

Supporting Reblocking and Community Development in Mtshini Wam

Abstract

The South African government is currently facing immense pressure to provide all citizens with access to housing and basic services. In response to the historically slow and unsustainable system of housing and service delivery for informal communities across South Africa, a process called reblocking was created. The informal settlement community of Mtshini Wam and our sponsor, Community Organisation Resource Centre (CORC), invited us to observe the first reblocking project undertaken in partnership with the City of Cape Town and the Informal Settlement Network (ISN). Our project goal was to support this reblocking process as well as community development. At the partnership's request, we created a guidebook to help streamline this process as the new standard of informal settlement improvement. We also utilised momentum from the reblocking process to implement community driven initiatives addressing issues of food security, entrepreneurial job opportunities, and quality and safety of shack dwelling.

For our full project report: <http://wp.wpi.edu/capetown/homepage/projects/p2012/mtshini-wam>

For more about the Cape Town Project Centre: <http://wp.wpi.edu/capetown/>



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Background

A housing crisis currently exists throughout South Africa, and as a result, millions of citizens are living in shacks in areas known as informal settlements. These environments pose many health and safety risks, including limited access to clean water and sanitation, coupled with the risk of floods and fire. Despite these conditions, over 3.6 million South Africans reside in informal settlements, which have grown rapidly in the post-apartheid era (Hasselhorn 2012).

The racial policies of apartheid forced many non-white South Africans far from the economic opportunities of the city. In 1994 apartheid ended and the constitution was heavily revised, lifting the geographic restrictions placed on non-white citizens. In response, migration to urban centers in the pursuit of financial opportunity accelerated, and settlements comprised of salvaged material shacks began to develop on both public and privately owned land, including flood plains, road reserves and dumpsites. With the rising number of informal settlements and new constitutional requirements to provide housing and services to all South Africans, informal settlements were finally recognized as a critical state issue. To provide housing opportunities, the government typically proceeded in a mass eviction, relocation and housing subsidy program, as used in the initial upgrade of a Cape Town informal settlement Marconi Beam in the late 1990s.

With little involvement of the community, the government relocated residents of Marconi Beam into subsidized “formal” housing, creating Joe Slovo Park. Many, however,

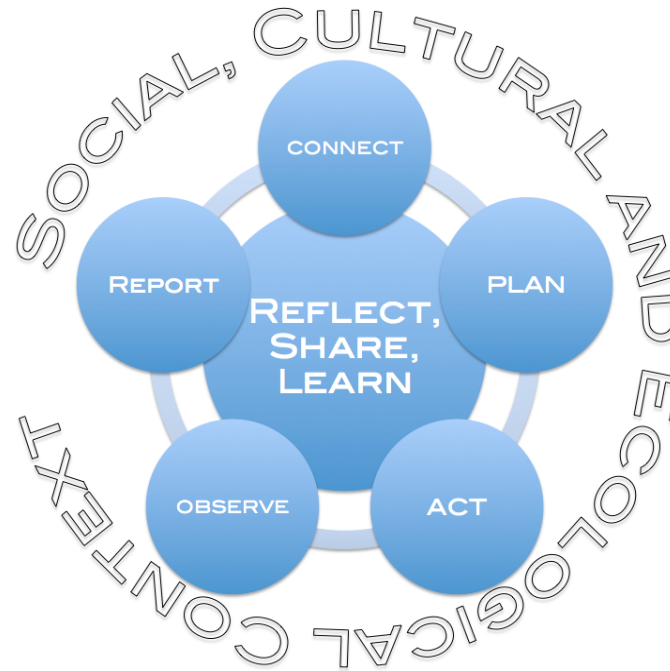
were unable or unwilling to pay for their formal services and either sold their houses or rented their backyards to shack dwellers. Over time, open areas in Joe Slovo Park became dense informal neighborhoods, reverting Joe Slovo Park back to an informal state (Barry 2006).

Joe Slovo Park, located in Milnerton, was a new project site for the WPI Cape Town Project Centre. The project took place in a neighborhood of Joe Slovo Park called Mtshini Wam. Since its creation in 2006, Mtshini Wam has become home to 497 people (SDI 2012). Mtshini Wam is facing many of the same challenges as other informal settlement communities, but is undergoing a very new and innovative method of informal settlement improvement, called reblocking.

Methodology and Objectives: Shared Action Learning

Working in informal settlements presents unique challenges that extend far beyond the distinctive cultural differences between American and South African cultures. Shared Action Learning (SAL) is a Cape Town Project Centre, action research oriented approach to help work within these complex issues by forming strong relationships and actively engaging all stakeholders of the project.

The five processes of SAL are connecting, planning, acting, observing, and reporting with consideration of the social, cultural, and ecological context wherein the project is taking place. These processes are to hap-



pen simultaneously in order to facilitate deeper understanding (Jiusto, Hersh and Taylor 2012). We connected with our partners as suggested by SAL to determine what our project goals would be. Our sponsor asked the project group to focus on researching reblocking and informal settlements during the preparation phase of the project. Community connections, however, only occurred in person because community leaders could not be contacted during the preparation phase. For this reason our project objectives were not clearly defined before we arrived in Mtshini Wam, but instead developed over time using Shared Action Learning on the ground. Through these extensive cycles of the SAL process, the following objectives were created:

- Understand the process of reblocking, the reasons for it and the benefits it provides
- Create a guidebook to help improve the reblocking process
- Implement community development projects in Mtshini Wam
- Create a pamphlet for the community detailing the story of Mtshini Wam’s reblocking
- Create certificates that accredit the skills reblocking workers developed.

Project Narrative

The following section of this report focuses on the major accomplishments of our team in Mtshini Wam. To fully understand our project, one must develop an understanding of this new upgrade process of reblocking, because it is in this context that our project takes place. Many of our deliverables and observations are directly related to the reblocking process, while others capitalize on the opportunities created by the reblocking process in Mtshini Wam. For a more detailed account of how our project came together in Mtshini Wam, including both challenges and deep rewards of cross-cultural collaboration, visit our project webpage “Acts and

Scenes” at: wp.wpi.edu/capetown/homepage/projects/p2012/mtshini-wam/.

What is Reblocking?

Reblocking is a process developed by Shack Dwellers International (SDI) that is based primarily on the spatial reconfiguration of shacks in informal settlements (SDI 2012). Shacks are rearranged and reconstructed to maximize open space in the settlement. Shacks are also often built on raised platforms and the settlements graded to prevent flooding. Reblocking is considered an in-situ process due to its minimal disruption of resident’s lives throughout the duration of the project. Reblocking is only made possible by the commitment and manual labour of community members where reblocking is occurring, a very bottom up strategy.



In the case of Cape Town, South Africa, reblocking is made possible by a multi-stakeholder partnership comprised of Non-Governmental Organisations (NGOs), Community Based Organisations (CBOs) and the City of Cape Town. The Informal Settlement Network (ISN) is a CBO comprised of informal settlement residents from across South Africa, who identify and mobilize communities to be reblocked, and provide support during the process. Community Organisation Resource Centre (CORC) is a support NGO who provides financial and technical support to both the partners and community.

CORC, in collaboration with the community, purchases the siding material for each

structure through another organisation, iKhayalami. The City of Cape Town provides the remainder of the shack materials through standard issue fire kits, and is also responsible for the installation of hard services, such as water taps and toilets, after reblocking is finished.

Through the Extended Public Works Program, the City of Cape Town hires community members to implement the physical reblocking in conjunction with outside contractors. The result of this partnership is a settlement organised into neat rows and clusters with improved shacks and installation of hard services available to every community member.

Benefits of Reblocking

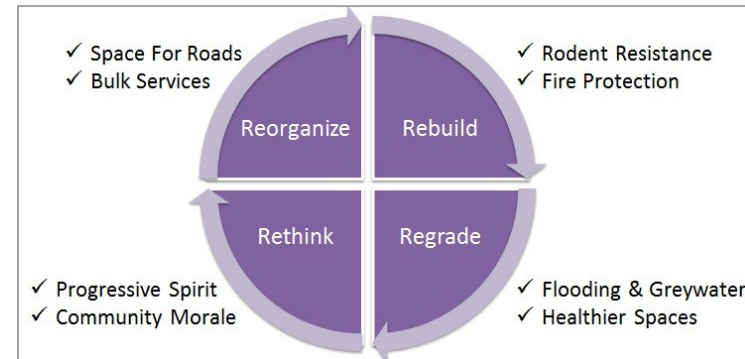
In Mtshini Wam, we witnessed this reblocking process along with the challenges and benefits involved. We observed clear benefits with respect to fire safety, establishing roads, reducing greywater hazards, creating jobs and inspiring a sense of pride within the community, all discussed below.

New fire-resistant metal structures, coupled with the creation of space between rows of shacks, greatly reduce the risk of fire. These spaces are specifically designed to allow the passage of large emergency vehicles.

The community’s soil compacting efforts and introduction of grading to the settlement appeared to reduce the amount of standing water after rainstorms. When we arrived in Mtshini Wam, there were large pools of greywater in the non-reblocked clusters that children would play in, while the pools made walking through the settlement a challenge.

During the demolition of old shacks, grey-

water could be seen pooled underneath residents’ shacks, often with rats present as well. The compacted platforms created for



reblocked shacks to stand upon prevent this pooling and have reportedly kept rats from burrowing under community shacks. Living conditions are greatly improved in reblocked clusters and shacks, which are noticeably less damp. Community members told us that they feel healthier since this change in their living conditions.

There is also a shortage of services present in Mtshini Wam as only three taps and 16 chemical toilets service 497 people. During our time in Mtshini Wam only one tap consistently worked. The chemical toilets are cleaned infrequently and due to the sheer volume of people using them, they are unpleasant to use and a health hazard.

The previous arrangement of the original shacks made installing personal taps and flushing toilets nearly impossible. However, the order that reblocking introduces to the settlements eases some of the difficulties in service provision. The government has promised a tap and flush toilet per shack in Mtshini Wam. While technically challeng-

ing, this would be a quantum leap forward from current services, and is made potentially feasible through reblocking.

The partnership makes involving the community possible, as ISN and CORC work directly with the community workers during all stages of reblocking. As a result, the community feels a sense of pride and ownership for what they have created, unifying the community, giving job opportunities to those who otherwise may not have one and creating a sustainable change. As one community leader stated, “we’re not just building homes, we’re building people.”

Opportunities for Improvement

This multi-stakeholder reblocking partnership is in its infancy and while most aspects are working, there is room for improvement. Partners frequently indicated that there was no guideline on how to proceed as they look for methods of improvement. They expressed interest in the creation of a guidebook that details past upgrading techniques and offers recommendations for improvements to future reblocking projects. Being involved in the process with no political or organisational motivations allowed us to gather and analyze information from each partner through meetings, interviews and onsite observation. We used our understanding of re-

blocking in collaboration with the WPI CTPC Langrug group to create a guidebook, supplemented by useful planning tools for communities and suggestions for improving the reblocking process.

Improving Efficiency

We observed in Mtshini Wam that communication amongst partners remained a challenge throughout the process. Clear communication is necessary for the complex process to work effectively, which will be portrayed in each challenge below.

In Mtshini Wam, meetings, phone calls and SMS messages are the main forms of communication in this process. Meetings, as the most formal method of communication, are necessary to keep all partners on the same page. Unfortunately, meetings are often cancelled by the city and NGO partners in particular, as they are spread very thinly across many soon-to-be implemented upgrading projects. The partners have a great deal of responsibility and very limited resources to allocate between projects. As more communities begin to reblock, the need for the partnership to expand and work more efficiently will increase dramatically. The guidebook is designed to systematize processes and maximize information flow between partners to keep everyone informed even if meetings fail to happen.

Core Challenges: Communication, Trust, and Coordination

Theoretically reblocking is a simple process. In practice however, it becomes extremely complicated due to the rich history and per-

spectives of those involved. South African politics contribute a great deal of difficulty to reblocking. The notion of promises made and not fulfilled counteracts the need for trust-based relationships amongst partners. A lack of trust is especially prevalent between informal communities and politicians. Those from different backgrounds are dealing with social divides and language barriers that also complicate the trust building process.

Bridging Informal and Formal Approaches

The partners each bring their own ways of accomplishing goals based on their experiences and past successes. The residents of informal settlements have become well practiced in temporary building solutions and an ability to improvise. This is in stark contrast to the government's careful, risk-averse, long-term planning approach. Where informal settlement residents rely on speed, agility, and "good enough" workmanship, the government, especially when developing formal infrastructure, expects much higher levels of precision and durable construction.



Even within government, however, inter-departmental communication and coordinated planning is difficult. For example, Eskom, a public utilities provider, and the Department of Human Settlements, unbeknownst to one another, were both working in the same informal settlement, but with divergent and conflicting plans. The partners recognize that trust and communication issues exist and are sincerely attempting to consolidate their work styles. In the Mtshini Wam reblocking process, CORC sought to balance the technical needs of the city with the abilities and work style of the community by supporting the relationship through training workshops and liaising much of the communication. This first effort provided an important learning opportunity and we made specific recommendations to improve the design and mapping process. In the initial design process there were instances where access to shacks would have been prevented, yet had the map been more finalised, the design on the ground would not have had to dramatically change. To resolve this problem in the future, we recommend placing doors and toilets on the original mapping design, while also using a large map of the community to mark off areas that have already been reblocked in a very visual manner.

Partners recognize that the biggest challenges with reblocking occur at a management level. They see that each phase of the project demands different levels of informal and formal work styles, which may be a result of varying preferred operation styles. Together we worked to further attempts to resolve this issue by finding the appropriate balance of thorough project planning and on-the-spot problem solving.

Figure 2: The Weekly Planning Form

Acting on Areas of Opportunity

The Guidebook and the specific recommendations we have left the partners present vehicles for process improvement, in which all partners are eager to be involved. Logistical and supply chain issues were particularly challenging. The number of structures demolished and constructed differed week to week, making it hard to schedule longer than a week at a time. This would often result in not enough notice given to the suppliers before the material was required on-site, and families were sometimes displaced for long periods of time during construction. To ensure a more predictable work rate we created work forms and progress tracking tools. The difficulty in this task was

finding the appropriate level of planning detail so that the planning is effective but not such a burden that community members would not use it. Figure 2 shows the very simple weekly planning form that was the outcome of many design improvements culminating the varying work styles of each partner involved.

Immediate progress was made using these tools and considerations. More importantly, progress was made due to the solidification of partner roles as previously, miscommunications and challenges arose over time and the partners addressed them to move forward. We witnessed a dramatic increase in work pace, precision and community morale. In leaving the community and its partners with these new tools for improvement, it is our hope that they continue to gain ground in Mtshini Wam and in the upcoming reblocking projects around Cape Town.

Beyond Reblocking: Community Initiatives

As envisioned by SDI, reblocking is not just about improved housing, but about strengthening communities, and indeed there is a strong sense of pride and accomplishment amongst the community members of Mtshini Wam for the reblocking process. Through conversations and profiling of community members, the Xhosa term “vugusenzele,” or in English “do it yourself,” was repeatedly used by community members to describe the new attitude of the community since the planning and implementation of reblocking.

Many of the people we worked with close-

ly expressed a strong sense of entrepreneurship, coupled with a forward thinking mentality. Community members are thinking not just of tomorrow, but of the time after January 31st, when reblocking is expected to be complete, focusing on continued improvement of their living conditions through community driven initiatives. We held multiple sessions with community members about their own “beyond reblocking” visions and distilled from these conversations ideas for four specific initiatives to undertake during our project time:

Gardening: To address the issues of food security and economic opportunity in Mtshini Wam, a Gardening Team was established and with the community we implemented three different types of gardens.

Carpentry: Community members formed a Carpentry Team to pursue entrepreneurial opportunities, and we provided them with skills for furniture design and business principles.

Litre of Light: To address fires and the quality of shack dwelling, we worked alongside the community to install ten solar bulbs in Mtshini Wam, leaving a tool kit and installation manual for mass implementation.



Certification: In collaboration with the reblocking partnership in Mtshini Wam, certificates were created to recognize the workers’ participation in their community upgrading process and aid them in future job searches.

Gardening

Gardening was the most constant of our community initiatives, as it remained a top priority of the community members from our first conversation to our last day in Mtshini Wam. It offered a way to both beautify the community, but also provide essentially free food. We liaised with a local designer and agriculture expert, Stephen Lamb of Touching the Earth Lightly, to secure the donation of 18 crated plants for the settlement. To care for the plants upon delivery, community leaders convened a group of 10 interested gardeners. We outfitted this team with basic tools and introduced ideas of vertical gardening.

Through gardening, we supported the abilities already present in the community, as most gardening team members had prior experience. Through continued collaboration with Stephen Lamb, the community was offered a subsidized vertical garden with the financial support of the CTPC co-researcher budget, the design concept from Arlo Mitchell of Greencube Landscapes and Gardens, and a sustainable worm composting bin donated by Global Worming. The vertical vegetable provides a space saving way to improve food security, while further reducing the risk of shack fires. It was difficult to gain acceptance of this idea, due to community hesitations about what was really being offered. Knowing the community would miss a valuable opportunity if

they rejected the idea, coupled with the pressure we felt to deliver something tangible to the community through our project, we explored the idea through drawings and extensive back and forth conversation. In doing so we were able to negotiate and compromise on the installation. This installation culminated in a major publicized event, which highlighted several other community initiatives as well.

We provided the Gardening Team with tools through our co-researcher budget, a “Worm Farm How To” manual, a Gardening Team “Plant Care” schedule, tool tracking documents, and other inexpensive ideas for vertical gardening. Finally we discussed future planning of produce sales in Mtshini Wam and neighboring communities as an entrepreneurial enterprise.



Litre of Light

The community voiced the need for windows and lighting solutions. We observed that many people must open their doors during the day to light their shacks, allowing sand blown by the wind into their home, and learned that candles have caused major fires within the community. Most residents are unable to install windows due to high cost or fear of having their shacks broken into. To address these issues, we investigated Litre of Light,

an innovative, electricity free lighting source that provides affordable and safe lighting to low-income shacks (aliteroflight.org). The Litre of Light solar bulb is created from a soda bottle filled with water and installed in the roof, employing the property of refraction to disperse sunlight into the shacks.



They provide an inexpensive way to bring light into dark spaces without installing windows, while eliminating the security risk and need for daytime candles.

After an in-depth discussion, three community members decided they would like to try the solar bulbs. With help from Touching the Earth Lightly, nine lights made their debut at the big event, attracting much of the day's [attention](#) ("Light at End of Tunnel over Shack Blazes," Cape Argus 2012), as they cost only R34 to install and were some of the first Litre of Light bulbs to be installed in South Africa. We supplied the community with a tool kit of essential supplies necessary to install the solar bulbs, and a step-by-step instructional manual. The bulbs also provide an opportunity for the Carpentry Team to install the lights and make a small profit.

Carpentry

A group of residents wanted to turn their skills and interest in carpentry into an entre-

preneurial opportunity after their contracts with the EPWP end, and so in the same spirit as the Gardening Team, a Carpentry Team was created. The team showed us multiple examples of their work including a chair and desk, explaining that they would like to build new doors for Mtshini Wam and also for other reblocking communities. After many discussions involving budgeting and general fiscal planning, it was agreed that WPI would also fund tools for this group through our co-researcher budget. These tools would not only be used for carpentry, but also for the reblocking effort, gardening and Litre of Light



as both gardening and carpentry would afford entrepreneurial opportunities in the future. We designed and built shelves with the Carpentry Team that were specially designed to hold crated plants in a vertical fashion, while still allowing access to sunlight. To aid in the long-term success of the Carpentry Team, we provided instructional pamphlets, tool tracking documents, and hands-on training sessions.

Certificates

Certificates were the final community initiative our team pursued. Community members had indicated that certificates of participation in the reblocking of

Mtshini Wam would hold great value to the community workers. Certificates could supplement future job applications and provide recognition of the hard work and learning accomplished by each individual. We created certificates and arranged for the City of Cape Town, ISN, CORC and WPI to all give signatures of key personnel. This certificate could potentially serve as a model for certificates of reblocking in other upgrade sites, perpetuating the self-improvement mentality resultant from the reblocking process. On our last day in Mtshini Wam we held a ceremony to hand deliver the certificates to each individual. The pride and excitement community members felt was evident in their celebration, which involved singing and dancing.



Conclusion

The reblocking process is an extremely difficult community based, multi-stakeholder project that has had great success in Mtshini Wam. We have seen the transformation of a ramshackle settlement with no hope of basic service installation into a cleaner and safer organized space. The partnership we were invited into has proven itself extremely capable and willing to meet the demands of informal settlement upgrading.

We believe that the partnership should continue to reblock communities using Mtshini Wam as a model of success at the end of a long, hard road. Mtshini Wam, like every informal settlement, brings its own unique assets and challenges to the process. Having an uncommonly strong leadership and a very motivated community has certainly helped make reblocking a success there. We feel a greater risk of failure is present in reblocking projects without such leadership and community cohesion.

We encourage partners to support community initiatives to improve community member's lives when reblocking ends. These projects can range from food security to crime prevention to improving the aesthetics of their community. Such projects manifest the forward-thinking mindset reblocking appears to promote in community members and partners. By helping community members start their own projects, the partners are channeling the enthusiasm that comes from reblocking into sustainable initiatives that will foster this progressive spirit even when reblocking is over.

Just as our guidebook tools were adapted as often as possible to meet the needs of Mtshini Wam, so too must the process and guidebook be adapted for other projects. With the reblocking partnership keeping up strong communication and a focus on systematic process improvement, we are confident reblocking will become a more streamlined and replicable process even when used in many varying contexts. In conclusion, we support the continuation of multi-stakeholder reblocking in South Africa and hope that our contributions will help make it a sustainable upgrading technique.

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