chapter 2 | pedi twee
context

2.1 Mamelodi

Mamelodi is a suburb located North-East of the centre of Pretoria. It was originally laid out as a dormitory township under the Apartheid government. The Group Areas Act excluded non-Whites from living in the most developed areas. This caused many non-Whites to have to commute great distances to and from work.

Figure 2.1 School children protesting against the Group Areas Act, 1955 (South African History Archive, 1955)

The older parts of Mamelodi, to the west, currently have typical suburb characteristics with residents expressing their pride and aspirations in their kept gardens, house upgrading and elaborate steel gates. To the East however, areas such as Alaska and Phumolong showcase poverty, lack of services, makeshift housing and daily pendulum migration.

Figure 2.2 Mamelodi-West as a suburb of Pretoria (Author, 2016)

Figure 2.3 Mamelodi location maps (Author, 2016)

Chiloane (1991) argues that the aim for the establishment of Mamelodi was to serve as a labour reserve. It was planned in such a way that it should remain a satellite of Pretoria with no economic viability or industries so that it could not become and independent town but would exist only for the convenience of Pretoria's industries and White population.

The original farm Vlakfontein was renamed in July 1962 to Mamelodi after president S J P Kruger. He was known to the black population by this name for 'father of whistling' or 'man who can imitate' (Raper, 1987). By 1964 a population of 6 561, comprising of 744 families, were resettled in Mamelodi (Chiloane, 1991)

According to Dewar and Watson (1984:3) these types of settlements were designed to facilitate control. To do this the number of entrances were limited, buffer strips of land surrounded them and they separated African ethnic groups within the township. They were primarily situated a relative distance from the 'white' cities.

Figure 2.4 Cattle crossing Tsamaya Avenue (Author, 2016)

1861 - Vlakfontein 329 JR farm allocated to C. Jansen

1874 - Vlakfontein was devided into 3 parts

1883 - Hugo Nellmapius builds his first factory in Eerste Fabrieken area. The Hatherley Distillery produced gin and whisky on the farm Hatherley. It was opened by President Kruger on 6 June 1883 and named "Volkshoop".

1890- Delagoa Bay railway line built to transport goods to and from Lourenço Marques (Maputo).

1895- The South African Fruit and Meat Preserve Works established in Hatherley

1897 - Liquor law prohibiting the sale of alcohol to non-whites. This greatly affects the Hatherley Distillery.

1900 -Distillery closes due to proclamation issued by the British Military Forces that prohibits the sale and manufacture of liquor.

1945 - Pretoria City Council buys parts 2+3 of Vlakfontein farm to be laid out as a "Black Urban Area".

1948 - 'Mamelodi Rondavels' was the first educational institution established by the Transvaal College of Education for the Pretoria Normal Bantu College and associated with the Kolege ya bana ba Afrika. Struggle leaders Stanley Magoba and Archbishop Desmond Tutu received their eduction here

1948 - Pretoria City Council designed a Native Housing scheme called the Lapa Scheme. A large section of the scheme was rejected by the community as 'primitive kaffir housing' and demolished

1951 - The Group Area's Act was introduced.

1952 - First school built in Mamelodi.

1953 - First public library built in Mamelodi East.

1954 - 'Site and Service' scheme introduced as a owner builder scheme. Majority of Mamelodi was built in this way.

1954 - Vlakfontein Industrial School set up to train workers in skills needed to build these houses.

1955 - First clinic built in Mamelodi.

1958 - Majority of residents of Lady Selbourne forcefully moved th Vlakfontein

1960 - First police station and community hall built in Mamelodi.

1962 - Start of Putco bus transport

1962 - Vlakfontein renamed as Mamelodi

1964 - Cinema built through local initiatuve

1970 - Mamelodi Sports facility built

1974 - Private taxi system starts

1977 - Mamelodi Community Council was founded

1980 - UP Mamelodi campus built (Previously a Vista campus)

1980 - Public Library built in Mamelodi East.

1983 - SOS children's village built

1983 - Hospital and hospice built.

1985 - Dr. Nico Smit moves to Mamelodi

1987 - All formal houses supplied with electricity and sewerage systems.

1993 - Solomon Mahlangu Square dedicated to his memory

1994 - First democratic election

2012 - Vusi Mahlasela receives SAMA Lifetime Achievement Award

2016 - 22 Buses torched in unrest

Waveform of "Silang Mabele" by Vusi Mahlasela

1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

Figure 2.5 Mamelodi timeline collage (Author, 2016)

Todes (2003:111) states that this separation has resulted in sterile environments with poor services and facilities and that it has undermined small-scale economic activity. Stals (1998: 4) notes that South African cities are often characterised by patterns of fragmentation and extreme low density sprawl, as is also the case in Mamelodi.

Stals (1998) also says that the displacement of the poor to the urban edges due to the legacy of the apartheid system together with the fact that the majority of new urban growth is happening amongst those who are most impoverished, results in increasing numbers of people living on the urban edges.

The average South African city has two separate social structures existing side by side. The spaces linked with these social structures also remain detached into their own "envelopes and enclaves" (Murray 2006:6).
The distance between the township and Pretoria greatly affected the social and political lives of the residents. The high cost of transport to town increased poverty and placed the residents under stress (Chiloane, 1991)

Mamelodi was founded with a buffer zone as a physical boundary between the White residential areas and the black residential areas that enhanced separation. In the case of Mamelodi, both physical and social boundaries exist.

Mamelodi is bordered on the north west by the coloured township of Eersterus, the industrial area of Waltloo on the west, The Magaliesberg mountains on the north and a white farming area on the South and the White Franspoort farming area on the east. Mamelodi used to be fenced to facilitate control (Chiloane, 1991).

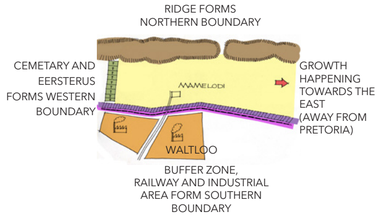

Figure 2.6 Adaption and translation of boundary map done by Mamelodi-Studie (Fortsh, et al., 1987)

In 1953 Mamelodi was rezoned based on ethnic groups. Different ethnic groups were consolidated under four main groups namely, Sotho, Nguni, Venda and Shangaan (Chiloane, 1991).

Figure 2.7 Illegal electricity connections in Mamelodi-East (Mamelodi Mappers, 2015, adapted by Author, 2016)

2.2 Skilled Trade Workers

In 1954, an industrial school, known as Vlakfontein Industrial, was opened in Mamelodi. The school served students from various language groups, environments and cultures (Chiloane, 1991)

Instruction at Vlakfontein Vocational School was given in:
- Bootmaking and Leatherwork (4 years)
- Bricklaying and Plastering (4 years)
- Electrical Housewiring (3 years)
- General Mechanics (4 years)
- Plumbing and Drainlaying (4 years)
- Cabinet-making and Carpentry (4 years)

(Southern Transvaal Regional Secretary and Research Assistant, 1960)

As can be seen in Figures 2.7, 2.8 and 2.9, the Vlakfontein workshops had a communal layout and students also collaborated on projects.

Figure 2.8 Shoe making class (Historical Papers Research Archive, n.d.)

Figure 2.9 Apprentices training as tailors (Historical Papers Research Archive, n.d.)

Figure 2.10 Carpentry students at work (Historical Papers Research Archive, n.d.)

Figure 2.11 Trained as a draughtsman (Historical Papers Research Archive, n.d.)

World shortage

It is worth noting, however, that the negative sentiments towards TVET colleges do not stem entirely from events that take place within a particular TVET institution; but rather they are rooted in the wider social opinions of vocational work (Winch, 2013: 93).

Skills in SA

A lot has been accomplished since the dawn of South Africa's democracy but a lot more still has to be done. Colonialism, Apartheid policy, current governmental corruption and lack of service delivery has not created conditions for the residents of informal settlements to flourish or just even to help themselves. Some policies, like B-BBEE and affirmative action has helped a small portion of the black population yet the majority of black people still live in poverty. The lack of employment opportunities together with conditions unfavourable for further education is detrimental to our South Africa's growth. Not only is it hampering South Africans from achieving their full potential but, as our previous minister labour minister Membathisi Mdladlana described youth unemployment in 2006, as a ticking time-bomb.

Majority of black people are still poor and they are still served by lower-quality public services and institutions (this include public educational institutions) than those of wealthier citizens. In some communities, patriarchy, which is also a legacy of our past, still makes sure that women and girls continue to experience a lower position in many areas of their lives, including the education and training system (DHET, 2014).

Richard Maponya, a South African entrepreneur and property developer, has been outspoken in his condemnation of Black Economic Empowerment (BEE), which he says has only served to enrich a "few connected" black business people. He states that the true solution to address the issue lies in training and education. He finds it frustrating that the country has the tools necessary to address poverty and unemployment, but we're stuck (Skade, 2014).

According to Statistics South Africa (2015), in 2015 as many as 3.6 million young people (15–34 years) were unemployed and actively looking for work, with adults (35–64 years) substantially lower at 1.9 million. Only 6.2 million youth had jobs versus the 9.2 million adults who were employed.

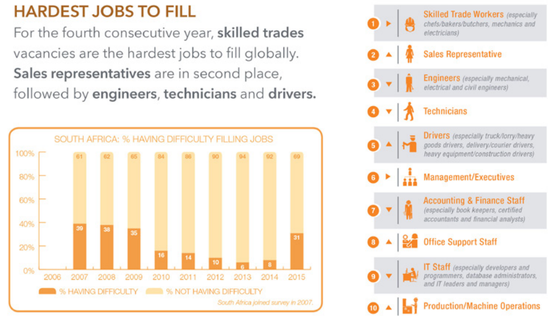

Figure 2.12 Hardest jobs to fill (Manpower, 2015)

Education has long been recognised as providing a way out of poverty and promotes equality of opportunity. The achievement of greater social justice is closely dependent on equitable access by all sections of the population to quality education. Widespread and high quality education and training will allow more rapid economic, social and cultural development for society as whole. Education will not guarantee economic growth, but without it economic growth is not possible and society will not fulfil its potential with regard to social and cultural development (DHET, 2014).

The teaching and learning in the TVET context requires the application of technical skills and knowledge. This type of learning is rooted in contexts, for example; the workplace or communities where livelihoods can be developed. The role of the lecturer is to facilitate learning environments that will develop students holistically (Lave & Wenger, 1991).

Currently there is a so-called "Pivotal" grant policy that industries can take advantage of that would fund for "professional, vocational, technical and academic learning" programmes that lead to qualifications or part-qualifications on the National Qualifications Framework. This policy prioritises scarce and critical skills and also include internships and learnerships. This can be seen as

an incentive for industries to provide workplace experience to TVET students and tax breaks for moving some of their workshops to rural areas (Jacobs, 2014).

A decentralised approach to skills training and TVET colleges might be more appropriate to informal settlements. This training facility will be started from the ground but should follow the decentralised approach in order to increase efficiency.

The DHET (2012: ix) is currently looking into the establishment of a new institutional type, provisionally called Community Education and Training Centres (CETCs), in order to meet the needs of out-of-school youth and adults (HRDC, 2015).

This new proposed decentralised, bottom-up approach of TVET colleges provide a great opportunity of investigation to what the contextual needs and opportunities are.

TVET

According to the report, Strengthening And Supporting TVET Colleges For Expanded Access And Increased Programme Quality (HRDCSA, 2014), both the TVET sector and South African society are confronted by challenges, that include:

- TVET colleges are perceived by society as the "weakest" in the broader education system
- Lack of a clear mission and vision in expressing the role of TVET colleges within the national education and training system
- Chronic unemployment and underemployment
- Rapid changes in the labour markets
- The increased demand for opportunities for education and training by young people and adults.
- Unclear relationship of TVET towards labour market demands, higher education and contributing to socio-economic development.

This study compared the South African TVET systems against working TVET systems of other countries. It found that the South African system was built around the notion of industrialisation while the working systems of other countries have been changed in line with their phases of economic development. A good example of successful vocational education is that of developmental states 1 (or the Asian experience). Their TVET system approaches were aimed at preparing for the country's next phase of socio-economic development. It also found that the demand-driven approaches to 'vocationalisation' need to be developed applicable to the stage of economic development and to the country's type of the economy.

The report also found that the recent increase in student enrolment was not accompanied by an increase in lecturer recruitment and that this has led to deterioration in lecturer-student ratio from 1:20 in 2002 to a national average ratio of 1:55 in 2012. The low skills level of lecturers and their lack of current industry knowledge have added to the challenges TVET colleges face (HRDCSA, 2014).

The goal of the Department of Higher Education and Training is to have, by 2030, head-count enrolments of 1.6 million in public universities, 2.5 million in TVET colleges, and 1.0 million in the proposed community colleges which are introduced in the White Paper (DHET, 2014).

In 2015 a total of 725 000 students enrolled at the country's 50 Technical and Vocational Training and Education colleges (DHET, 2014). If the goal of 2.5 million by 2030 is to be reached, it means that the system will have to expand 3.5 times it current capabilities, this includes facilities, lecturers and private partnerships.

Government imagines that TVET colleges will become the foundation of the country's skills development system. TVET college enrolments have increased over the past few years. Head-count enrolments increased from 345 566 in 2010 to an estimated 650 000 in 2013; enrolments are expected to increase to one million by 2015 and to 2.5 million by 2030. This growth is predicted to continue in order to address the country's acute skills shortages (DHET, 2014).

Government also aims to urgently re-establish a good artisan training system with a target to produce 30 000 artisans a year by 2030. It also deems it important to expand other forms of on-the-job training, including learnerships and internships in non-artisan fields. The SETAs have a crucial role to play in facilitating such workplace learning partnerships between employers and educational institutions (DHET, 2014).

According to von Kotze (2010: 7) a TVET policy built on the sustainable livelihoods approach would recognise that people, however poor, have developed and mobilise coping mechanisms, capabilities, knowledge and skills. People draw on local knowledge and locally available resources, including experts and people in positions of power, in order to make a living and deal with daily obstacles and uncertainties.
This would also;

- bridge disciplines and professions
- link training with working capital
- connect people with markets for both buying materials and selling products,
- create facilities to manufacture or provide services while respecting the necessity of local people to participate directly in ongoing negotiated decision-making

With this approach a TVET could contribute to a 'democracy we can eat'.

Community colleges

The White Paper for Post-School Education And Training (DHET, 2014) proposes a new type of institution to be established to cater for students who do not qualify to study at TVET colleges and universities, mainly youth and adults who did not complete their schooling or who never attended school. Community colleges will be multi-campus institutions which group together a number of existing public adult learning centres (PALCs).

The paper suggests that community colleges should draw on the strengths of the non-formal sector, in particular its community responsiveness and its focus on citizen and social education. Community colleges will be integrated with public programmes, such as the Expanded Public Works Programme (EPWP), Community Works Programmes (CWP), and others to provide appropriate skills and knowledge. These programmes can provide work-integrated learning opportunities, while the colleges provide classroom and workshop-based learning. SETAs can also play a vital role in facilitating such partnerships. The proposed introduction of community colleges should take a phased approach to help inform further development of the concept and its implementation throughout the country (DHET, 2014).

SAIVCET

The White Paper For Post-School Education And Training (DHET, 2014) proposes the establishment of The South African Institute for Vocational and Continuing Education and Training (SAIVCET) in order to provide the necessary and appropriate support to the college sector.

This proposal for such an institute shows the importance and need that exists but the fact that it does not yet exist also amplifies the dire current state of the TVET system.

A lot of research and experimentation has been done on the spatial requirements of academic education. However, Cutshall (2003) states that the spatial considerations for VET schools are not the same as conventional schools. Little research has been done on the spatial requirements of Technical and Vocational Education and Training, especially within the South African context.

2.3 Street as Public Place

Moughton (2003) states that the street is not only means of access but also an arena for social expression. This also the case for Gector Pieterson Road in Mamelodi-West.

People have always lived on streets. They have been the places where children first learned about the world, where neighbours met, the social centers of towns and cities.
- Donald Appleyard (Project for Public Spaces, n.d..)

According to Better streets, better cities (ITDP, 2011), streets occupy approximately 20 percent of the total land area in a typical city. They are also the most important and universal form of public space. It describes streets as "the stage upon which the drama of urban life unfolds every day". But recently, streets have been reduced to a more restricted role of serving as conduits for the movement of automobiles. The report states that the situation is getting worse every day as the number of private vehicles grows exponentially. As a number of cities around the world have realized, this has undermined quality of life and the character of public spaces. There is an urgent need to look at streets as places where people walk, talk, cycle, shop, and perform the multitude of social functions that are critical to the health of cities (ITDP, 2011).

The report states that streets are also vital to the identity of cities. Streets should be representative of the lifestyle and culture of the community. Their designs need to respond to the host of activities and functions that streets perform. Streets are one of the most valuable assets in any city. They not only ensure the community's mobility, but also are a place for people to meet, interact, trade, and recreational activities. Streets make a city liveable and foster social and economic bonds, bringing people together. (ITDP, 2011).

Mitullah (2003) observed that in all the cities covered in the Street vending in African cities report, street trade was rampant and a source of employment and income for many urban dwellers. It is unaccounted and unrecognised in national economic statistics in most countries however. Street trade has been viewed as an underground activity that undermines the healthy function of the formal economy and this perception has resulted in conflicts with urban authorities over licensing, taxation, site of operation, sanitation etc.. She mentions that it has been argued that vending attracts those who have limited opportunities for obtaining formal employment and/or prestigious business, thus minimizing the chances of social exclusion and marginalization.

In all of the case studies, women dominated street vending. She attributes this to the limited economic opportunities for women in both rural and urban areas, the gender bias in education, and the need to augment their husbands' income. Street vending also appeals for women due to its flexibility. Women can easily combine street vending with other household duties (Mitullah, 2003).

The study found that urban authorities in the cities view vending sites as temporary while the vendors view them as permanent. It is the urban authorities' perception of street trading as temporary that makes them not see the need to provide vendors with proper market facilities.
Traders were found to use different structures, including tables, racks, wheel burrows, handcarts, and bicycle seats to display their goods. Others display their goods on the ground over a mat or gunny bag, with some simply carrying their merchandises on their hands, heads or shoulders. Goods, such as clothes, are sometimes hanged on walls, trees, fences and an advanced group that constructed temporary shades with stands for display (Mitullah, 2003).

"If we can develop and design streets so that they are wonderful, fulfilling places to be community-building places, attractive for all people—then we will have successfully designed about one-third of the city directly and will have had an immense impact on the rest."
- Alan Jacobs (Project for Public Spaces, n.d.)

Masonganye, (2010) noted that the Tshwane Spatial Development Framework (SDF) does not address or include informal/street trading. Informal trading is still not given much acknowledgment because these spatial plans do not provide space for this activity. Street trade is not promoted and is not being effectively incorporated into the urban fabric. The city has been very conservative in exploring the possibilities of a well-planned informal trading mandate (Masonganye, 2010).

Trancik (1986) argues that in the past the street as public space, primarily the main street was viewed as the focus of community life and was maintained as a high-quality spatial experience. The diversified commercial activities and its closeness to residential neighbourhoods made it the physical and social centre of the community.

Carr et al (in Oktay, 2002:263) feels that public open space provides a fundamental place for people to carry out the functional and ritual activities that bind a community together. spaces "*…promote a sense of place, become a source of community pride, and offer opportunities for people to play an active part in caring for the local environment"* (Tshwane Open Space Framework, 2005).

2.4 Urban Intention

Most street traders have no lease for the sites/pavement they use and this can be assumed as the reason for the temporary nature of the structures.

According to Mittulah (2003) the South African National Government is committed to creating a conducive environment for small informal economic activities, including street trading. New laws are in place or about to be put in place. In order to realise this, at National, Provincial, and Local levels. She further states that he Business Act of 1991 changed the legal approach to informal trading.

The Act acknowledged street traders as business people who contribute to the economy. The Act has also provided the traders with the right to trade, whereby the Local Authorities merely regulate but cannot prevent traders from trading.

The South African legal provisions have enhanced the business environment of street vendors. In cases where vendors have not organised themselves, Local Governments have insisted on umbrella organisations to be formed to represent street traders organisations. In some cases street vendors have formed organisations for negotiation and lobbying. Associations such as SEWU, Queenstown Hawkers and Gompo Association in South Africa are serving these purposes (Mitullah, 2003) .

The White Paper on National Strategy for Development and Promotion of Small Businesses in South Africa of March 1995, commits the Government to the creation of an environment that encourages and assists the development of all categories of the informal economy. The 1998 White Paper on Local Government requires that Local Government be committed to `working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs and to improve the quality of their lives'. Street vending minimises the chances of social exclusion and marginalisation and has increasingly become an option for many citizens (Mitullah, 2003).

Our opportunity, as designers, is to learn how to handle the complexity, rather than shy away from it, and to realize that the big art of design is to make complicated things simple.
-Tim Parsey (Blender, n.d.)

Steyn (2008) describes market streets are crucial elements in informal settlements. Their function and typology does not only impact on spatial organisation, but also on the way they are used as social spaces and to create places for activities that are intrinsic to the coherence of the community. He suggests that since slums are never going to disappear, we must now devise a strategy for their sustainable future in environmental, social, and especially political and economic terms. Steyn further argues that there is considerable expertise available locally, but political will is essential to recognise shantytowns as an asset, their concomitant market streets as vital for income generation, before professionals and communities can start to collaborate on finding ways to transform the contested space in a convivial, supportive place.

2.5 Site Skills Analysis

Figure 2.13 Hector Pieterson Road - Street of Skills (Author, 2016)

Carpentry

-Cupboard makers

Welding

-Window frame and gate makers

Brick making

-Brick makers and building supplies

Recycling

-Metal, plastic, glass & cardboard

Ice-cream

-Ice-cream in the yard

Spaza shops

-Take-aways, fruits & vegetables

Mechanic

-Auto Mechanics

Zozo

-Steel sheet and wooden pallet Zozo makers

Tyre shop

-New tyres and repair

Tavern

-Sidewalk taverns focussing inwards

Butchery

-Fresh meat suppliers

2nd Hand clothing

-Informal shops selling 2nd hand clothing

Figure 2.14 Hector Pieterson Road - Legend (Author, 2016)

Shisa nyama

-Braai using sidewalk as social space

Upholstery

-Upholstering couches next to the street

Sewing

-Making dresses and fixing clothes

Internet shop

-Internet and ice-cream

Gymnasium

-Small gym with weight lifting equipment

Hair salon

-Salon social space next to building supplies store

Shoe repair

-Repairing shoes under a tree

Cell repair

-Repairs done inside house

Muti

-Traditional medicine sold as liquids and parts of plant

Informal settlements have a rich layer of social infrastructure informing the built form (Hamdi, 2010). This infrastructure should be utilised in the process of improving the physical built environment.

Frescura (2000) states in his paper, Deconstructing the Apartheid City, that although the Group Areas Act was repealed in 1991, the component elements of Apartheid planning have been indelibly etched into the urban fabric of our cities. Their effects will probably continue to be felt for many years to come, and that their traces may never be entirely expunged from the South African urban fabric (Frescura,2000).

Frescura (2000) looks at the identification of the Apartheid city which features' could be interpreted as part of a segregationist residential policy:

a. The Segregation of Residential Areas.
b. Use of Buffer Zones.
c. Use of Natural Features.
d. Industrial Belts as Buffer Zones.
e. Extended City Planning.
f. Extended Road Links.
g. Military Control.
h. Social Infrastructure.
i. Housing.

2.6 Possibilities

School system from 2017

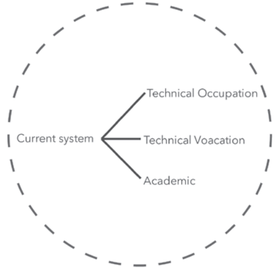

Figure 2.15 Three stream schooling diagram (Author, 2016)

A scholar's aptitude will be used to place them into one of three streams. Adequate facilities and resources have not yet been provided for these additional streams. Opportunities exist to expand current schools by using local skills and resources.

Skills revolution

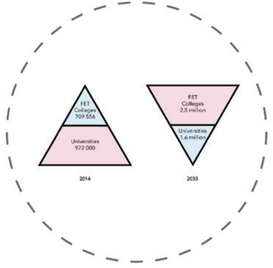

Figure 2.16 TVET college enrollment (Author, 2016)

The skills deficiency in South Africa is one of the biggest obstacles to finding employment and poverty reduction

Potential overlap

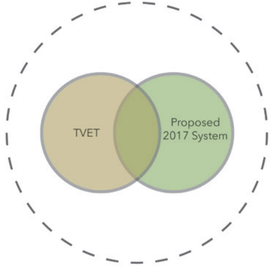

Figure 2.17 Potential overlap (Author, 2016)

Shared resources could lessen the burden on an already fragile system and provide new opportunities for collaboration.

Transport

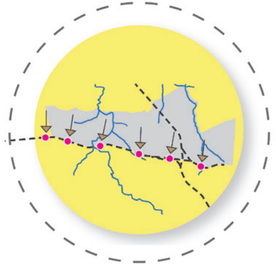

Figure 2.18 Daily pendulum migration (Author, 2016)

Improved access to transport would ease the burden of daily pendulum migration and could provide local job creation.

Networking

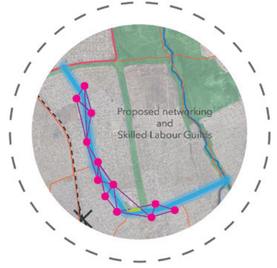

Figure 2.19 Proposed networking (Author, 2016)

Networking could help individuals to tender for bigger contracts that they would normally not be able to handle.

Guild Formation

Figure 2.20 Proposed guilds (Author, 2016)

Guild could provide a platform for individual tradesmen to expand their knowledge, share information and provide exposure. Guilds can also facilitate in the training of future artisans.