator, the architect does not have this burden of answering to demands and expectations and taking blame from the community. He or she gives them the power, by allowing them to discuss problems and ideas while he/she facilitates the discussions in a concrete direction. In situations where power within the community itself is not balanced, the architect may initiate activities to ensure that as many people as possible are involved in the planning and decision-making process.

Community architects have to consciously work on narrowing down if not removing the gap between professionals and the people. There are some cultures, for example in the Philippines, where this gap is particularly wide, which makes the poor and less educated regard themselves as being further down the social and professional scale than the rich and well educated. When working with communities, however, it is particularly important for professionals to be conscious of this gap and to behave in ways that make people feel less intimidated. This will allow them to reach a level where they feel comfortable expressing their ideas and working with professionals as their equal partners. The small upgrading projects under the ACCA programme have contributed to reducing this kind of gap, and many young professionals have been mobilized to work with communities. Because most of the small upgrading projects are not very complicated technically and match the skills levels of young professionals, their young, modest and less domineering presence and their availability to spend more time in the community have largely helped remove the usual feelings of anxiety, discomfort and subservience experienced when working with professionals.

Community architects help break people’s and society’s mental fixation that the poor are incapable of achieving their goals. Through workshops and other creative activities, community architects try to make the process – of designing a house or planning a new site, for example – as simple and least technically daunting for people as possible. The main aim of every activity should always be to allow people to gradually build up their confidence so that they can take the lead role in planning, designing and building their own houses and communities; and likewise, to have the confidence to know when to seek technical help from architects, engineers and planners – and also how to direct technical professionals from a position of authority, as leaders of the process.

To a certain degree, society makes them believe (perhaps in varying degrees across Asia) that because they are poor and less educated, they cannot do things such as designing houses and planning communities, and that this is a job only for professionals such as architects and planners. The community architect has a very important role here in ensuring that transformation happens at the basic level, by breaking down such disempowering mental fixation that society and people themselves have of what people can and cannot do.

For example, when communities make cardboard models of their houses, it is another simple way of getting them to “be the architect” and

have the chance to express the form of house they may want. Similarly, the first step in a housing design workshop, of asking people to draw their dream house, is very important. Letting the people dream about what they want is a drastic departure from what people are used to, that is, having outside powers telling them what to do and deciding the course of their lives. Allowing the people to imagine their lives together as a community is another example. This is taking that important first step of letting people become the subject of the process, by giving them a chance to express their ideas together. Gradually, their confidence grows, first at the individual level and then collectively, and they reinforce each other's confidence as they interact and learn from one another. This process becomes very powerful and eventually, they realize that they can in fact do anything.

May Domingo, one of the authors of this paper, remembers how in the very first housing design workshop in Iloilo (Kabalaka) in the Philippines, they started with a very simple exercise of getting the people to draw their dream house. But nobody wanted to pick up the crayons or coloured pens they were given or touch any of the big white sheets of paper because they felt they were incapable of drawing something that architects were meant to do. It took at least 20 minutes to explain to the participants that anybody could draw as long as they did not worry too much about how it looked. This was such a simple exercise but it was so important for them to be able to break that thinking and build their confidence. The community members were told that ultimately, it was they who were going to have to build these houses and not the architects.

The process of breaking through that kind of thinking took a long time but it was important to do so; and at the end of that long design and building process the people were so proud that they had managed all of these things, even though they had started by saying "I cannot draw this!"

e. The need for real projects to work on; not just talk or theories

Practical projects are an effective way of ensuring that communities fully appreciate their potential in construction projects. Box 3 provides an example of a practical project that was undertaken collaboratively by community architects and communities in the Philippines.

The ACCA programme has opened up new opportunities for professionals. Although many young architects had expressed a desire to work with communities, opportunities to do so were rare and sporadic. However, the large number of ACCA projects being implemented has allowed the interests and involvement of an increasing number of architects and other professionals to be sustained and deepened. This kind of solid, consistent and relatively ongoing area of work with communities has created an opportunity to form a network of professionals within countries and between countries of the region, to share their experiences, support each other's work and create a parallel force, such as the people's movement, of professionals seeking to create change in society.

The ACCA programme has also opened up the opportunity for partnerships with universities. It is very important as a first step when approaching universities to introduce them to the concept of community-driven upgrading and the ACCA vision of effecting pro-people change at city scale. It is also important to show them what is already happening

BOX 3

The bamboo bridge project (a small upgrading project) of the Matina Crossing community in Davao City, Philippines mobilized a lot of professionals from beginning to end. Aside from the Indonesian bamboo architects and carpenters, it also got universities, architects and engineers, not only from Davao but also from the cities of Iloilo and Cebu, to be deeply involved in the structural design. The community were aware of the very strong flash floods that occurred in the Matina River and expressed anxiety over any bridge design that used columns, for fear that the enormous force of the current would knock the columns out and cause the bridge to collapse. The challenge then for the professionals was to help the community design a footbridge without columns to span the 23-metre width of the river, which was to be made of bamboo but that was strong enough for pedi-cabs to use.

There was a further challenge in that the entire construction of the bridge and management of the project was to be undertaken entirely by the community. For almost a year, this mobilization of men, women, youth and children in the community created a lot of intense interaction between them – not without the usual tensions and minor conflicts – and all worked with dogged determination.

On many fronts, the challenges for the architects and the engineers were equally large. Everything that had to be done was all new, for both community and professionals – from the structural design of the bridge, to searching for the right species of bamboo, to learning how to propagate and treat the bamboo, to training, working with and also learning from community people themselves to implement the project.

The opportunity to do and learn and experience so many things from a project such as this strengthens the commitment of both the professionals and the community to see beyond the project and beyond their own community, and ask what else can be done – for example, developing the use of bamboo for housing.

For both the community and the professionals, this kind of project also strengthens the sense of responsibility to do it well and to make sure the bridge stands safely for as long as possible, knowing that the project received a loan from ACCA funds and that this is a big investment for the people of Matina. The technical challenges involved in a project such as this makes it very interesting for professionals; but being driven by people and grounded in the daily reality of working with the community provides the professionals with a whole new, rich learning experience that does not exist within the confines of a university or a private firm.

on the ground, and to demonstrate that this is taking place not in only one or two communities but in hundreds of communities all over Asia. Showing them the wide range of issues and the numerous alternative solutions that already exist, as well as the fact that there is still huge scope for finding many more new solutions, stimulates the social commitment and challenges the creative interests of universities and young students, making them want to become part of the larger movement for change.

III. THE ROLE OF COMMUNITY ARCHITECTS IN THE PROCESS OF SOCIAL TRANSFORMATION THROUGH PHYSICAL TRANSFORMATION

Whatever the tools and processes of working with people, the core idea of being a community architect is to oversee a process that brings together all of the people's energy and lets them realize their potential, beyond the problems they face. Rather than providing technical inputs, as is the case with the conventional architect, the role of the community architect is to ensure that all working processes still maintain space for people to share their ideas and be the subject of their dreams and solutions, as much as possible. In this way, social transformation could happen along the

way of physical change, guided and facilitated by community architects. However, it is quite hard to explain logically every step the community architect has to go through when working with people, because this may vary depending on the context of each community. But there are key steps. The ACCA process starts with a survey of the settlement, so that everyone gains a better understanding of their settlement. The second step is the planning and design of housing and community upgrading. The processes of change in physical terms also create the concrete direction of social changes and transformation within the community, where saving groups and self-organization can be formed.

a. Mapping and surveying: starting point of social and physical transformation

Mapping and surveying are the first step for community members and architects in understanding existing problems. The mapping process we discuss here is not simply a gathering of information and data and arranging the analyzed data in a simple way in order to inform people. The process of mapping itself also provides a good starting point for all community members to reflect on how they live in the community, how things relate to one another both socially and physically, and to identify the common community problems that concern everyone. This opportunity also provides the community with the chance to form working groups to help determine community priorities.

Mapping can also be a good starting point not only for individual projects for a community seeking physical solutions but also as a catalyst that could lead to the formation by urban communities of networks on a citywide scale. Good examples are Bharatpur city in Nepal and Lautoka in Fiji. In Bharatpur, eight communities came together to collaborate on a community project in Salayani. In Lautoka, 13 communities participated in a workshop and the first mapping exercise enabled community members to make a city map detailing where existing squatter settlements were located and who owned the land. They also mapped vacant land and its ownership, for potential development or relocation if necessary. Base maps of the city were provided by the city administration and two pieces of land for relocation were donated by the municipality.

b. Designing community upgrading

The community architect can play an important role in providing alternative designs and finding ways to improve physical aspects of both housing and basic services at an affordable cost to the communities. As in Nong Duang Thung in Lao PDR, the design process started with a plan of the existing settlement of 84 households, and then the people looked at how they could adjust the main walkway a little to bring in a water supply, drainage and electricity for all. Only five houses had to be moved to make way for the widened and straightened walkway. This process could be achieved through the creation of guidelines for re-blocking designs, where every household is part of the entire community development (Figure 1).

Sometimes, the design may also take advantage of existing local opportunities. One example is from the Matina Crossing community in Davao, where a bamboo bridge for crossing a deep ravine that separated



FIGURE 1
Community plans showing “before” and “after” upgrading in Baan Nong Duang Thung, Laos PDR

The “before” plan illustrates participatory ideas on reconstruction, on-site relocation and upgrading that were included after a mapping process. The “after” plan shows the new, wider walkways and the water supply and drainage infrastructure supplied to the community.

SOURCE: Illustration by Supawut Boonmahathanakorn.

communities from the mainland was constructed (Photo 1). This encouraged the people to use local materials and undergo “bamboo training”, which started with harvesting and preservation and led onto uses for meeting basic community needs for shelter, furniture, bridges, income generation and handicraft production. Linked to the sophisticated design and its quality was the need for the communities to gain the right to live on their land.

Sometimes, conflicts within communities can be solved gradually through small upgrading processes that involve community architects, as was the case in the toilet project for Muslims and Christians in Digos in the Philippines. The project unified Christians and Muslims in a place that had been torn apart by communal wars for decades. It was a community where one side was Muslim and the other Christian and both areas experienced serious sanitation problems. But they had to compromise on how to deal with the situation – could they separate the toilets and make one side Christian and the other Muslim? There was a lot of dialogue along those lines, but finally they opted to build the toilets together in a row, in the same area. Four stalls were built (two for Christians and two for Muslims), with different coloured doors and logos to identify which belonged to whom. This toilet project was a major breakthrough and was quite significant for the two communities as they

**PHOTO 1****Community bridge made of bamboo, Davao City, the Philippines**

© Andrea Fitrianto (July 2011)

were able to manage it jointly. Students from the local University of the Philippines in Davao were also involved in the project. Furthermore, it helped show that communities can produce construction materials such as soil and cement blocks by themselves, to generate income and reduce the costs of construction materials.

c. Comprehensive site planning: weaving Nature and communities to live together

During the site planning process for communities that are to be relocated from their old settlements to new allocated land or that move back to their homeland after a disaster, the principal questions are what are the conditions that make a community live together well and how can we as architects create the participatory design and planning processes to create those conditions? Mandartola is an area of new land allocated by the government to 346 families in Gopalganj municipality, Bangladesh. The families had been evicted from their settlement to make way for the expansion of a sports complex, and at present are living in temporary housing in 32 locations scattered around the town. People have been organized by the Urban Partnership for Poverty Reduction Programme (UPPR – an organization managed by UNDP) into saving groups and have formed a community development council. The 346 families have asked to move to this 4.16 acre site once land filling and plot allocations have been completed. In order to achieve this, community architects, together with local young architects and planners and UPPR and municipality staff, have been assisting and encouraging people to be involved in the process of site planning and housing design. The architects help find



PHOTO 2

A workshop with community members to explore the new site plan possibilities, Gopalganj municipality, Bangladesh

© Supawut Boonmahathanakorn (June 2011)

practical solutions to suit different site conditions – be it in low-lying paddy fields, beside main roads or in flood-prone areas. In terms of social and community organization on a citywide scale, the challenge is how to share land between families that has been allocated by government. If the land is inadequate, how can all those in need be accommodated? And as a pilot project in partnership with government, how can this opportunity be used to set up a city development fund and its mechanism to help other poor groups in the city (Photo 2).

Another example is the Pan Thakhin savings group formed in one of the landless communities in Hlaing Tar Yar township (a peri-urban area of Yangon in Myanmar), where architects worked with the community. In Hlaing Tar Yar, where most of the members of the savings group are extremely poor land renters, the people faced eviction as speculative buying and selling of land drove up both the land costs and land rental rates. So people started savings groups in order to buy new land with a communal land title. Once they had reached a clear decision to purchase the land, which was supported by the ACCA programme, they started to work with community architects. The key lesson was to understand what they needed and how much it would cost them to build new houses



PHOTO 3
Savings group members consider plot sizes according to their financial capacity

© Chawanad Luansang (August 2010)

based on their resources (Photo 3). With the help of the architects, people explored their housing designs, using paper models and with some simple scale tools. Through the design process, people could visualize how they would like to live together and how big a plot they would need. People are almost always extremely practical and realistic when they draw their dream houses, and most of the designs consisted of a simple house on stilts, a toilet, a pig shelter, a water pump and a big tree. From there, a financial scheme was developed that was related to the design of the real houses and real plots. The architect helped with technical details such as shared septic tanks to save money on the toilets and a simple biogas tank that can run on pig dung. By working on one pilot project the architect can share these ideas with other communities, for example by inviting urban poor such as the landless in north Okalapa to come and learn. This is an important networking strategy and an important way of maximizing the learning in every project.

Another important example of the work of the community architect is the rehabilitation that took place after the Mount Merapi volcanic eruption in Indonesia, whereby the Arkom Jogja community architect group in Yogyakarta helped to facilitate a network of 11 villages that were badly affected by the eruption. The villagers saw the volcanic eruption as a natural cycle that they had always lived with. For them, the real disaster was the government's relocation policy, whereby farmers who had 3–4 hectares of land before the eruption were being forced to relocate to sites where they get only got 100 square metres of land and US\$ 3,500 to build a little house. After the eruption, some villagers went back to rehabilitate their villages in defiance of the government's relocation plans. A community architect has been supporting them to build temporary

houses, set up women's savings groups, map the settlements, replant bamboo and hardwood forests and use some small project funds from ACCA to rehabilitate the water supply system and repair drains, roads and evacuation bridges. The architect in partnership with the community creates a link between traditional wisdom and today's technologies. The architect, for example, learnt that communities on the slopes of Merapi always planted bamboo around their settlements, which they used to build all sorts of things. Bamboo groves can also act as an early warning system because the bamboo poles will crack and make a thunderous noise that can be heard all the way down the mountain. With this knowledge, the architect and the communities replanted the bamboo forests around the settlement to retain this early warning system for future eruptions.

Blending design and planning with socio-political process is key. Every step of the working process has to create a sense of working together. By starting with simple things, people's confidence is strengthened. Sometimes, people find small working groups easy and comfortable, a place where they can share and discuss ideas, and this is crucial in the earlier stages; and these small groups can gradually grow and develop into a working taskforce in community development. The architects have to encourage people to discuss and analyze the information gained from mapping and surveying, and through this group analysis and discussion many solutions will emerge and lead to a point where people will have to find the consensus to proceed to the next stage of working. The architect helps to make the abstract more tangible and visual, so that people can relate to their experience. But it should always be borne in mind that the architect should not dominate the decision-making.

When tasks are of a technical nature, such as producing estimates and construction budgets or calculating the size of a tank producing biogas, the architect can link communities with technicians so that knowledge can be imparted without actually installing the facilities for them.

IV. THE NEXT GENERATION OF COMMUNITY ARCHITECTS: GETTING STUDENTS AND UNIVERSITIES INVOLVED

The demand for community architects in supporting the people-driven processes in the ACCA movement is high, but there are few architects with such skills. To spread the concept of community architecture and to encourage the active involvement of young architects and lecturers, the network has worked with students and lecturers, offering them the opportunity to learn by supporting informal settlers or getting involved in finding solutions to urban poverty. This bridge not only benefits the urban poor in that they get support from the local institutions but it also creates new ways of learning for the architecture students, namely that the physical change of planning and designing can be implemented with the social aspect of people-driven process in mind.

Over the past two years of the ACCA programme, there has been much collaboration with the universities. For instance, the bamboo design workshop in Davao to explore the building of the bridge was organized by the Homeless People's Federation Philippines Inc., hosted by the Matina Crossing community, and supported by the Philippine Action for Community-led Shelter Initiatives Inc. (PACSII), the Technical Assistance Movement for People and Environment Inc. (TAMPEI) and

two universities in Mindanao, as well as 60 participants from various federations, community representatives and architects from Thailand, Cambodia and Vietnam.

Even though there is a big demand for architects in the global South to work on commercial projects, there is a need for the curriculum to focus on addressing urban poverty and supporting community development. Over the past two years, the ACCA programme has shown that universities are keen to be part of this. Currently, there are 15 groups of community architects working in nine Asian countries. There are also more than 20 universities across the region that are involved in a range of community activities such as citywide surveys and mapping, designing and implementing small and big building projects, running design workshops and providing ongoing technical support, helping to prepare presentation drawings and models as negotiating tools to present to local governments, helping communities to design low-cost housing models and estimating costs, and helping to develop and manufacture low-cost building materials.

With the rising number of young architects in the region, the Community Architects Network has been organizing networking events such as workshops and exchanges to help strengthen their skills; this also creates a space for the young architects, universities and communities to engage with one another. The network has also been documenting emerging and practical knowledge gained and lessons learnt in the form of a handbook.

V. CONCLUSIONS

Over the past few years, a network of community architects in Asia has been involved in a number of community housing projects, including 111 big housing and 177 small upgrading projects in 162 cities, supported by the Asian Coalition for Community Action (ACCA) programme. This programme, which is supporting citywide upgrading in many Asian cities, has created an opportunity where Asia's people-driven housing movement and a new kind of design support system are growing together, pioneering all sorts of ideas and showing new light. Groups of architects are working with poor communities and exploring new techniques for getting people to survey and map their settlements and design their own community layouts, upgrading projects and housing models. The work of community architects in Asia has shown that professionals should stop making all the design decisions and instead, should take on the role of helping translate people's own ideas for transforming their houses and communities into drawings and models that the wider society can understand. Through such a design process the communities will become empowered, and it can inspire them to participate in other productive activities.

REFERENCES

- ACCA (2010), *107 Cities in Asia: Second Yearly Report of the Asian Coalition for Community Action Programme*, published by ACHR in both printed and electronic forms and downloadable from the ACHR website at www.achr.net, 48 pages.
- Towers, G (1995), *Building Democracy – Community Architecture in the Inner Cities*, UCL Press, London, 272 pages.