Meeting, greeting & seating

- a design proposal for Magomeni Garden, Dar es Salaam, Tanzania

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Asante!

Without the curiosity and willingness to interact from the users of Magomeni Garden this project would lack meaning, asante sana to all of you.

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Charlotte & Kajsa

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Mr Esra Mbiki, Kinondoni Municipality

Timo, Martin & Charlotte

Kajsa & Mr Solomon

Chris

Mary Komba, Head Planner, Kinondoni

Agnes

Elvis, Alphonce & Ikupa

Rehema, Frida, Osna, Happy, Grace, Latisia, Elvis (our translator) and Charlotte

Sammanfattning

De första tankarna kring denna uppsats väcktes i samband med att Charlotte var på utbytestermin på Ardhi University i Dar es Salaam. Där besökte hon Magomeni Garden som en del av en kurs i trädgårdshistoria. Under ett skypesamtal med Kajsa, som just då befann sig i Kanada, leddes samtalet in på vikten av urbana parker i utvecklingsländer och grunden till uppsatsen började ta form. Genom ett Minor Field Study-stipendie (MFS) från SIDA fick vi chansen att spendera tio veckor i Dar es Salaam för att kunna göra en fältstudie till uppsatsen.

Syfte

Syftet med den här uppsatsen är att utveckla ett designförslag för Magomeni Garden. Designförslaget grundar sig i en teoretisk- och kontextbaserad bakgrund men även i dialoger vi utfört tillsammans med människorna som använder Magomeni Garden, analyser av området och upplevelser och intryck vi fått efter att ha tillbringat tio veckor i Dar es Salaam.

Den huvudsakliga frågeställningen för uppsatsen är:

· Hur kan en urban park gestalts så att den passar in och svarar på områdets behov, samtidigt som den är kulturellt och social förankrad?

För att få fram, motivera och stärka svaret på vår huvudfråga har vi två frågor som hjälper oss:

· Vilka är vinsterna med urbana parker?
· Varför är allmänna parker viktiga I utvecklingsländer?

Ambition

För att skapa hälsosamma, trivsamma städer, tror vi att kvantitativ grönska behövs som en del av den urbana stadsstrukturen. Syftet med den här uppsatsen är att bidra till ett förbättrat vardagsliv för människorna som bor och vistas i området kring Magomeni Garden. Genom en ny gestaltning av Magomeni Garden, där designen är kopplad till den lokala kontexten, tror vi att Magomeni Garden kan påverka många människor på en daglig basis och även knyta an till trädgårdens historiska syfte, nämligen att bidra människorna i området med en rekreativ källa, en social mötespunkt samt fungera som en grön oas i en annars så hektiskt stad.

Avgränsningar

Uppsatsen koncentrerar sig på urbana parker och litteratur som används har varit inriktad på fördelarna med urbana parker, vilket också har varit ett sätt för oss att motivera och rättfärdiga vikten av uppsatsen. Uppsatsen är även avgränsad till att designa en specifik plats, nämligen Magomeni Garden. Inspiration och research har därför begränsats till Tanzania och Dar es Salaam. Syftet med uppsatsen är tänkt att visa en konceptuell design för Magomeni Garden, men även att öka förståelsen för urbana parker. Därför har vi valt att visa designen på en konceptuell och rumslig nivå, där vi fokuserar på att visa funktioner, planerade aktiviteter, rumsliga upplevelser, snarare än att gå in i detalj i byggnadskonstruktion och detaljritningar.

Målgrupp

Uppsatsen riktar sig till personal på Kinondoni Municipality, som inspiration för framtida utveckling av Magomeni Garden och andra gröna platser i Dar es Salaam. Uppsatsen vänder sig även till människor som bor nära Magomeni. Vår intention är att studenter och yrkesverksamma inom landskapsarkitektur/arkitektur/planering och stadsbyggnad ska finna uppsatsen inspirerande och givande. Denna uppsats vänder sig även till SIDA, som har gjort det möjligt för att åka på fältstudie till Dar es Salaam. Uppsatsen kan komma vara intressant för många olika människor kopplade till SIDA, då SIDA jobbar med och är involverade i flera projekt som liknar och gränsar till vår uppsats.

Metod

Allmänna parker är viktiga komponenter i en stad, då det är demokratiska platser där människor kan samlas och mötas oberoende av socio-ekonomiskbakgrund, ålder, kön eller religionstillhörighet. En stor variation av människor som använder parken, främmande vegetation och en helt ny kultur att sätta sig in, bidrar till att designen och tillvägagångsättet av denna är tämligen komplex. För att få en förståelse för hur livet mellan husen och allmänna platser fungerar i Dar es Salaam behövde vi kunskap om både historia, dagens funktion, på såväl gräsrotsnivå som på beslutfattarnivå. I den här uppsatsen har vi använt oss av litteratur, dialoger med brukare och beslutsfattare, workshop med

landskapsarkitektstudenter, observationer och analyser av olika platser i Dar es Salaam, för att få en så god insikt för Magomeni Garden som möjligt, detta för att kunna förstå vår site och skapa en så grundad design som möjligt.

Under den här resan har en av de viktigaste metoderna varit att alltid försöka vara en del av Dar es Salaam. Att interagera, forma sig till nya situationer, möta människor med intresse och öppenhet och på så sätt bli accepterad och få deras förtroende, har på många sätt varit den bästa vägen att lära känna Dar es Salaam.

Bakgrund/Kontext

Många städer i utvecklingsländer växer snabbt, för två sekel sedan bodde bara fem procent av jodens befolkning i städer, idag är ligger den siffran på över femtio procent. Denna snabba ökning sätter stor press på miljön (McMichael, WHO, 2000, s. 1).

Allmänna parker har en betydande roll för människors livskvalitet och hållbarhet i snabbväxande urbana miljöer. En allt mer utspridd och uppdelad stad är en global trend och en av de bidragande faktorerna är ökad bilanvändning, gallerior och stormarknader. Allmänna och publika platser kan koppla samman städer och människor genom att skapa identitet och karaktär till en plats. Även en liten allmän plats kan fungera som en symbol för ett helt kvarter. Allmänna platser är effektiva katalysatorer för social gemenskap, hållbar ekonomi och säkerhet. De påverkar även hälsa och miljön positivt, allmänna platser är även en symbol för demokrati i en stad (CABE SPACE, s. 14, 2004).

Befolkningstillväxt i Tanzania

De senaste tio åren har en försämring av urbana miljöer skett i Tanzania. Detta beror till största del på snabb befolkningstillväxt och ökad utveckling i de urbana delarna av Tanzania. I Dar es Salaam, har befolkningsökningen varit över fyra procent de senaste åren vilket har påverkar kvalitén på den urbana miljön påtagligt (UN-

Habitat, 2009, p. 20). På grund av de politiska strukturer och regleringar som idag råder i Dar es Salaam, finns en stor brist av planering och hantering av stadens miljöer. I 'Dar es Salaam City Plan', är den urbana miljön refererad som ett stor bekymmer som behöver tas om hand, men ingen ytterligare information om tillvägagångssätt finns (UN-Habitat, 2009 s.19). Negativa effekter av urbanisering.

Flertalet platser som förr utgjordes av gröna platser såsom, mark längsmed floder och stränder har fått ge vika till för byggnader på grund av urbanisering. Den stora omställning av dessa platser påverkar dess tidigare roll, både vad gäller ekosystem och deras funktion som social mötesplatser (Mng'ong'o, 2004, s. 6).

För att förstå kontexten för det här projektet jämför vi Tanzania och ser hur länderna skiljer sig åt och/eller liknar varandra. Ämnen som tas upp och jämförs är bland annat relationen till natur ur ett urbant perspektiv, vilket relaterar till historia, sociala strukturer och levnadsförhållanden. Även traditionen av parker, hur klimat, gatuliv och boende påverkar den sociala kulturen. Det är förstås en hel del som skiljer sig åt länderna och kulturerna emellan, men de basala behoven är således lika.

I den teoretiska bakgrunden behandlas även vinsterna av och med urbana parker. Men varför i hela världen bry sig om urbana parker? Frågan är relevant i kontexten i utvecklingsländer, där basala behov fortfarande är ej är tillgodosedda. I många delar av världen lever människor utan rent vatten, fullgod infrastruktur och kämpar mot många sjukdomar, som i utvecklade länder inte är något problem. Så att investera i och satsa på parker kan ju i första anblick verka trivialt men vad vi förstått i den här uppsatsen är att fördelarna med urbana parker är många och viktiga för livskvalitet och trivsamma städer.

I denna del av uppsatsen hittar vi argument som styrker vikten av urbana parker och som svarar på frågeställningen 'Vilka är vinsterna med urbana parker?' Det finns starka bevis på

att urbana parker ökar den allmänna hälsan, och påverkar den sociala tillhörigheten och den lokala ekonomin positivt (Konijnendijk et al. 2013). Kaplan & Kaplan var tidiga med att hävda de fördelar människan kan uppnå från kontakt med natur, både i en urban och rural miljö. Dom fann att människor både föredrar och återhämtar dig snabbare när de vistas och spenderar tid i natur, vilket påvisar att naturliga miljöer erbjuder mer än bara nöje (1998, s. 10).

Från rapporten " Benefits of Urban Parks" (Vinster med Urbana Parker) gjord av 'The International Federation of Parks and Recreation Administration' (IFPRA) har vi samlat sju vinster av de ekosystemtjänster som kan finnas i urbana parker. Dessa är:

- Urbana parker och direkta och indirekta hälsoeffekter, så som minskade stressnivåer och rekreativa värden.

- Urbana parker och social sammanhållning, vilket är relaterade till demokrati och en känsla av samhörighet.

- Urbana parker och ekonomiska värde, vilket är en kombination av turism och fastighetsvärde.

- Urbana parker och biodiversitet, vilket skapar habitat för både växter och djur.

- Urbana parker och luftkvalitet, filtrerar luften och minskar luftföroreningar.

- Urbana parker and vattenhantering, att lokalt ta hand om dagvatten.

- Urbana parker och avkylning, jämnar ut temperaturer och minskar urbana värmeöar.

Dessa sju punkter kan alla kopplas till Magomani Garden.

SITE -Magomeni Garden

Magomeni Garden byggdes någon gång innan 1969, och tanken med den offentliga trädgården var att erbjuda hälsofördelar till människor som bodde i området. Idag är Magomeni Garden nergången och förfallen då det inte funnits pengar till något underhåll eller skötsel av parken under de senaste femton åren. Magomeni Garden ligger centralt, cirka tio minuter från stadskärnan med buss. Trädgården fungerar lite som ett nav i området, med busshållplats, kyrkor, moské, sjukhus, Kinondoni kommunbyggnad nära inpå, vilket gör att många människor dagligen passerar trädgården. Detta gör Magomeni Garden till en social plats som är full av liv. En ny design och uppgradering av Magomeni Garden kan påverka och förbättra livskvalitén för många människor i området.

Flertalet sociala aktiviteter händer i trädgården idag, försäljare säljer sina varor, människor lagar mat, vissa tvättar sina kläder, vissa vilar och sover. Men de flesta använder trädgården som en genväg eller träffar vänner. Det finns inga papperskorgar eller system för sopor, vilket resulterar i att en hel del skräp ligger utspritt i stora delar av parken. Det finns inga parkbänkar eller andra sittmöjligheter bortsett från stubbar eller stenar. De flesta människor som sitter i trädgården, tar skydd från den stekande solen, i skuggan av en trädkrona. Det finns många träd av varierande kvalitet, många är tyvärr gamla och sjuka. I övrigt är vegetationen en blandning av inhemska och exotiska arter. Det existerande gångsystemet i trädgården fungerar bra, det ser ut att ha uppkommit naturligt av hur människor gått på platsen. Gångstigarna består av sand, vilket är ett problem under regnperioderna, då det blir lerigt och svåra att gå på.

DIALOGER

Med denna bakgrund fortsätter uppsatsen men ett kapitel med dialoger om Magomeni Garden och grönska i Dar es Salaam.

Samtal med personal på Kinondoni Kommun och användare av Magomani Garden.

Dessa samtal hölls med människor som använder Magomeni Garden men även tillsammans med personal på Kinondoni Municpality (kommun). Vi fick reda på att flera olika aktiviteter och funktioner finns på plasten idag, allt från att den fungerar som sovrum för vissa till kontor eller bara ett ställe att möta sina vänner. Många använder platsen som en passage. Magomeni Garden Vi fick reda på att de flesta människor bryr sig om och tycker om trädgården idag, men önskar att den hade fler sittplatser, fler träd och var mindre skräpig. Ett annat ämne som dök upp var problemet med finansiering till underhåll och skötsel av parken, vilket enligt de kommunanställda skulle kunna lösas genom att ta en entréavgift till parken. Vi frågade oss om trädgården då fortfarande skulle ses och fungera som en allmän plats, vilket de rådde delade meningar om. Genom workshopen som vi höll tillsammans med landskapsarkitektstudenter från Ardhi University fick vi reda på att de tyckte att allmänna platser skulle vara gratis att vistas på och till för alla. Det kom även fram att den tanzaniska kulturen håller starka traditioner vad gäller könsroller och att detta är något som påverkar gatulivet (något vi även själva noterat). Det finns alltid en risk att allmänmark blir byggd på. Säkerheten i parken efter mörkrets infall är även något att ta hänsyn till. Om människor och i synnerhet försäljarna i trädgården skulle känna mer tillhörighet och delaktighet i platsen skulle den antagligen hållas renare, fri från skräp.

DESIGN

Kunskapen vi samlat på oss under arbetets gång har kokats ner till sju designprinciper. Dessa sammanfattar kunskapen vi vill ta men oss i designen och är, vilket kan ses som pudelns kärna. Vi kallar det nitty-gritty. Dessa är:

PEOPLE FIRST! (MÄNNISKAN FÖRST!)

EASY ACCESS & MOVEMENT! (TILLGÄNGLIGHET & RÖRELSE!)

SPATIAL PLEASURE! (RUMSLIG BEHAG!)

DESIGN in CONTEXT! (DESIGNA i KONTEXTEN!)

COPE with NATURE! (MÖT NATUREN!)

MANAGE MANAGEMENT! (FÖR FÖRVALTNING!)

TODAY but BETTER! (IDAG men BÄTTRE!)

Magomeni Garden får ett nytt ansiktslyft men behåller identiteten och dagens funktion som ett landmärke i området. Dagens aktiviteter får en ny plattform, vilket underlättar det vardagslivet för många som använder trädgården, där både aktiva och lugna aktiviteter tillgodoses. Trädgårdens olika karaktärer förstärks och trädgården delas konceptuellt upp i fem remsor, där aktiviteter, uttryck och vegetation skiljer sig åt. Dessa är: Savannah (två remsor i utkanterna av trädgården), Relax&Interact, Bustling Passage och Play Pond(er).

Inspiration till konceptet för den nya designen 'Meeting, Greeting & Seating, är förknippat med den tanzaniska social kulturen och känslan som finns i Dar es Salaam, där skugga, kreativa sittplatser och försäljning är något av ledord.

Den nya designen tar utgångspunkt i det

existerande gångsystemet, där vissa delar blir hårdgjorda för att öka tillgänglighet och minska slitage. Välmående träd behålls och nya planteras. Vi har valt att använda oss av inhemska arter för att skapa goda habitat och en biodivers trädgård, där låg skötsel blir en stor bonus. Regnvatten tas om hans och leds från de hårdgjorda ytorna in i planteringar och samlas upp i en dagvattendamm, vilket bidrar till en självförstörande trädgård och en trädgård som är vacker både under torra och regniga perioder.

DISKUSSION & REFLEKTION.

Vi tror vi under resans och projektets gång har fått kunskap om hur man ska förhållas ig till nya situationer och arbeta utifrån dessa. Att vara öppen och nyfiken på flertalet människors idéer har varit till stor hjälp för att samla so god information som möjligt. Att undersöka en plats, inte bara till dess fysiska utformning, utan även social mönster är även det en stor vinst. Detta har gjort att vi kunnat skapa en gestaltning som svarar till flertalet styrkor och svagheter i trädgården. En svårighet som dök upp med gestaltning av parken är att den var så nergången och att underhållet av parken helt saknades, även planering och förvaltning av parken i stort. En stor fördel med trädgården var att den redan användes flitigt och att den redan idag hade ett starkt socialt värde.

Om detta projekt skall fortskrida, skall flera steg ske innan den nya designen kan bli implementerad i Magomeni Garden. En god kontakt med brukare och kommunanställda och att höras deras åsikter om förslaget är nödvändigt. Även finansiering av anläggning och framtida skötsel måste undersökas vidare och en strategi för designen stegvis kan introduceras i trädgården.

Att få förståelse för en ny kultur på detta vis är otroligt lärorikt och någonting vi önskar att fler får möjligheten att göra. Med de utmaningar såsom språkbarriärer, olika uppfattning om tid och att inte hitta vad du behöver när du behöver det, gör att ett flexibelt sinne vara extra användbart. Detta praktiska sätt att arbeta, vilket inkluderar många dialoger med användarna, är något som vi vill ta med oss och kommer att försöka genomföra i framtida projekt. En annan sak som vi tycker lyckades väl i detta projekt var att vi försökt vara en del av det sammanhanget och lära känna varje nyans av det, utan att i förväg ha fördomar om platsen. Vare sig vi kommer vara aktiva i Dar es Salaam eller inte, kommer vi att försöka närma oss nya projekt med samma nyfikenhet och lyhördhet, som vi gjort i detta projekt.

Vi hoppas att den här uppsatsen är intressant för beslutsfattare i Dar es Salaam, användare av trädgården, studenter på Ardhi University och i andra delar av världen (inklusive Sverige) och alla andra som kan tänkas vara intresserade av urbana parker i utvecklingsländer.

Abstract

Today, more than fifty percent of the world's population lives in cities, and the pressures that urbanisation bring is particularly present in developing countries. As landscape architects, it is important to gain knowledge about the effects of urbanisation and thereby prevent the negativities within global projects. During ten weeks of field studies, granted through a scholarship from SIDA, parts of Dar es Salaam was explored and analysed with curiosity with the aim to develop a new design for the neighbourhood park Magomeni Garden.

Dar es Salaam is located in one of the most rapidly urbanising regions in the world. The rapid growth puts pressure on the environment and the humans living in it. Lack of means to regulate land development has led to a situation where expansions of unplanned settlements occur, with spatial disorder as a consequence. In the extension, urbanisation has led to a decreasing amount of publicly available and qualitative green spaces, and degradation of the few ones that exist.

There are facts that strengthen the status of urban parks, which especially becomes relevant in developing countries where many people live under sparse and exposed conditions where public spaces often is lacking or is absent. Research made on the importance of urban parks show that they not only contribute to positive health effects but also increase social cohesion, economy, increases biodiversity and air quality, improves water management and generate a cooling effect.

The neighbourhood park Magomeni Garden was built during the early 1960ies. Today, the garden has degraded and is untidy due to the absence of maintenance during the last decades. The site is one of few green sites available to the public in Dar es Salaam. The garden functions as a hub, as a social meeting point, and for local business activities. Magomeni Garden is also used for daily chores such as cooking, washing and sleeping.

With the context of Magomeni Garden as a base, the culture in Tanzania and its history, a design has been developed that addresses the social culture, that strengthens a beneficial microclimate. It accommodates the need for an active central space where there is still room for less-programmed areas for the users to develop themselves. The main inspiration for the design evolves around human activity and needs. Further, it embraces solutions that are cost efficient and low in maintenance, where the use of local material and constructions techniques is self-evident. The design is low in maintenance and makes use of local natural resources, including local water management and use of native species.

We have had the opportunity to personally experience and be a part of, for us, a new culture and see how urbanisation affects a developing country up close. This has given us an increased understanding for the problems with urbanisation and global situations. It has also given us an inevitably valuable insight in the daily life of Dar es Salaam, which has been a crucial part when designing the park and writing this thesis.

Men relaxing in the shade of a canopy Magomeni Garden 2013.

Definitions of terminology

Active transport: "Relates to physical activity undertaken as a means of transport. It includes travel by foot, bicycle and other non-motorised vehicles. Use of public transport is also included in the definition as it often involves some walking or cycling to pick-up and from drop-off points. Active transport does not include walking, cycling or other physical activity that is undertaken for recreation." (National Public Health Partnership, 2005, p. 54)

Bajaji: moped taxis, similar to Asia tuctuc's.

Benefit: In the frame of this report, 'benefit' is defined as something that promotes wellbeing. Thus, in the case of urban park benefits, we are concerned with the services provided by the park that promote human or societal wellbeing, either directly or indirectly. (Merriam- Webster's, 2012).

Boda boda: local motorcycle taxis.

Bottom-up approach: proceeding from the bottom or beginning of a hierarchy or process upwards; non-hierarchical (Oxford Dictionaries, 2014)

Bustani: is the Swahili word for garden. Swahili lacks a word equivalent to park therefore garden is used to when referring to both gardens and parks in Dar es Salaam.

Dala dalas: local mini-buses that is privately owned but used for public transportation within cities in Tanzania.

Dar: Sometimes used as short Dar es Salaam

Ecosystem services: Ecosystem services are services that different kinds of ecosystems and their organisms provide humans with. For example, pollinating performed by insects, and the forests ability to clean water. (Colding et al. 2013, p. 7)

Garden: A garden can both be defined as a private area but in the case of Magomeni Garden it is defined as " Ornamental grounds laid out for public enjoyment and recreation" (Oxford dictionaries, 2013)

Green space: "an area of grass, trees, or other vegetation set apart for recreational or aesthetic purposes in an otherwise urban environment" (Oxford dictionary, 2013, Green space)

Hardscapes: "The man-made features used in landscape architecture, e.g. paths or walls, as contrasted with vegetation" (Oxford dictionary, 2014). "Softscape refers to the elements of a landscape that comprise live, horticultural elements" (Wikipedia, 2014) i.e. vegetation.

Masai: "A member of a pastoral people living in Tanzania and Kenya" (Oxford Dictionaries, 2013)

NGO: a non-governmental organisation

Park: as a noun is "a large public garden or area of land used for recreation" (Oxford Dictionaries, 2013)

Public space: an area open to all (and which has several functions) regardless your background, economic status or gender. Does sin this paper not include places where you have to buy something to be allowed to be there. "all areas that are open and accessible to all members of the public in a society, in principle though not necessarily in practice" (Orum and Neal, 2010, p. 1)

SIDA: Swedish International Development Cooperation Agency. "Sida is a government agency working on behalf of the Swedish parliament and government, with the mission to reduce poverty in the world. Through our work and in cooperation with others, we contribute to implementing Sweden's Policy for Global Development (PGU). (SIDA, 2014)

UN-Habitat: United Nations Settlement Programme. "Our mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all" (UN-Habitat, 2014).

Urban: is "relating to, or characteristic of a town or city", for example, "the urban population" (Oxford dictionary, 2013)

Urban green structures: "include a wide range of different components. Apart from parks, these include woodland, street tree and square plantings, cemeteries, private gardens, green roofs, community and allotment gardens, sports complexes, and so forth" (Konijnendijk et al, 2013, p.2.).

Urban parks: "are defined as delineated open space areas, mostly dominated by vegetation and water, and generally reserved for public use. Urban parks are mostly larger, but can also have the shape of smaller 'pocket parks'. Urban parks are usually locally defined (by authorities) as 'parks'" (Konijnendijk et al, 2013, p.2.).

Well being: According to Defra (2007) in Konijnendijk et al (2013, p.3.), wellbeing is defined as a "positive, social and mental state; it is not just the absence of pain, discomfort and incapacity. It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment, and a healthy and attractive environment".

Table of Content

Introduction

The introduction chapter covers how the thesis started to take form, the ambition with this project, research questions, delimitations and target group.

Urbanisation a global trend

For our masters thesis in landscape architecture, we have developed a design suggestion for Magomeni Garden in Dar es Salaam, Tanzania.

Magomeni Garden caught Charlotte's interest during her exchange semester in 2012/2013 at Ardhi University. Magomeni Garden was one of several study sites within a course regarding park history. During the course, it became obvious that Dar es Salaam lacks quality green public spaces. While Kajsa dealt with the Canadian winter and Charlotte with the Tanzanian summer, discussions of the role of parks, particularly in developing countries, occurred and the topic for a masters thesis started to grow. Through the grant of a Minor Field Study (MFS) funded by the Swedish International Development cooperation Agency (SIDA), we spent ten weeks in Dar es Salaam to study the project site and enhance our understanding of the culture and context of Tanzania and the urban life in Dar es Salaam.

Rapid urbanization in developing countries

Cities in developing countries are growing steadily and fast. Two centuries ago five percent of the world's population lived in urban areas, today this number is over fifty percent. This growing urban population increases the pressure on the natural environment (McMichael, WHO, 2000, p. 1). Sub-Saharan Africa is the world's most rapidly urbanizing region. This is due, in part, to high fertility rates and an increasing occurrence of rural to urban migration. (McMicheal, 2000, p.7).

Urban environments such as cities are argued to be *the bases of human ecology*; humans are social beings that desire comfort, security, variation and opportunities. The dense population of cities make them places where ideas, energy, creativity and technology can thrive but cities also have a different side that shows poverty, inequality and environmental health hazards. This alternative side is particularly present in developing countries due to infectious diseases and poor regulation of industries, housing standard, infrastructure and social violence (McMicheal, 2000, p.7).

The power of public space

In cities, urban parks play a significant role for the quality of life and sustainability in increasingly urbanized communities (Chiesura, 2003, pp.1-2). Disconnect from communities is a global trend and contributing factors are car dominance, shopping malls and large grocery stores. Public space can reconnect individuals and communities by bringing identity to an area, create a sense of place and enhance an areas character. Even a small public space can work as a symbol for a whole neighbourhood. Public spaces are powerful catalysts for social unity, sustainable economics, safety, and they give benefits to health and the environment (Mrema 2013, p.3). Public space also stand for democracy in a city (CABE SPACE, p. 14, 2004).

Population growth in Tanzania

Over the past ten years, a degradation of the urban environment has occurred, mainly due to rapid development and massive population growth in the urban centres of Tanzania. In Dar es Salaam where the growth rate has been over four percent, human activity has increased which negatively affects the quality of the urban environment (UN-Habitat, 2009, p. 20). Moreover, due to political structures and regulations there is a significant lack of planning and management of the environment in Dar es Salaam. In the Dar es Salaam City Plan, the urban environment is explicitly referenced as a concern that needs to be addressed, but there is no further discussion of how it should be managed (UN-Habitat, 2009 p.19).

"Successful, thriving and prosperous communities are characterized by streets, parks and open spaces that are clean, safe and attractive –areas that local people are proud of and want to spend their time in."

CABE SPACE, p. 20, 2004

DAR ES SALAAM
Growth rate over 4%

Increase ↑ Human activity → Decrease ↓ Quality of environment

Figure 1. *(UN-Habitat, 2009, p. 20)*

Dar es Salaam is the largest city in the county.

Revitalizing Magomeni garden

Magomeni Garden is today facing degradation due to lack of maintenance, which is a result of urbanization and the political climate.

Magomeni Garden was built sometime before 1969 to offer public health benefits to the residents and the surrounding neighbourhood. The last fifteen years the garden has been kept without any maintenance, which has lead to a garden with degraded structure and functions.

Situated ten minutes from the city centre, and close by the dala dala (local mini bus) stand, religious buildings, the hospital, and the Kinondoni municipality office, the garden resembles a hub where many people pass by every day. This makes Magomeni Garden a social place that is full of life.

A revitalizing of Magomani Garden can be a starting point for a network of quality green spaces within Dar es Salaam, which can improve the quality of life for many people.

Many people pass by Magomni garden everyday.

Dar es Salaam consists of tree differens municipalities. Magomani garden is located in Kinondoni municipality.

Magomeni garden is situated adjacent to Morogoro Road, approximately ten minutes from downtown Dar es Salaam.

The gardens location makes it a hub, close to dala dala stand, religious buildings, hospital and municipality office.

Research question

This project focuses on developing a design proposal for Magomeni garden, based on a theoretical and context background, as well as dialogues with users of the garden and analyses of the site.

By making a resilient design our hope is that this will lead way for reversing and mitigating the negative aspects of urbanization.

The main question for this project is:

- How can a design of an urban park be performed so that it serves the surrounding area, and is culturally and socially anchored?

To answer the question above we also want to know:

- What are the benefits of urban parks?
- Why are public parks important in developing countries?

Ambition

To provide healthier and thriving cities we believe that the implementation of qualitative green space is essential. The intention with this project is to contribute to an improved everyday environment with a design that connects to the community and to the cultural context. We believe that a revitalization of Magomeni garden can affect the lives of many people on a daily basis and connect to its original purpose; to serve as a recreational source for nearby neighbourhoods, and a central meeting point for community members.

Delimitations

Urban parks are a delimitation from public spaces. By focusing on urban parks, which is defined as a "large public garden or area of land used for recreation " (Oxford dictionary, 2014) other public spaces such as squares, streets and markets are excluded. Urban parks offer various areas of interest, such as democracy, social, cultural, environmental, economical and health aspects.

Channelling the supporting literature towards the benefits of urban parks has been a way to prove and justify the purpose of this thesis to the readers and to us.

Regarding the final design presentation, we have chosen to make illustrative plans, sections and visualizations to describe and explain the design on a conceptual and spatial level. We focus on showing the functions, planned activities and the spatial experience rather than going down to detail in construction drawings.

Comparisons with our Swedish background have been essential, especially regarding the subject of "park mentality" as a way of understanding the site and its context.

By limiting the research to Dar es Salaam and the choice of one site for the design proposal we have focused the subject and limited our workload. Choosing Magomeni garden for developing a design suggestion has steered us into focusing on neighbourhood parks, and how they serve the immediate surrounding.

Magomeni garden is an interesting place because of its location close to a bustling neighbourhood, a hospital, a church, a mosque, the dala dala stop and the office for Kinondoni municipality.

We have chosen to use local plant material as much as possible. The local plant material is adapted to the local climate, which decreases the need for maintenance and enhances the sites sustainability. Since Dar es Salaam is a multicultural city with influences from many countries, it has sometimes been hard for us to distinguish the local plant material from the exotic plant material. Globally, a dispersion of exotic species occurs which can lead to degradation and extinction of the indigenous flora and fauna. Therefore it is important to be aware of this effect and not actively introduce foreign species (Mng'ong'o , 2004, p. 8).

Target group

This project turns to the Kinondoni Municipality, to serve as inspiration for future development of Magomeni garden and other green spaces in Dar es Salaam. The project may also be interesting for people living in Magomeni. Our hope is also that students and people operating in the field of landscape architecture, architecture and planning will find this exciting and rewarding. This project also turns to SIDA that sponsored this thesis with a scholarship which made the field study possible. SIDA is in various ways involved in and work with development questions.

When the sun starts to set and climate gets more pleasant, teenagers gather to play football. Magomeni garden.
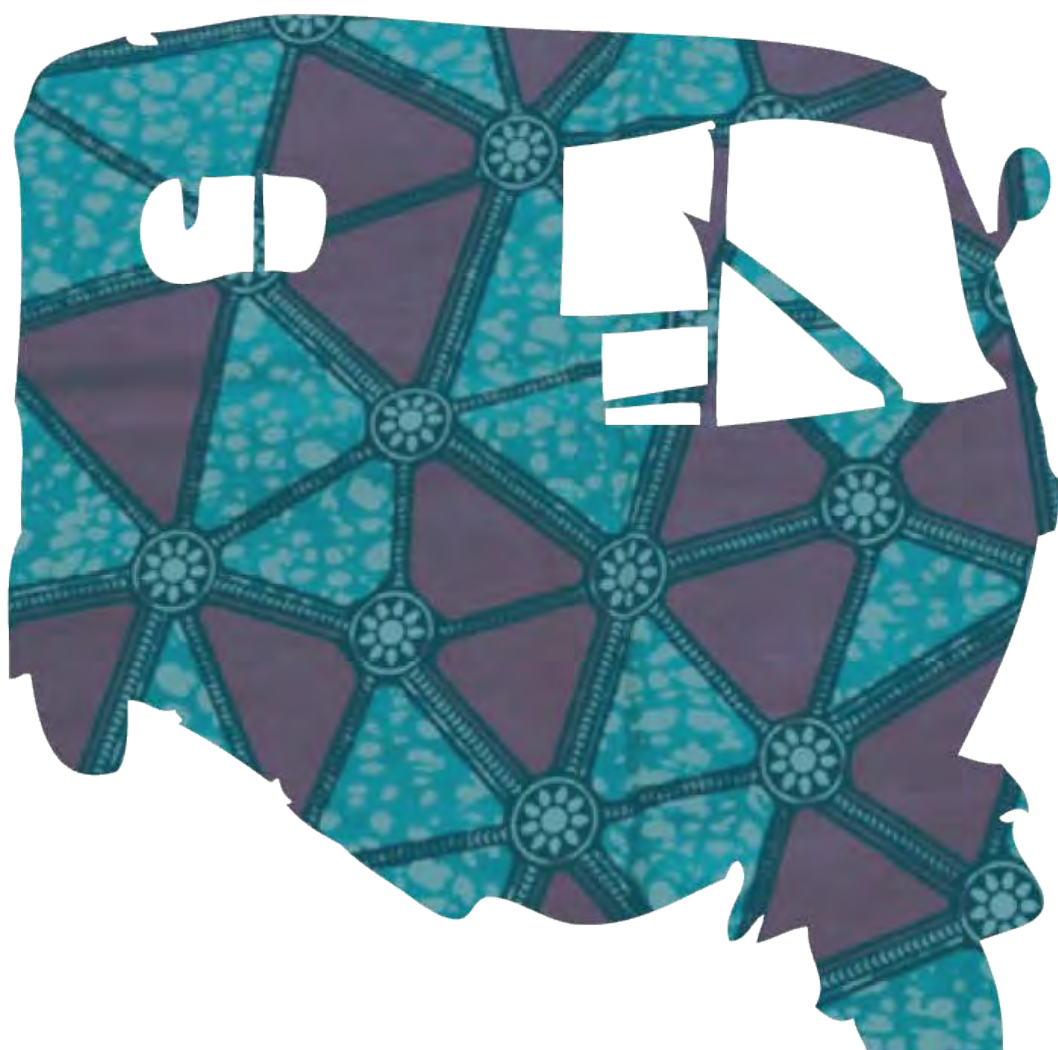
Methodology

The methodology chapter starts by giving an overview of the work process.
The chapter continues with a more explicit description about
the different methods used in this project.
It ends with a discussion about the methods.

Starting with our aim &
ambition
for this project.

Why are public parks
important in developing
countries?

Experience the
everyday life
in Dar es Salaam

Using different tools:
dialogues

supporting
literature

What are the benefits
of urban parks?

analysis

site
observations

Gaining
knowledge

How can a design
of an urban park
be performed so that it
serves the surrounding area
and is culturally and socially
anchored?

Translating
knowledge into
nitty-gritty

Spatializing the
nitty-gritty into a
concept

Visualizing the
design
through illustrations

Figure 2. Describing the work process and where the questions of issue are addressed.

Work process

Public parks are important components in a city; it is where people can gather and meet without matter of socioeconomic status, age, gender, religion and cultural belonging. This variety of visitors and other aspects also make them complex, especially when you are learning about a new culture. To understand how public life i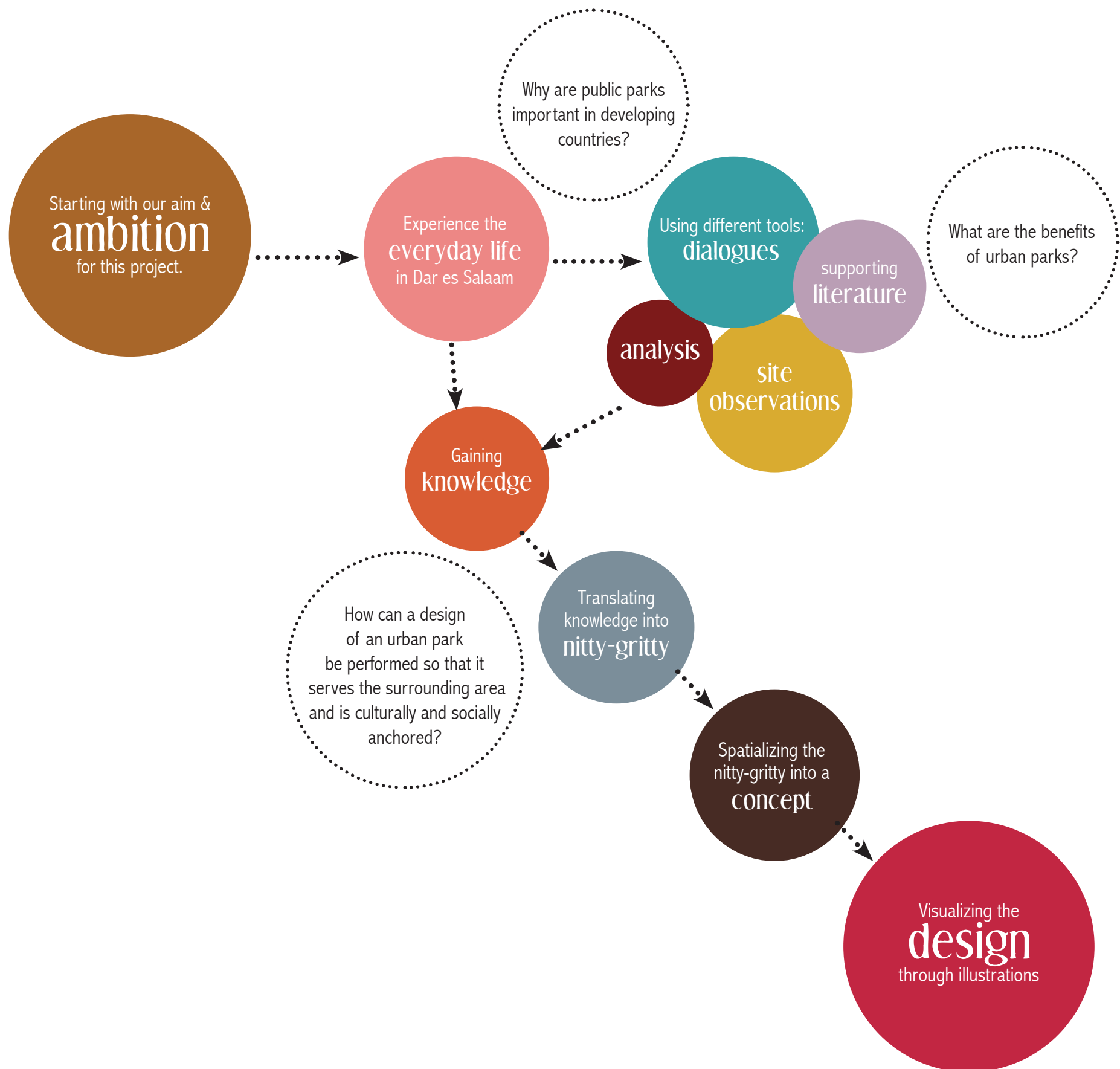n Dar es Salaam used to function, how it functions today, and what is needed for the future we need insight from several sources. In this thesis we have used literature, dialogues, a workshop and observations to create an understanding of our site and its context, in order for us to illustrate a new design of Magomeni Garden.

Throughout our journey, the most important method has been to always interact with Dar es Salaam, adapt to new situations, meet people with interest and respect, and gain their trust - without speaking the same language. To be open-minded, sociable, interested, and to speak with all kinds of people have definitely been the best way to get to know Dar es Salaam. We worked in a new context and environment, and we took all the opportunities we got to collect information and inspiration,small and big, to form our project. From noticing how the streets in our neighbourhood were cleaned every morning, how and where commercial activities occur, spotting inventive seating furniture and shade structures along the roads. Further, ...gathering data from governmental sources and organisation formed a spectrum of input.

The work of our thesis has been done in three different phases.

The three phases

Pre-phase - MFS application

The project site were chosen prior to the application for a Minor Field Study. The site was introduced to us through Charlotte's exchange semester at Ardhi University and the historical park course. The site was successfully selected as it has a park character and is open to the public but is in need of restoration. These were characteristics of a site that we wanted to work with.

Phase one: The first one started with a pre-study and research in Sweden. This was done to get prepared and to get an understanding about Tanzania, and the subject related to our work. The first phase continued in Tanzania and Dar es Salaam, where we focused on the cultural, environmental, and contextual aspects to get an understanding for the site and our work. We did this by discovering the city, investigate different sites and reading literature concerning our subject.

Experiencing everyday life in Dar es Salaam has been invaluable. It was the most important part that allowed us to come close, interact, understand, and get to know the social and cultural traditions and mentality of the people living in Dar es Salaam.

This phase also included mapping, inventory, analysis, meeting with official stakeholders, a workshop with landscape architect students from Ardhi University, and daily interactions with users of the site.

Phase two: The second phase focused on the specific site and making a new design proposal for Magomeni Garden. The design work started in Dar es Salaam, as we thought it was important to have the site close in mind and in distance to get our design as adapted and rooted as possible. Back in Sweden we finalised the design with rendered plans, sections and other visualizations.

Phase three: We completed part of the literature study in Sweden, as some literary sources were difficult to access and/or find, while in Dar es Salaam. In Sweden our design process continued along with finalizing of analysis and layout work.

Scales of the project

To address the complexity of urban development and its relation to public and urban parks we needed to work on different scales. We dealt with investigations ranging from how parks and greenery are geographically linked to the urban fabric, to a scale where we studied specific details and physical attributes of the park itself. In the end the larger scale of green structures within the city was only dealt with briefly in the study. Nevertheless, it was an important part of understanding the context we are working in.

We looked into how it is programmed, its main use and how it is maintained. We also studied how parks functioned on a policy level, how do regulations, standards and by-laws and people's meanings of public parks looks like.

Case study

The case study involves observations and analysis of sites in Dar es Salaam and specifically of Magomeni Garden.

The green side of Dar es Salaam

Site observations were encouraged by our advisor Dr. Mrema, and several sites were visited in Dar es Salaam. The sites were chosen by us and Dr. Merema as familiar 'public' places.

We analysed the different places by their architectonical elements, social activity and people density. We investigated the sites in relation to the city and the spatial and urban context. The investigations of existing green and social public places in Dar es Salaam were done to gain knowledge about how these places function in the city today. To design a new park it is essential to understand the whole setting, such as the built structure, the natural landscape, the surrounding context and the habit, culture and tradition of the city.

We designed a site observation protocol to have with us during the site visits. If functioned as a framework and gave consistency to our visits.

Site observation protocol:

Site name:
Date:
Time:
Weather:
People density:
Activities:
Landscape and vegetation:
Ground cover, Bush layer, Trees, Other material, Movement patterns
Impression:

Protocol used for site observations in Dar es Salaam.

Observing Magomeni Garden

To get to know Magomeni Garden and its routines, we visited the site many times at different days and hours. We documented the site by photographing, filming, sketching, observing, and taking notes. We mapped the physical environment, as well as the social pattern and activity on the site.

To have a bottom up approach for this project, it beacame very important for us to interact with the users in Magomeni Garden, in order to gain their trust and become accepted. During our observations we were inspired by the participant observation method. This method involves two types of actions at the same time; involvement and interaction with others take place while watching and taking notes of their behaviour. This work is performed on a scale of different degrees; from only watching to fully participating (Fangen, p. 30, 2005).

Site analysis

To understand the physical elements and character of Magomeni Garden and its surroundings we conducted site analysis that was inspired by Kevin Lynch's method. Kevin Lynch was an American city planner who wrote the book *The image of the City* in 1960. Lynch divides the physical elements of the city into five different categories (Lynch 1960, p. 46).

The five elements in which the city can be categorized are:

Path: The paths are often roads and walkways. Both for cars and pedestrians. The paths are active places that often arrange other elements. People like to observe their surrounding from the paths (Lynch, 1960, pp. 49-62).

Edges: Edges are elements that divide and frame spaces. They can both function as barriers that divide places or act as seams that connect places, depending on their look (ibid., pp. 62-66).

Districts: Districts divide different parts of the city according to their character and the experience of being in that specific area (ibid., pp. 66-72). We have used the districts in two

different scales. One level consists of the site and the surrounding context, and the other is situated within the site. We categorized the districts from physical elements and perceived feelings of the sites. We found it important to pay attention to the 'soft values' in the analysis, as we saw the garden as a sociable and active place.

Landmarks: Landmarks are often physical elements, such as buildings, mountains or trees. Landmarks are often seen from different angles and can be helpful for orientation. Landmarks can also be smaller and more intimate. This could be a detail on a building or street furniture (ibid., pp. 78-83).

Nodes: Nodes function as the core in an area and do usually have a high concentration of activity in it. An example of a node can be a road junction or bus stop (ibid., pp. 72-78).

We have used Lynch's method from a landscape architectural perspective and adjusted the method to the scale and context for our site. Using this method allowed us to gather information from the site and its surrounding in a structured way. This also eased the presentation of the gathered information.

SWOT-analysis

We used the SWOT model early in the process to get an overview of the mentioned variables. The model is used to categorise, in this case a sites characteristics and variables identified under each headline; Strengths, Weaknesses, Opportunities and Threats (SWOT). Strengths and Weaknesses are based on internal factors, while Opportunities and Treats is based on external factors (Boverket 2006, p. 44).

	Favourable	Unfavourable
Internal	strength	weakness
External	opportunity	threat

Illustration of SWOT model.

Man passing by one of few public green spaces in down town of Dar es Salaam, outside the NBC bank.

Dialogues

Dialogues includes the connections and conversations we made with both official stakeholders, students and everyday users of Magomeni garden.

Interviews

In a culture where information has been passed on orally and where few written sources exist, it was beneficial to gain information by meeting and talking to people in person.

The interviews were made to gain information about the history, present and future Magomeni garden and which context it exists in.

Inspired by semi-structured interviews
A semi-structured interview can be described as an interview that neither is an open conversation nor a questionnaire. It is characterized by having different themes and suggestions for relevant topics and questions. It is possible to make changes during the interviews, in terms of the questions and its wording. What is gained during this kinds of interview is the perception and the experience of the interviewee (Kvale & Brinkmann, 2009, pp. 17-19). Semi-structured interviews are a type of qualitative method and can be characterized by being open, flexible and similar to normal conversations. One drawback is that it can be time consuming and that the interviewer can influence the informant.

Through the use of this method, we based the interviews on specific themes. We prepared questions and topics beforehand (see Interview Questionnaire) and sometimes supplement questions were asked. During the actual interview we let the conversation flow spontaneous and naturally.

The information gathered from the interviews was later used in the design of the new Magomeni garden. A design that would then be reflected by the people connected to Magomeni garden.

Interviews with official stakeholders
To gain information about history, by-laws, development, views on green and public space and future plans we contacted Kinondoni municipality (to which Magomeni Garden belongs). They helped us to get other contacts for example, the City council. We had already established and gathered some information from the Ministry of Land and Housing from Charlottes previous visit to Dar es Salaam.

The information received added to the historic and future Magomeni garden, which could steer the nature of the design. For example, limits in funding and ideas about climate adaptations affected the final design.

Interviews with users of Magomeni Garden
We did not know much about the users or how active Magomeni garden was before we first began with the observations. The only thing we knew was that we had decided that it was the users opinion and experience of the park that was most important and that their voices need to be heard. The connection with the local community was relevant since "the city should reflect the citizens' sense that it belongs to them as well as a sense of comfort and freedom" (R. Bittner, p. 188).

The local connection is also important for creating a site-specific design, as design details may not transform a community but they can bring joy (Architecture for humanity, 2012, p.21). The authors of the book 'Design like you give a damn' says that they learned that a grass root approach to design and construction - working directly with the beneficiaries and hiring them to be part of the process - created social cohesion and an incredible trust between all stakeholders (Architecture for humanity, 2012, p. 21).

Execution of the interviews in the garden
After some visits in Magomeni Garden we realized that the communication was an obstacle due to our insufficient Swahili and also because of some the users limitations in English. We

"It is not the planners' main goals that should rule a site but the people living in it should have every possibility to dream and fulfill her/his dreams..."
(J. Jacobs, 1965, p.27)

came to realize that we needed an interpreter for our further communication with people in Magomeni Garden.

Elvis became our interpreter, a former classmate to Charlotte. Elvis is a landscape architect student at Ardhi University. He knows about the subject and is fluent in both English and Swahili. Elvis translate the questions before the interviews which gave us a chance to discuss the translation of them.

In the garden we had the questions with us on several forms. We always started the interviews by introducing ourselves very clearly and informed them about the project. If there was a language barrier, Elvis would start to ask the questions in Swahili. He started with the questions of the form and let the conversations proceed from there. The questions did not necessary follow a certain order, but were raised and discussed when it was deemed appropriate.

Sometimes the answers were long stories and then Elvis retold us the stories when he was done with the interview. In some cases the interviews got out of track, and then steered back by additional questions. Elvis also asked attendant questions and opened up for us to add questions or subjects.

Spontaneous conversations
When we were in the park people often came up to us and asked question or wanted to tell us their opinion on or stories about the garden. These spontaneous chats have contributed to the overall understanding of public life in Dar es Salaam and Magomeni garden in particular.

Workshop with University students

We held the workshop to gather knowledge about what students in the same field as us find important about public parks and how they relate to them. How do they perceive the greenery of Dar es Salaam and what do they find essential for the city in the future? The workshop was held in the very beginning of our project and worked as a catalyst for our future work.

We conducted a workshop together with four landscape architecture students, studying in their fourth year at Ardhi University.

Before the workshop we prepared four topics that we wanted to discuss. As said, the workshop were held early during our time in Tanzania, and we wanted to shred light on any potential cultural differences through these topics. The topics were: their personal relationship to nature, public space, greenery of Dar es Salaam and finally a SWOT Analysis of Magomeni Garden. The topics were displayed on A1 sheets.

We wanted the participants to write down everything they felt related to the topic. Which later led to discussions.

Supporting literature

In order to gather literature we used a method called "the snowball method" (snöbollsmetoden). The method to gather information can be compared to a snowball in motion. Information grows from several sources that might refer to another as the project moves along (Wibeck, 2000, p. 68). The search for information started in the beginning of the work. We searched for other master thesis related to our subject that carried our search forward.

The main literature have been books, dissertations, thesis and publications online. We knew some books and authors from before, which were interesting for our subject.

Key words when searching for literature were; 'Public parks', 'Green places', 'Urban parks', 'Social value of public place', 'Benefits from parks/nature', 'Developing countries', 'Urban growth'.

Literature have been gathered to find information about:

- Tanzania and Dar es Salaam mainly orienting around the urban context and development of both the environment and settlements.
- Urban parks and if and what benefits they bring to an urban context.

The design process

The design process started the first day of our thesis. It has been an on-going process, where ideas have popped up and been collected along the way.

The process has not been linear one, many twists and turns have occurred during the way, although the design has been guided by the different methods used in this work. Everything we have read, seen, analysed and experienced during our stay in Dar es Salaam has, in one way or another, led to our final design.

We have been sketching and trying ideas from the start, but the main part of the design work were conducted when the site observations and interviews were done. The design is based on our interviews, site observations, analysis, inventory and guidelines from literature and articles, as well as on our overall impression and feeling of Dar es Salaam.

The results from this led to a concept in which the knowledge we gained could be accommodated into the final design.

For the actual design work various kinds of techniques have been used such as; pen and paper, AutoCAD, Illustrator, Photoshop and building a model in sand. The design work ended with a presentation phase where visualizations, illustrative plans and sections were made with digital techniques.

The schematic way for our work process:

ambition

Experience the everyday life in Dar es Salaam

dialogues

supporting literature

analysis

site observations

knowledge

nitty-gritty

concept
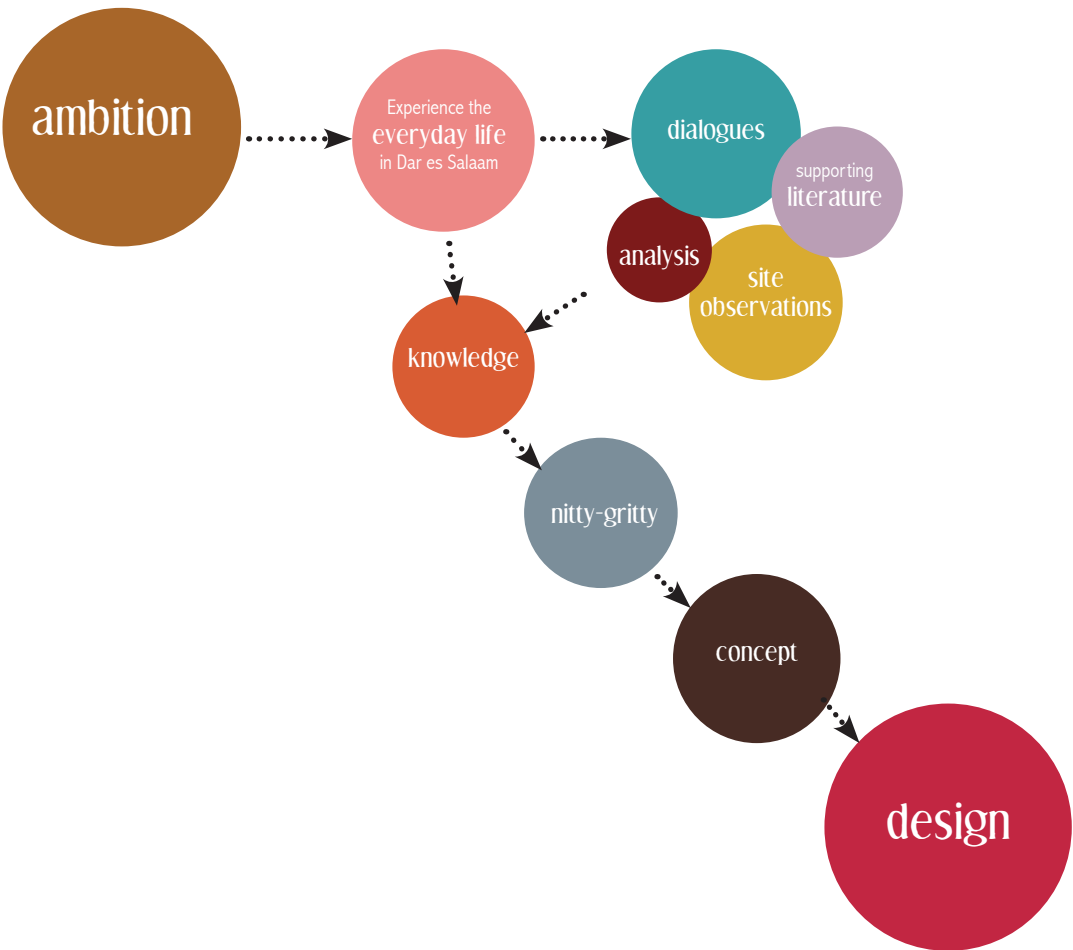
design

The actual way for the design process:

investigations

literature

workshop

observations

choice of methods

sketching

visualization

analysis

sketching

sketching

interviews

Figure 3. Illustration of design process.

Collecting ideas and sketching at the dala dala stand, along Kawawa Road next to Magomni Garden.

Methodology discussion

Work process

Some of our initial ideas of how to gather information before coming to Dar es Salaam had to be modified during the time of this thesis, especially in Tanzania where things did not work in the same way as we are use to. Working within a new context requires some time for adaptation and in Tanzania a great measure of "Hakuna matata" (No problem) is useful. Things often take longer time, the buses have no schedule, meetings are being cancelled or the book was not to be found. These aspects have been balanced by help from the enthusiastic staff at Kinon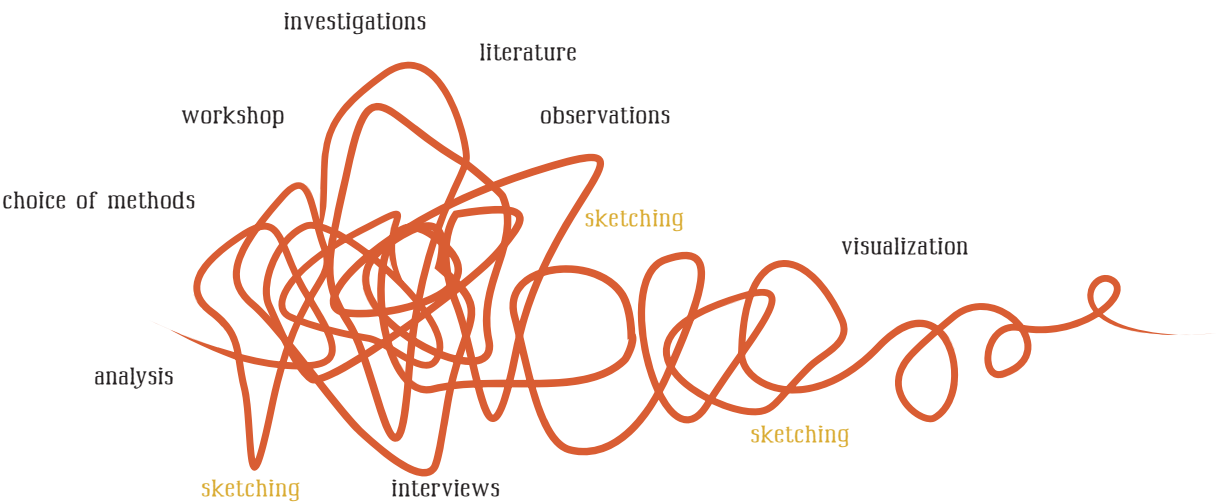doni municipality and the people we met in Magomeni garden. They have all contributed to a broader and more holistic view of Magomani garden.

The limited time we spent in Dar es Salaam made revisits to the site and reconnecting with some of the people difficult. Because of that some information may be misinterpreted.

Case study

By living in the city and commuting by dala dala and foot we gained a fairly broad perspective on the city. Some of our friends who have lived their whole or parts of their life in Dar es Salaam have been the sources to explore new sites, which added another dimension to the local life for us.

Site visits

The choice of well-known places for the site visits may have made us miss informal sites that also represent Dar es Salaams greenery and street life. Since the street life happens everywhere in Dar es Salaam we hade to zoom in to some places for more specific analysis.

Observing

Observing life in the quiet has been near to impossible. Using a participant observing method was necessary, as it was obvious we did not belong to the site. Many people came up to talk to us and wondered what we did in the park. It is possibly that our presence in the park changed some of the users behaviour. But this is hard for us to know.

Lynch

Being inspired by Kevin Lynch's method gave a good base and form for the analysis performed. Applying a framework may sometimes become a bit stiff and limiting but serves the purpose of organising and displaying the analysis. In combination with or own addition to this method filled its purpose well.

SWOT

The SWOT was a good way to get the initial perspective on the site. It gave us a base to work from and showed were to focus and to do more exhaustive studies.

Dialogues

As stated by Kvale & Brinkmann there is room for perception and experience of the one being interviewed. However, the possibility of influencing the informant is always present. The risk of this might be emphasised by the language barrier as direct questions and answers might not be used. The reason for having an interpreter is partly to address and mitigate the negative effect of language barriers, but interpreters bring other issues. For example an interpreter may not give back information word by word and thereby nuances in the conversation is lost.

Due to lack of written material about Magomeni garden, relying on oral sources have been essential. Having both written and oral sources would give a stronger and more nuanced foundation of information to rest on.

Workshop

The workshop we hold only consisted of three other students and us. A larger group of students would of course be preferable. That would potentially give more material for discussion and a wider frame of reference. As always in a group constellation it is a challenge to create the right social climate, during our workshop we sensed that the students held back and was not sure what to say.

Supporting literature

Using a rather free method for gathering literature that constantly leads to new sources has enabled us to review a wide variety of sources. This has on the other hand been time consuming ,and to some extent hindered us from going into deep in a few selected sources.

The Design process

The on-going and organic design process is sometimes hard to grasp and clarify. We hade some troubles in the beginning of the design process when we were suppose to start to sketch on the actual site. We did not know on which level of detail we were supposed to aim for. We were not clear if the design proposal were supposed to be complete into every detail or if we could keep it on a conceptual level. How much information is needed to understand a conceptual design? These were questions that followed us far in the process.

Challenges

Communication problems due to language differences, opened up for an interpretation and occasionally relying on a translator.

Finding information about Tanzania's planning and history of urban development has been difficult at times. Public parks are sparse in number and presentation, and it is hard to find historical information about the few that exist. The culture and tradition is to pass down information orally, and therefore it is not strange that there are few written sources. Like the staff at Kinondoni municipality and City council, many are aware of the problems that a lack of a centralized information system brings.

The limited time spent in Dar es Salaam influences certain parts of the project, as there was no possibility to go back and conduct new interviews and/or observations. We were only able to visit the garden during the daytime, as it was deemed unsafe during dark hours. This limited our observations and the selection of people we could interview.

Being a foreigner, a *muzungu,* makes one both privileged and disabled in the interaction with the local community. As a westerner you stand out, hence, observing the city life becomes influenced by the interaction that inevitably occur. Greetings of curiosity but also expectations and sometimes scepticism towards our intention occurred. Due to cultural beliefs we did not feel free to take picture in every situation. After some time we could interpret situations more freely and became more comfortable to take pictures. This particularly stands for sites that we visited several times.

Urban greenery
Contextual background

This chapter presents the context in which this thesis is developed. Urban development and environmental conditions in Dar es Salaam and Tanzania is presented here together with a description of differences and similarities between Sweden and Tanzania.

Different origins -different habits & public needs

A comparison of Tanzania and Sweden enhance the understanding of the context of this project and how it relates to a Swedish frame of reference. Subjects dealt with are the relation to nature in urban settings, which connects to history, social structures, and living conditions.

The following text is based on knowledge from conducted site visits during our ten weeks in Dar es Salaam. This brought opportunities to see Dar es Salaam's situations and structures clearly, but unwritten rules might have passed by unattended. For a full description of the performed site visits in Dar es Salaam see Appendix 1.

The tradition of parks
Gardens and parks have long traditions in Europe, first for the upper class to enjoy, and later, as a given city element for the public. Today it is common for people to gather in parks for picnics, meet up with friends, or go for a walk during lunch. In Tanzania, colonialism and influences from around the world has brought trends in design and planning schemes. Today, most urban parks or gardens in Dar es Salaam hold a decorative purpose. The parks often have surrounding walls and well pruned trees and shrubs (see picture 6 next page), which make out a place that signals "Sunday walk" or function as a botanical showcase. This resembles parks typical in Sweden during the late 19th to the early 2000th century. Access by the public may be denied due to socioeconomic disposition and earlier incidents. However, colonialism brought a street structure that still can be seen in some parts of Dar es Salaam's downtown as large trees lines that shades the streets (see picture 2 next page). These colonnades create a soft contrast to the mainly built structures.

The modern park, that is multifunctional and connecting to cultural, social and biological aspects, among others, can not yet be seen

in Dar es Salaam. Although, functions of these parks take place in many other settings, Tanzanian's perform much of their social life outside, which contributes to a bustling street life. Coco beach is a common place to spend the weekends and the water front along Ocean Road is one of few places where exercise occurs every day (see picture 1 and 5).

Relation to nature
Outdoor life as a recreative activity has deep roots in Swedish society and so does the Right of Public Access" or "The Freedom to Roam" (Allemansrätten), which allows anyone to visit public or private land in order to recreate and exercise. The recognition of nature's value is fairly large and circumstantial and demonstrations to save trees and green areas occur, both now and then. We perceived Tanzanians to have another relationship. Tanzania has in large parts of the country, a wilder nature, with more dangerous animals and plants than those that can be found in Sweden. This might be a contributing factor that constrain the relationship to nature.

Climate and housing affects social culture
The way of housing affects the everyday life of Swedes, especially in Stockholm, where people tend to live alone in apartments of multistory buildings. The social climate often respects private zones and personal integrity, which sometimes leads to a lack of communication with a neighbour or a fellow human on the bus. The use of outdoor spaces, such as parks, culminates during the summer in Sweden when the weather is warm and pleasant. Few opportunities for new social connections occur during the colder part of the year, since most life happens indoor.

Dar es Salaam is different, most people live in communities with one-storey houses and they have another culture of being social compared to Swedes. Within the neighbourhoods there is dependence on each other to build functional and safe communities, which enhances social interaction. Like the active street life in Magomeni Mapipa (see picture 3 on next page).

It is hard to miss the sociable culture where long greeting procedures are standard.

Street life
From the site observations we made in Dar es Salaam, it is visible how the everyday street life occurs all over the city. People crowd the streets in comparison to Sweden and Stockholm where one might walk alone on a street in the middle of the day. Especially during the colder months, yet, Stockholm has a denser living population than Dar es Salaam (See figure 4, p 31). However, the recreational values of parks are harder to fit into a street and considering Kaplan & Kaplans 'Attention restoration theory' (p.41), there might be a suppresed need for parks as an everyday environment in a dense urban setting such as Dar es Salaam.

To relax in Tanzania, one has to be tolerant and creative with location and seating possibilities, since little is planned and provided (see picture 4). This differs from Sweden, where park benches and other amenities are common features in the urban environment (see picture 7). In Tanzania many things of what in Sweden are seen as private, such as cooking and doing laundry are happaning in the streets. Kids are playing in the street cause many people dont have a private garden or backyard. What sums up public life in Tanzania is that socializing and relaxing among other everyday and leisure activities, in the most cases, occurs in the shadow of a tree. It is clear that shade is an important feature in the public realm. Trees often have well used seating furniture underneath their shading canopy.

Same basic needs
The dynamics of groups differ between the countries. In Tanzania, it is more common to spot a group of men socialising than women, or a group mixed with women and men, which reflects the cultural norms. The different cultural, social, and economic prerequisites build different cities and societies. Regardless of the varying living conditions over the globe, we are all the same when it comes to basic needs and quality of life. The desire to grasp the first spring sun in Sweden is the same as finding a lush tree that will ease from the burning midday sun in Tanzania.

1.Cocco beach, a popular weekend destination for many people livning in Dar es Salaam.

2. Massive trees form long colonnades in downtown, Dar es Salaam.

3. The street life is active in Magomeni Mapipa neighbourhood, one of few planned settlements in Dar es Salaam.

4. Perfect hang out spot made from car tire, Magomeni.

5.Ocean road constitute one of few areas in Dar es salaam where recreation and exercise occurs.

6. Wall encloses the park named Mnazi Moja in downtown Dar es Salaam.

7. Monica Zetterlund park is a lush oasis in central Stockholm. A long curved bench provides plenty of seating.

Urban development & environmental degradation

In order to design a garden that responds to its context a presentation of Tanzania's and Dar es Salaam's urban situation and development is required. This concerns environmental conditions, as well as a discussion of past, present, and future urban development.

Developing countries are often identified by their gross national income (GNI), this is a convenient variable, but it does not necessarily cover all aspects of development (The World bank, 2014 & Colding et al., 2014, p. 8). Adaption of a wider definition can be beneficial, in order to make way for solutions. As early as 1975, the Dag Hammarskjold foundation provided just that; a multifaceted and holistic definition:

"Development is a whole; it is an integral, value-loaded, cultural process; it encompasses the natural environment, social relations, education, production, consumption and well-being. The plurality of roads to development answers to the specificity of cultural or natural situations; no universal formula exists."

(The Dag Hammarskjold Foundation, 1975, p. 7)

The definition demonstrates the breadth of challenges that developing countries face.

Urbanisation and its negative effects

Cities in developing countries have a tendency to grow according to old-fashioned engineering perspectives. This means that infrastructure and buildings are prioritised instead, for example, urban greenery. A consequence of urbanization in combination with poor planning is inevitably a rapid decrease of greenery, including plants, spaces, and structures. Failure to recognize the environments many benefits and lack of means contributes to this decrease (Mng'ong'o, 2004, p. 6).

However, knowledge about ecosystem services and other natural functions shows that urban greenery fills an important role within a city (Moll et al., 2013 in Mng'ong'o, 2004, p. 6). Environmental degradation and the loss of ecosystem services impose constraints on countries, regions, and cities development (UN-Habitat, 2009, p.4).

Urbanization in Tanzania

A rapid development and massive population growth has occurred over the past ten years in the urban centres of Tanzania (see Figure 6. p 32) (UN-Habitat, 2009, p. 20). This urbanisation is largely an inevitable and irreversible process that brings an increased need for space for infrastructure and facilities (Mng'ong'o, 2004, p. 6). The urbanisation in Tanzania is contributing to slight improvements of the country's economy (NBS, 2007 in SIDA, 2010,

Ecosystem services

Ecosystem services displays a diversity of functions that can benefit humans, these generate benefits for the economy, health, and climate among others. The service can for example, be the forests capability to clean water (Colding et al. , 2013, p. 7).

p. 7), yet urbanization causes problems and the government's ability to meet the needs of a growing population are limited (SIDA, 2010, p. 7). Problems that comes with a rapid urbanisation are for example; the absence of clean water, a insufficient road network, poor public transportation and no solid waste management. These problems amplify in the large areas of unplanned settlements and often occur together with sprawl. These areas are the home of most Tanzanian city inhabitants (Winks, Quintin, 2009, p. 41).

Environmental issues often appear in cities, due to exposure of climate change, scarce planning, and poverty (SIDA, 2010, p. 7 & McMichael, 2000, p.7). The negative effects of a degrading environment are starting to become visible in Tanzania, which affect livelihood, public health, human security, and economic growth. Environmental degradation thereby constrains the development of Tanzania (SIDA, 2010, p. 2.) Other factors that hinder the development are poverty and on-going incidents of corruption (SIDA, 2010, p.3. & Winks, Quintin, 2009, p. 32).

	TANZANIA	SWEDEN
Area:	945 000 km^2	407 340 km^2
Population (2013):	49,1 million	9,6 million
Capital:	Dodoma	Stockholm
Main language:	English, Swahili	Swedish
BNP/capita (2011):	550 US dollar	61 098 US dollar
Most poulated cities (2012):	Dar es Salaam (3,4 million)	Stockholm (847 073 inhabitants)
Internet users (2009):	678 000	8,4 millions

Nationalencyklopedin, 2013.

Basic facts

Tanzania

Tanzania is situated on the east cost of the African continent where it meets the Indian Ocean. Tanzania is a United Republic consisting of the former Tanganyika and the Islands of Zanzibar and Pemba (Kinabo, 2003, p. 1). The large coastal country spans over approximately 945,000 square km and lies just below the equator (Williams, 2012, p. 396).

Most of the country consists of high plateaus, but there is a wide variety of terrain. Tanzania is known for its several national reserves or game parks. It is the home of Mount Kilimanjaro and parts of Lake Victoria, which is located in the north (ibid., p. 397).

Tanzania has remained politically stable since 1995, though going through several changes like multi-party democracy and economic policies from socialism to capitalism. The country still struggles with poverty reduction, public services, and infrastructure, but there are good prospects for the future (ibid., p. 406).

Tanzania is an ethnically diverse country due to migrations over the last 1000-2000 years into what today forms the country (Williams, 2012, pp. 396-397). The main language, Swahili, or Kiswahili, is a Bantu dialect that has developed among people in the coastal region as a trade language. Swahili is contributing to the unifying of the ethnic groups since 95 percent of Tanzanians are born into a family that speaks a Bantu dialect (ibid, pp. 396-397).

In mainland Tanzania, religions include Christians (45%), Muslims (35%), and indigenous beliefs (20%) (Kinabo, 2003, p. 2).

Dar es Salaam

Dar es Salaam is the largest city in Tanzania with at least 3,4 million inhabitants in 2012. It serves as the country's industrial and economic centre (Nationalencyklopedin, 2013, Dar es-Salaam).

A large immigration from Asia, India, and other African countries and the different historical periods and styles have influenced Dar es Salaam to become a dynamic city with a wide range of people and cultures.

An influx of unemployed youth from rural areas looking for better opportunities in urban settings is a contributing factor for the city's rapid population growth. About sixteen percent of the city population are migrants from other places in the United Republic of Tanzania (Kinabo, 2003, p. 2).

About 75 percent of Dar es Salaam citizens live in unplanned areas (UN-Habitat, 2009, p. 11). Institutional city planning and management of the environment is falling behind because of weak finances (UN-Habitat, 2010, p. 13).

DAR ES SALAAM   STOCKHOLM

Size — $1590\ km^2$ / $381\ km^2$

Population — 3.4 million (2012) / 1.4 million (2011)

Population density — $2\ 138/km^2$ / $3675/km^2$

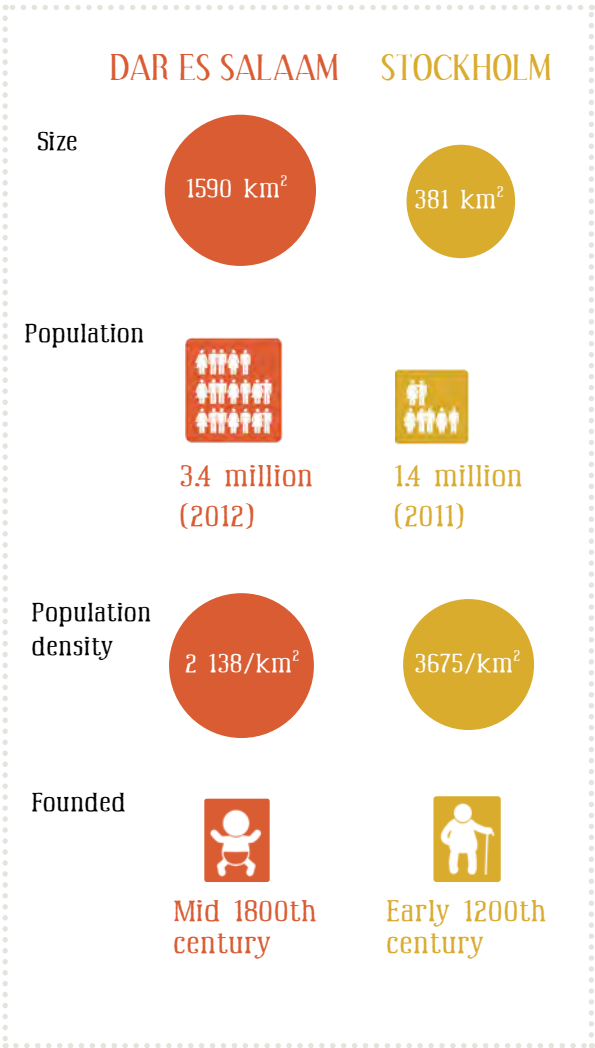Founded — Mid 1800th century / Early 1200th century

Figure 4: The World Bank, 2013 & Nationalencyclopedin, Tanzania, Stockholm, 2013

Expansion of unplanned areas in Dar es Salaam

Dar es Salaam has a growth rate of over four percent per year. This increase in human activity has negative affects on the quality of the environment (UN-Habitat, 2009, p.20).

Dar es Salam, which means, "Harbour of peace", was founded in 1862 by the Sultan of Zanzibar on a site where only a small fishing village existed (Nationalencyklopedin, Dar es-Salaam, 2013). In 1891 Germany chose the site to be their capital seat which sparked the city's growth (Mng'ong'o, 2004, p. 33).

During the colonial period from late 1900th to mid 2000th century, unplanned settlements started to grow. After the independence of the country in 1961, the unplanned settlements grew rapidly as increased urbanisation occurred.

Until 2007, unplanned settlements continued to expand, and there was in general no outspoken intolerance from the leaders, nor was there any upgrade of them between 1960-1990. It took until 2007 before a comprehensive policy for unplanned settlements was developed (UN-Habitat, 2010, pp. 17-18).

In the late nineties, seventy percent of the citizens in Dar es Salaam lived in unplanned areas and today the number has reached to eighty percent (UN-Habitat, 2010, pp. 4 & 18).

Development patterns of today
As a result of the many areas that have not followed set plans and regulations, Dar es Salaam faces a situation that causes spatial disorder (UN-Habitat, 2009, pp. 9-11). The occurrence of planned areas can be described as follows:

"...pockets of planned areas within the mosaic of an unplanned urban landscape." (UN-HABITAT, 2010, p. 13.)

The topography influences development patterns as well as the quantity and quality of green spaces and structures (Mng'ong'o, 2004, p. 34). The city's expansion mainly occurs towards the inland, and mainly along the "primary roads that radiate out from the city centre"(Mng'ong'o, 2004, p. 33).

The access to planned areas does not match the market in terms of facilities, prices, and location. This leads to a continued increase of unplanned settlements. In contrast, planned and more accessible areas goes through gentrification (UN-

Population growth

Population in million
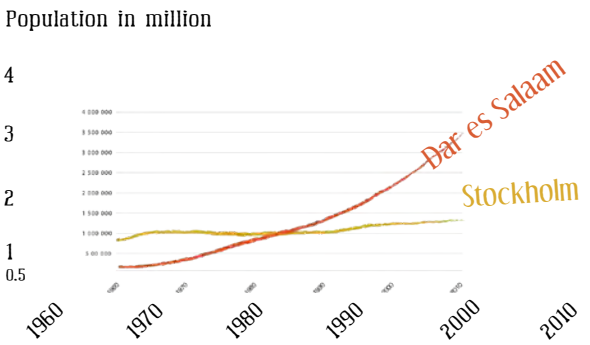
Figure 6. (After The World Bank, 2013)

HABITAT, 2010, p. 13). The UN-Habitat say in their report 'Dar es Salaam Urban Profile' that there is a lack of space for business activity, poor transportation infrastructure, inadequate water and sanitation facilities, and congestion (UN-Habitat, 2009, p. 10). However, lack of greenery is not mentioned in the report.

Several spaces that would make out the green structure of Dar es Saalam, such as valleys and beaches have turned into developed land.
The change of these places affects the previous functions concerning ecosystems, social meeting places and cultural events (Mng'ong'o, 2004, p. 6).

Dar es Salaam, historical timeline
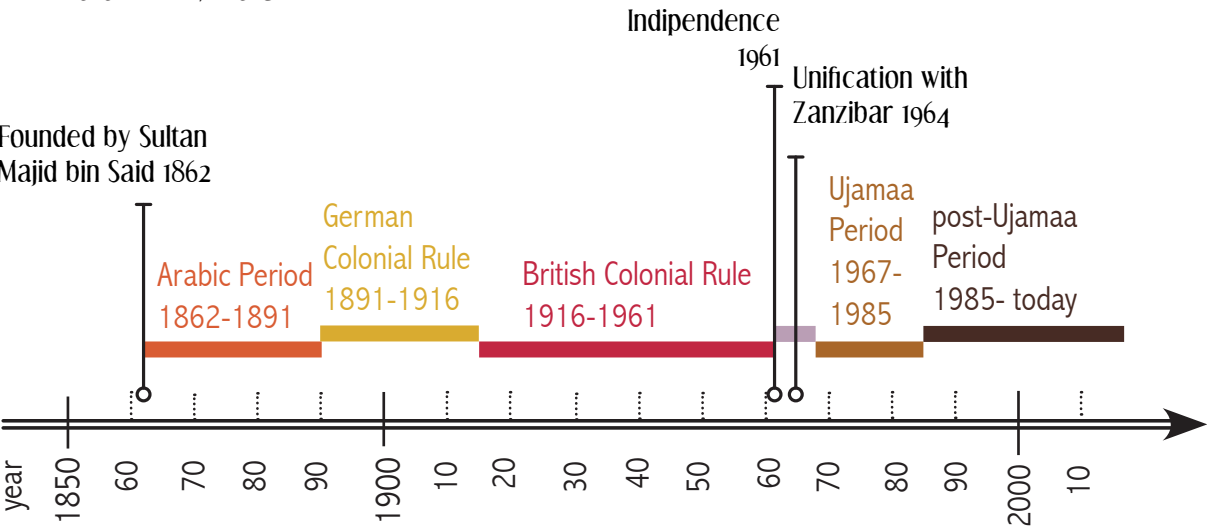
Figure 5. Historical timeline for Dar es Salaam 1850-today.
(After Tanzania Nationalencyklopedin, 2013)

Dar es Salaam, informal settlements marked with yellow, planned settlements marked in pink.
(After UN- HABITAT, 2010, p.20)

DAR ES SALAAM SETTLEMENT GROWTH 1890 - 1998
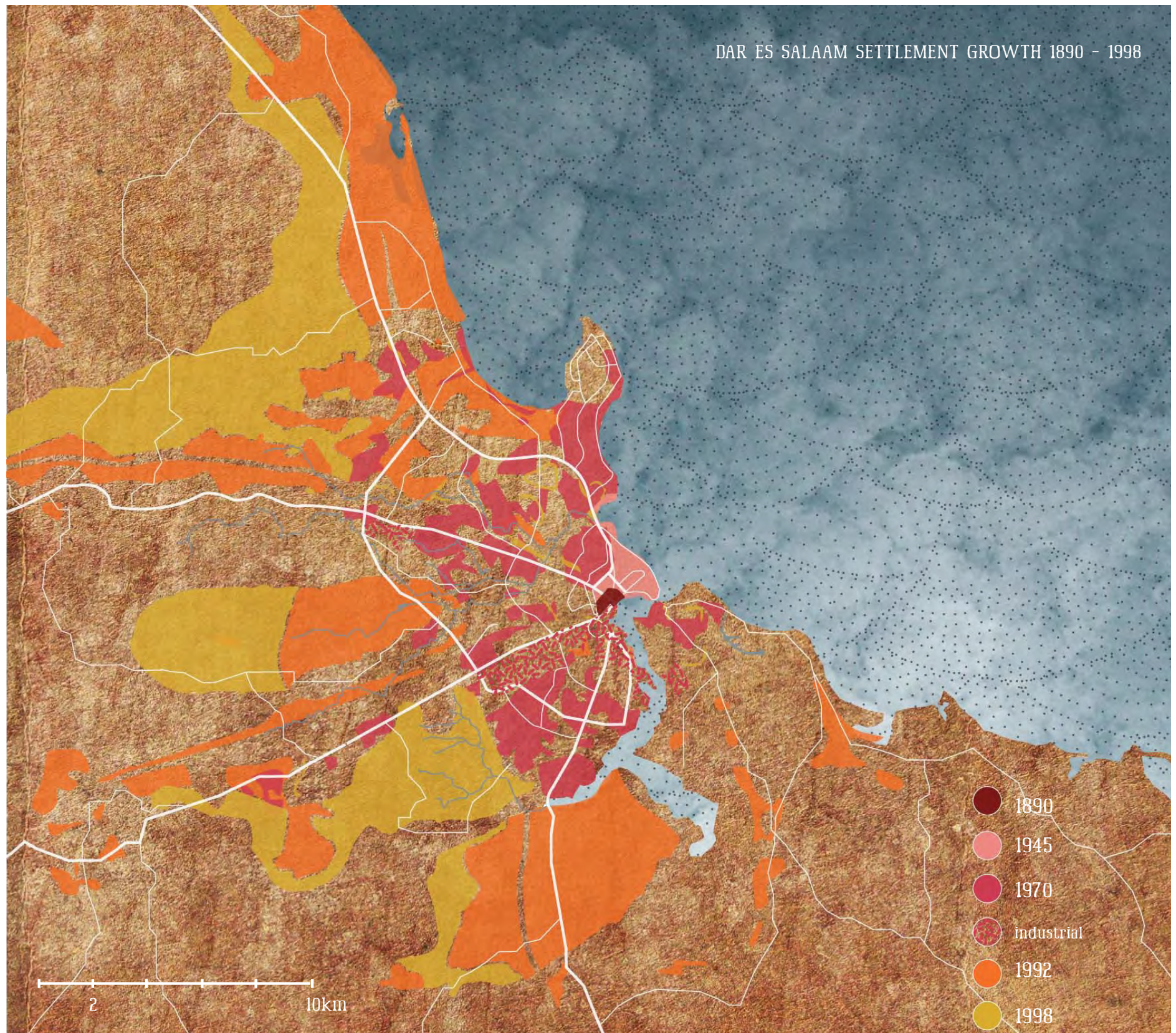
1890
1945
1970
industrial
1992
1998

2   10km
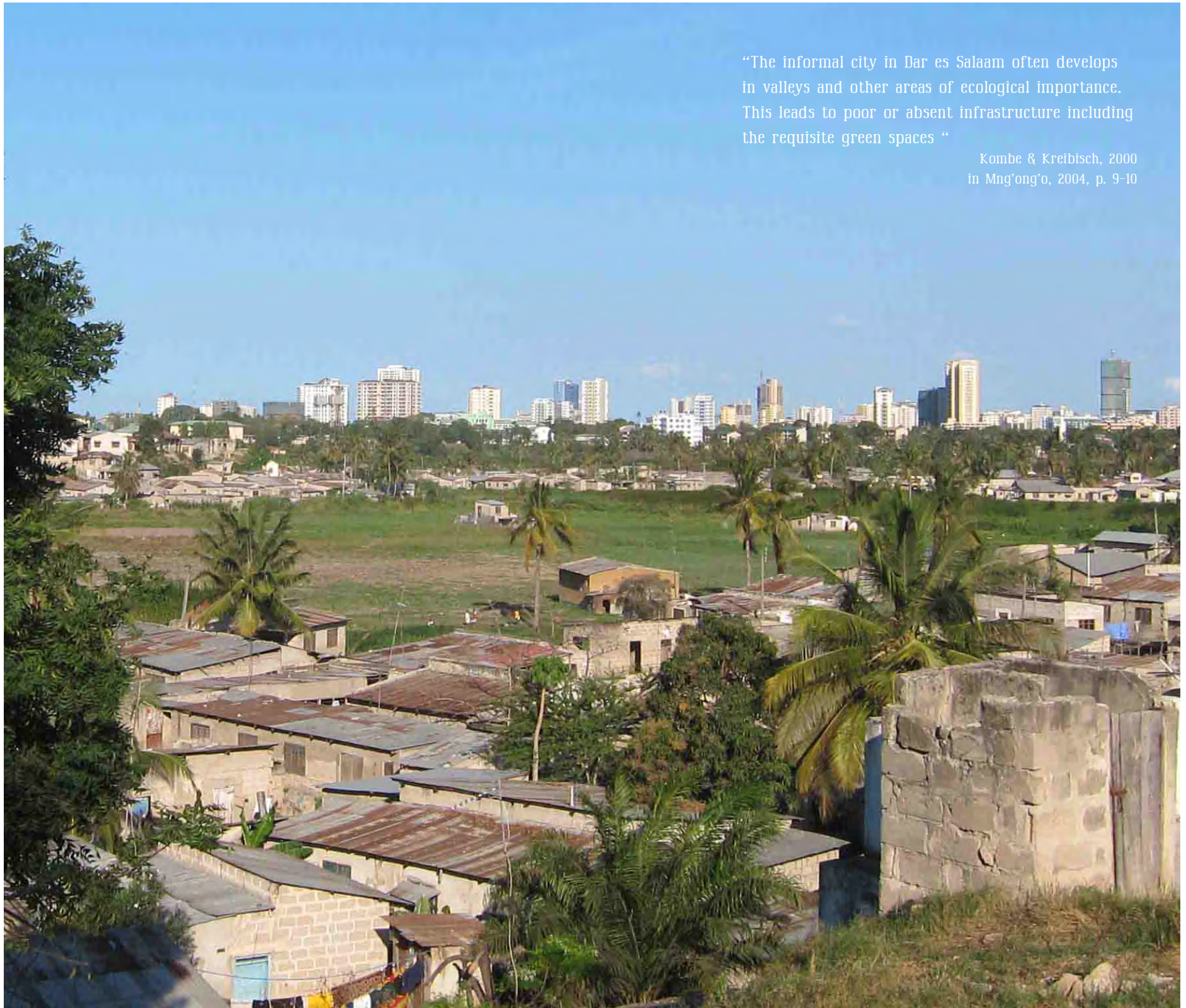
Unplanned settlement located in a river valley in Dar es Salaam impact the ecological structure negatively. The area often flood, which has great consequences for the people living there. Due to its fairly central location, there is unwillingness to move.

Planning and management

The political structures lack means to regulate planning and management of the environment, and this is the case for most sub-Saharan countries, including Tanzania. These structures generally function better in the developed world since extensive regulations and guidance control the development (Mng'ong'o, 2004, pp. 9-10).

The government of Tanzania struggles with filling its position as a provider of planning and services. This is partly a consequence of a lack of funding and human resources (Halla 1997 in Mng'ong'o, 2004, p. 10). The lack of financial resources is unfortunately demoralising staff members, which leads to weak enforcement of constitutions, which also creates a continued undermining and inability to provide services in the urban context (Banyikwa 1989; Hardoy et al. 1989; Kironde 1995; Kombe 1995 in Mng'ong'o, 2004, p. 10). Irreversibly this leads to the expansion of unplanned settlements (Mng'ong'o, 2004, pp. 9-10) and the degradation of the green structures of a city.

The president of The United Republic of Tanzania (His Excellency Jakaya Mrisho Kikwete) expressed in 2005 a concern about the scarce planning situation within the country:

"We are all witnesses to how some of our people and some city, municipal and town authorities are ignoring town planning and urban zoning regulations [...]. One example of places that are taken over is open space and playgrounds... If we do not contain this trend, our urban areas will become jungles of unplanned, unregulated and poorly serviced concrete structures. The Fourth Phase Government will demand that Local Authorities should address this matter as soon as possible."

(UN-Habitat, 2010, p. 29)

Even if the president does not mention green structures, he expresses a concern of the opposite, "concrete structures".

Political structures in Dar es Salaam

In dar es Salaam political structures and regulations significantly lack in planning and management of the environment (UN-Habitat, 2009, p. 20). The actuality of environmental issues and climate change should allow the topic to permeate all political and governmental dialogues, but this is not the case (SIDA, 2010, p. 13).

The Citywide Action Plan

In the Dar es Salaam Citywide Action Plan, the goal is to upgrade half of all the unplanned settlements by 2020, and prevent the establishment of future unplanned settlements (UN-Habitat, 2010, p. 3). The environment is one of the goals to work with in the action plan (ibid., p. 35), yet this issue has little space within the report. Management of the unplanned development include "green belting", as a strategy to prevent further sprawl of the city (ibid., pp. 4 & 57). This may be an efficient way to deal with sprawl, but it does not address the need of green structure within the existing, denser parts of Dar es Salaam. The action plan further suggests that the creation of green areas will occur by planting trees in identified zones and hazardous areas. The locations will be within both planned and unplanned areas (ibid., p. 57). Furthermore, by preserving areas and implementation of "conceptual land use designs", upgrade of roads, schools, health centres, markets, areas of worship, and recreational areas will be conducted (ibid., p. 56).

Gender inequality

In a upgrading program, Dar es Salaam Cities Alliance Programme, women and youth were the target group during the public participation. This approach is essential within a culture of stereotypes and long history of patriarchal practices. Gender inequality in Dar es Salaam and Tanzania often show through marginalising women and girls in both employment and education. When turning to women during the public participation method, the aim was to mitigate and reverse the patriarchal structures (UN-Habitat, 2009, p. 18).

Just as the poor are faced with increased exposure to environmental degradation, so are the women. Since females conduct most of the agricultural labour and household chores, the environment shaped around them greatly affects their everyday life. Conflicts and natural disasters make out greater risks in contrast to the male population. Also, if she is burdened, her chance for empowerment and taking part in decision making is minimized (SIDA, 2010, p.19). Emphasizing the female perspective when designing public space, as a part of an everyday life, can therefore be of great importance.

Infrastructure/Transportation

The upgrading of Dar es Salaam also includes infrastructure. Outdoor air pollution, on a national level, is not a major threat to public health or the environment at the moment. Nevertheless, the increased occurrence of motor vehicles, industries, power generation, and fossil fuels, might increase the actuality of this problem (SIDA, 2010, p. 5).

The limited transportation facilities are used to their full capacity, and alternative means of transportation, such as walking and cycling should be encouraged. One reason is to lower the high levels of pollution that are increasingly polluting the environment (UN-HABITAT, 2009, p. 7). Another reason is to increase safety standards for the already large number of people (33 percent) who access the city by non-motorized transportation (NMT) on an day-today basis (ibid., p. 12). NMT is ignored as a valuable form of infrastructure, which brings a lack of walkways, bicycle paths, zebra crossings, footbridges, and pedestrian signs and markings in city streets (ibid., p. 12).

There is ongoing construction of a new rapid transit bus system that will ease access to the city centre along Morogoro road. Dar es Salaam Rapid Transit, DART, will launch in 2015 if construction run by schedule. This development affects the case study of this thesis, Magomeni garden, since it lies within fifty to hundred metres from Morogoro road and the planned bus stop.

DART, Dar es Salaam Rapid transit, phase one (After DART, 2013).

Construction of DART on Morogoro Road, early 2013.

Environmental conditions

The terrain and climate vary throughout the country. The central area of the country is dry due to the flat plateau landscape. In areas of varying typography that receive plenty of rain the country is lush. The majority of the country has a savannah-type vegetation, characterized by the acacia. Mangroves characterizes the coastal regions, but have faced mayor cut backs. These variations create a diversity of flora and fauna (Williams, 2012, pp. 409- 410). In Dar es Salaam, influenced by years of trade, the native flora have gradually changed to be dominated by exotic species (Mng´ongo, 2004, p. 36).

In the highlands, the amount of rain is 500-700 mm while the coast receive 1000-1900 mm. There are traditionally two rain seasons from March to May and October to December. Short rains have tended to spread from November to May, with dry spells in January and February (Williams, 2012, pp. 409-410).

Climate change

Tanzania only stands for a small part of the greenhouse gases emitted in the world, yet it is facing high consequences. Climate change will pose both direct and indirect threats to urban areas; increased temperature and intense rains may aggravate drainage problems, causing floods, destruction of infrastructure, and health problems. These issues will be especially present in unplanned areas (SIDA, 2010, p 7).

Climate change scenarios show that the temperature will increase slightly more than the global average in Tanzania (UN-Habitat, 2009, p. 5). Tanzania's average temperature over a year will likely increase between two to four degrees Celsius by 2075, but during daytime the increase may be as much as five degrees Celsius (Noel & Smith, 2010 in SIDA, 2010, p. 23).

The rainfall patterns are also likely to change, with less precipitation in some regions and more in others (UN-Habitat, 2009, p. 5). Areas of uniform landscapes (plains) can expect a decrease in rainfall, but ones with a more contrasting typography (undulating landforms) will see an increase in precipitation (SIDA, 2010, p. 24-25).

Deforestation reduces Tanzania's buffer capacity towards climate change. The driving factors of deforestation are farming, housing, overgrazing, wildfires, use of charcoal, and commercial exploitation of timber (SIDA, 2010, p. 24-25).

Poverty and environment - a vicious cycle

Poverty is present in the country and is one driving factor of environmental degradation. Many poor people rely on natural resources for their survival and degraded environment increase poverty. Their dependency on nature also limits their capacity to adapt to changes and external shocks, which climate change generates. This can negatively affect the country's work on reducing poverty and gaining economic development apart from the negatives that will impact the environment (UN-Habitat 2009, Environmental policy brief, p. 4 & 6. & SIDA, 2010, p. 2). This creates a vicious cycle.

Garbage is often deposited along water courses or other natural areas in Dar es Salaam, this is partly a result of high collection fees. (2013)

Charcoal is common fuel in households, Dar es Salaam, 2013.

Burning garbage is routine in Tanzania.
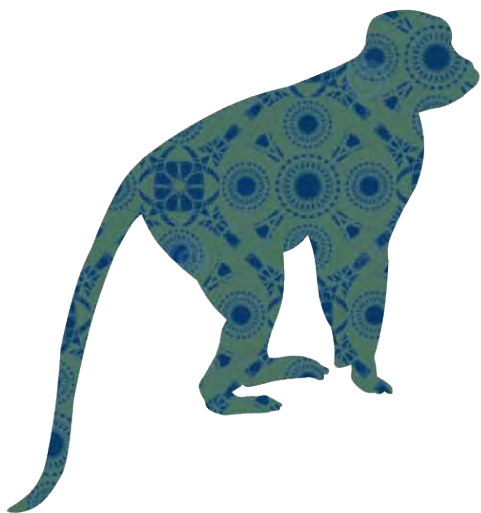
Seven reasons for urban parks

Theoretical background

This chapter is based on the questions at issue: What are the benefits of urban parks? In the previous chapter it was made clear that developing countries, and especially urban settings, deal with many challenges. Greenery in urban areas was indicated to have positive impact on people and environment in various ways, and therefore, the role of greenery is hereby further investigated.

Why on earth care about urban parks?

The question is relevant in the context of developing countries where basic needs are still often left unfulfilled. In many parts of the world people live without clean water, adequate infrastructure, and are battling many diseases that are no longer problematic in developed countries. At a first glance, investing in parks may seem trivial, but the benefits generated by urban parks are many and essential for life quality and thriving cities.

Urban parks are a component within a city's green structure. There is evidence that urban parks enhance the public health and boost local economy (Konijnendijk et al. 2013).

The urban environment should, at its best, provide a qualitative green structure, in order for ecosystem services to function within a city. They can then contribute to poverty reduction, improved public health, and economic growth (SIDA, 2018, p. 18).

Benefits of urban parks

Public space is one of the most important contributors to quality of life in terms of health, environmental merit, and social unity. Improving these spaces is essential in the social and physical upgrade of townships (Dr Mrema, 2013, p. 3). Kaplan & Kaplan were early advocates of the benefits humans can gain from a healthy relationship to nature, in both rural and urban settings. They found that people both prefer and recover more rapidly when spending time in nature, thereby demonstrating that natural environments offer more than pure enjoyment (1998, p. 10).

During the eighties, ecologists and economists developed a way to better measure the value of products and services provided by ecosystems, and the term ecosystem services was coined. Ecosystem services displays a diversity of functions that can benefit humans. Ecosystem services can for example include; the forests capability to clean water; watercourse capacity to buffer during heat waves; and insects that pollinate crops and wild plants. Ecosystem services provide options that allow money to be saved by letting nature do the work for the humans. Also, positive influences on health are gained, and mitigation of negative climate impact occurs to mention but a few (Colding et al. , 2013, p. 7).

From the report by The International Federation of Parks and Recreation Administration (IFPRA) named " Benefits of Urban Parks" we have gathered seven ecosystem services found in urban parks, these are:

- Urban parks and direct and indirect health effects - Reduces stress levels and hold recreational values.

- Urban parks and social cohesion - relates to democratic space and feeling of belonging.

- Urban parks and economic values – a combination of tourism and property values.

- Urban parks and biodiversity - creates habitats.

- Urban parks and air quality and carbon sequestration - filtration of the air creates better air, less pollution).

- Urban parks and water management - locally dealing with floods and droughts.

- Urban parks and cooling - equalizes temperature and reduce heat island effects.

(Konijnendijk et al. 2013, p. 3)

Like Colding et al., states, investing, working, and living in communities that gain the positive outcomes of ecosystem services are more attractive (2013, p. 7) and therefore more resilient.

Green structure

A green structure is a planning term and defines green areas and areas of water that are linked together within an urban context. The green structure is not defined by ownership of land, but consists of a variety of spaces, such as parks, private gardens, river ways, and "wild/pure" nature (Colding et al., 2013, p. 69). The green structure often stretches to connect the greenery of a downtown area with the natural, agricultural, and semi-urban areas at the urban outskirts (Mng'ong'o , 2004, p. 6).

Health effects

A benefit of urban parks is the positive effect on mental and physical health. Urban parks generate well-being by offering recreation and leisure activities, which affect us both directly and indirectly (Konijnendijk et al. 2013, p. 3). Direct human health effects are measurable, such as blood pressure, and they have been scientifically stated (Ibid., p. 9).

People that are given access to and use parks show, through indirect factors, positive effects on human health. Examples of indirect factors are increased recreation, physical activity, and community attachment (Ibid., p. 9).

The need to recover

On an everyday basis the human brain sorts through large amounts of information, in a city this information comprises of traffic situations and commercial activities to mention but a few. Kaplan & Kaplan state that dealing with this direct information on a daily basis leads to mental fatigue and recovering from this is essential to remain healthy and maintain well-being (Kaplan & Kaplan, 1998, pp. 6, 8 & 22).

Kaplan & Kaplan developed "The Attention Restoration Theory", which builds on a persons need for "soft fascination". Soft fascination relates to the old parts of the brain, which organizes information that we meet in everyday life. Compared to a city, nature contains little information that must be sorted and considered, which allows the higher cognitive centres to rest and the human brain to recover. Direct attention requires more effort than soft fascination from the brain, hence, recovering requires soft fascination. Due to the lower amount of information, natural settings provide an environment where restoration from mental fatigue is possible (Ibid., p. 18).

Kaplan & Kaplan further highlight the various possibilities to design and manage environments so that recovering from mental fatigue is encouraged (1998, p. 22). Providing access to these environments, therefore, increase the possibility to recover (Ibid., p. 22), which demonstrates the importance of having a diverse city structure where nature is present.

Characteristics of restorative settings

Kaplan & Kaplan address four different components that exist in restorative environments:

Being away: The importance of escaping the everyday urban environment that tires you can be provided with small means. A certain environment, large or small, can contribute to the feeling of being away. Being able to see a canopy through the window is one example.

Fascination: Places that are fascinating, not only captures and hold the attention, but also offers processes that are engrossing to people. "Soft fascination occurs when the interest to the surroundings is big enough to hold attention, but not more than it is room for reflection."

Extent : A restorative environment permits the eye to focus on things that do not require any special effort, yet it is inviting and fascinating. An environment that offers extent provides space for mental wandering. While the sense of extent is important, the physical area does not need to be vast. In fact, vastness, if lacking in structure and interest, can interfere with restorative benefits.

Compatibility: The place fits and supports the users expectations and desired activities. (Kaplan & Kaplan, 1998, pp. 18-21)

Design considerations:

Providing places for recovery is essential (according to the attention restoration theory), especially in a chaotic environment like a city. The characteristics of restoration will be present in our design proposal for Magomeni Garden. Design elements that we can affect are on a small scale, such as, accessibility by safe crossings, providing needed facilities and amenities, and a natural setting. This increased general quality will hopefully affect the time spent and frequency of visits to the garden. Distance to and the size of Magomeni Garden are, however, factors we have little possibility to affect in this project.

Resting, waiting and socializing under the canopy, Magomeni garden, Dar es Salaam.

Social cohesion

As part of public space, one of an urban parks assets is social cohesion; which contributes to defining citizens as a group rather than individuals (Gallacher, 2005, pp. 41-42 in Mrema, 2013, p. 3). Urban parks contribute to social cohesion and identity by strengthening human relations by providing space for interaction (e.g., Coley et al., 1997; Kuo et al., 1998; Van Herzele and Wiedemann, 2003; Parr, 2007; Maas et al., 2009 in Konijnendijk et al. 2013, p. 14). The most common interactions that occur in parks are greetings and shorter talks (Konijnendijk et al. 2013, p. 3 & 15). These sometimes cursory and informal interactions should not be underestimated as a way of building social cohesion.

Where people meet in the city varies, from local recreation facilities, schools, churches, and in parks (Kuo et al., 1998; Völker et al., 2007 in Konijnendijk et al., 2013, p. 14). Places where there are trees, which provide shade and lush grass, are attractive and draw visitors, especially in tropical climates. In turn, this increases the likelihood of interaction between actors, compared to other barren areas (Coley et al., 1997 in Konijnendijk et al., 2013, p. 14). Overall, urban settings provide very few of these characteristics that a park contains. Therefore, increasing park space and quality can mitigate these effects. By providing space and activities, an arena for interaction between people of different social and ethnic background is made. Interaction and shared values are components


Tensta Parkour park offers a meeting point for both physical activity and observing.

that have to be present in order for social cohesion to exist (Konijnendijk et al. 2013, p. 3 & 14).

KNOWLEDGE IMPLEMENTATION:

Integration and social cohesion are an important part of a sustainable city development, which act to mitigate the negative aspects of globalization. In Dar es Salaam the strong tradition of a social and outgoing everyday street life helps the feeling of belonging, although, privatization of public land is a threat. Public parks, such as Magomani Garden, could guarantee these kinds of spaces by offering space for interaction, seating opportunities, and lush vegetation for all people. Providing a platform where citizens can meet has potential to boost the community and in our case, Magomeni Garden and its surroundings. By creating a space with diverse activities and flexibility a large number of citizens can be influenced.
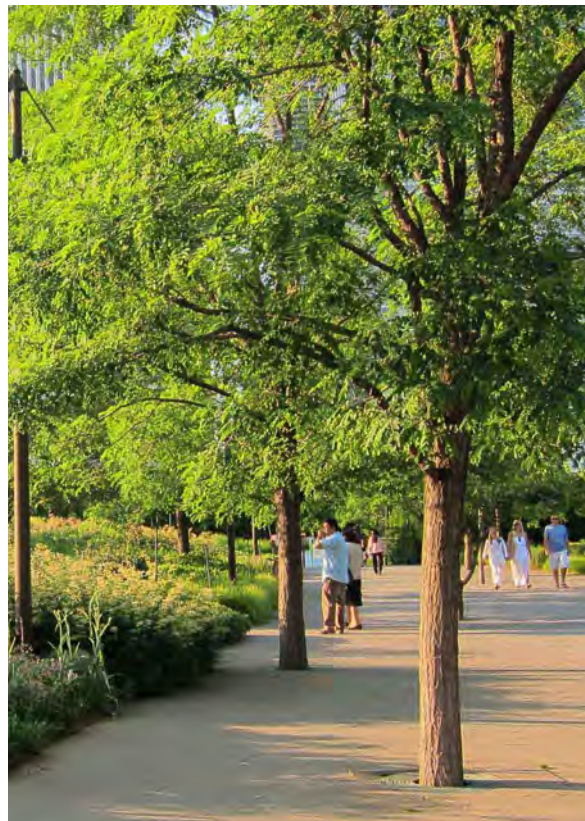
Biodiverse planters and economic benefits by attracting visitors to the Millennium park in Chicago.

Economic benefits

The relation between ecology and economy is particularly strong when it comes to ecosystem services. Ecosystem services promote economic gain by letting nature do the work for us, like pollinating, purifying water, and speeding up recovery time (Colding et al., 2013, p. 5). Although, more controversial aspects of economic gain is tourism and property value:

Tourism

A city can attract tourists through a specific park or by having a representative green structure. The tourism then has a positive impact on the local economy. A city's recognition of its natural areas, through either establishing or preserving green space, is a valuable component in order to attract visitors, especially in the business of eco-tourism (Majmudar et al., 2011 & Wu et all., 2010 in Konijnendijk et al. 2013, p. 17).

Property values

The relation between nature and property prices is a way of estimating the value of nature. Parks, but also other green areas, generate economic ripple effects on the nearby properties which increase in value. Price increases of 8 - 20% are estimated as reasonable starting points (Crompton, 2001 & Luttik, 2010 in Konijnendijk et al. 2013, p. 20-21). Still, the price range varies around the world, which promotes caution when transferring results (Konijnendijk et al. 2013, p. 21).

The variables that impact property values are access to and visibility of parks, just like proximity to facilities and commuting. Open spaces, and particularly parks, hold a higher economic value compared to other green spaces, such as forests and agricultural land (Brander & Koetse, 2011, in Konijnendijk et al. 2013, p. 21).

Does size matter?

Even if the value increases proportionally to the size of the park, smaller parks still have a positive effect on property values (Kumagai &

Yamada, 2012 in Konijnendijk et al. 2013, p. 21). Several studies pointed towards increased property values within a few hundred meters from a park or green area (Konijnendijk et al. 2013, pp. 21-22). However the effect can also be negative if there are noisy and/or criminal activities occurring in the park (Chen & Jim, 2010 in Konijnendijk et al. 2013, p. 22).

Design considerations:
Awareness of urban parks economic benefits may encourage stakeholders to preserve and maintain Magomeni garden. Magomeni garden has a central location in the community and increased attractiveness is something that the surrounding areas can benefit from. Recognition of the economic gain from urban parks might increase the willingness to invest in such areas by private and governmental investors. And as this chapter shows, cities have much to gain from including greenery in its layout.

Pollination, an ecosystem service that requires a diversity of plants and pollinators to be resilient.

Biodiversity

Biodiversity is a supporting service, which means that it is essential in the function of other ecosystem services (Colding et al., 2013, p. 68). Urban parks have shown to be hot spots of biodiversity in a city setting (Konijnendijk et al., 2013, p. 24, 26 & 40). Their advantage in creating and maintaining biodiversity comes from the number of habitats within the parks and the habitats heterogeneous composition. Within the urban park, "[...] multiple scales and spatial attributes interact in shaping the overall richness of species [...]" (Konijnendijk et al. 2013, p. 25). Urban parks are thereby contrasting to the homogenous character of other urban areas (e.g., Cornelis & Hermy, 2004 in Konijnendijk et al., 2013, p. 24). his concentration of species becomes important since cities often are dense and greenery competes with many other elements of a city, such as, infrastructure and housing.

Exotic and native species
The composition of species in a city is seldom native due to urbanization. In urbanized areas, urban exploiters, urban adaptors, and exotic species become more common and outrival native species. Exotic plants often make up fifty percent of the flora (Konijnendijk et al. 2013, p. 25). Severe urbanization not only decreases the existing biodiversity, but also reduces the future possibilities of a profound native flora and fauna (Konijnendijk et al. 2013, p. 25).

In terms of biodiversity, the design of parks and the selection of plants have a large impact on the park and its surroundings. Extensive park areas, increased connectivity among green areas, and a lower degree of urbanisation are essential to the preservation of native flora and fauna (Konijnendijk et al. 2013, p. 25).

However, in a world of climate change, where climate boundaries move, the use of exotic species might be a necessity, in order to have (a more resilient) urban flora and fauna (Colding et al., 2013, p. 49).

Fragmentation of green areas
Other challenges that urban species face is isolation. Green areas in urban settings often become isolated patches of greenery surrounded by built structures; this limits the exchange of species and individuals (Konijnendijk et al., 2013, p. 26), which negatively effect abundance and diversity. Some species cope with isolation if the site is large enough and maintain a high quality, for example birds while ants, bees and butterflies do not cope as well. Invertebrates isolation could even be beneficial for them (Konijnendijk et al., 2013, p. 25). These variations point to the complexity of species and ecosystems.

Although, a relation that seems to be constant is the one between increased habitat diversity and increased species richness. Older parks have an advantage as they often hold a complex and diverse habitat structure (Konijnendijk et al., 2013, p. 25).

Design considerations:
Creating biodiverse parks requires awareness on several levels. For Magomeni Garden a balance between exotic and native species in the selection of plant material is important. Also consideration of microclimate is needed, in order to create different habitat zones.

A diverse set of flora, from trees to ground cover, may provide the park with a good mix of habitats. Magomeni Garden has a role to play in the green structure of Dar es Salaam and should be a example, suggesting a connection to other areas would be interesting, in order to create a network of green areas.

Air quality

Clean air is an ecosystem service contributing to good living conditions, but humans interference of and impact on ecosystems is opposing a threat to their function and existence (Colding et all., 2013, p. 8).

Air quality is a major concern in urban areas since it affects public health negatively and increase mortality rates. Particulate matter (PM), Sulfor oxides (SOx), Nitric oxides (NOx) and Carbon oxides (COx) are Just some of the materials that constitute air pollution (Cavanagh et al., 2009 in Konijnendijk et al. 2013, p. 31).

An invisible process
The ability of green areas to clean air is invisible for the human eye, and it is a process we often take for granted (Colding et al., 2013, p. 15). Urban vegetation improves air quality by capturing pollutants and particulate matter (Konijnendijk et al. 2013, p. 31 & 33). Cleaning air is a complicated process that depends on leaf microstructure and cell physiology at the micro level (Konijnendijk et al. 2013, p. 32). To gain from these air purifying processes it is important to preserve and create a diversity of green space within the city (Colding et all., 2013, p. 15), from pocket parks and extensive fields to street trees.

Carbon sinks
Vegetation has shown to hold an important role in climate change regarding their capacity to store carbon, therefore parks function as "carbon sinks". Trees hold a very important role in the urban environment compared to other vegetation (Konijnendijk et al. 2013, p. 33)

Trees hold a key role
In comparison to low and short vegetation, a park that has a large amount of tree cover and woodland character reduces the occurrence of pollutants by increased efficiency in deposition (Konijnendijk et al. 2013, p. 31). A trees capacity to remove pollutants from the air depends on physical factors such as the amount of leaf coverage within an area and how long the trees carry leaves. Weather and climate also affect the vegetation's capacity and speed of transpiration and deposition (Konijnendijk et al. 2013, p. 31).

By lowering the air temperature through transpiration trees have a reduced effect on the production of ozone. On the downside, they can also create ozone through the emissions of "volatile organic compounds" that react with nitrogen oxides.

Even though many studies indicate increased air quality in urban parks, the overall air quality may not always be significantly better in the surrounding areas (Lam et al., 2005 in Konijnendijk et al. 2013, p. 32). For example, vegetation can be a source of allergens, which negatively effect some people's air quality. (Konijnendijk et al. 2013, p. 31)

Design considerations:
The use of different and a large quantity of trees in the design is justified by their positive affect on air quality.

Local water management in Sinzai, Dar es Salaam.

Water management

Access to clean water is like clean air, an asset that increases the quality of life for people (Colding et al., 2013, p. 8).The water in an urban environment often carries many pollutants that affect urban and rural systems negatively (Konijnendijk et al. 2013, p. 35).

Water management is important for cities, especially in times of climate change where urban regions face extreme weather such as heat waves, increased precipitation and periods of drought (Colding et al, 2013, p. 10). Cities can seldom be independent, but have to take water from their surroundings (Konijnendijk et al. 2013, p. 35), which further increases the strain on the environment.

Non-permeable surfaces can be a threat
The homogenous cityscape mentioned under biodiversity is often made of hard surfaces. With the placement of built structures, you drastically increase the likelihood of impervious surfaces, which leads to decline in groundwater levels and flooding (Colding et al, 2013, p. 20 & Konijnendijk et al. 2013, p. 35). During heavy rainfall, which is common in Dar es Salaam, the impervious surfaces contribute to flooding of surface water. When rainfall does not infiltrate the ground forty to eighty percent is lost to surface runoff where evaporation returns the water to the atmosphere without positively impacting humans (Konijnendijk et al. 2013, p. 35).

Parks contribute to stormwater management
The problem of water management, such as storm water runoff and polluted water, can be solved through implementation of ecosystem services (Colding et al., 2013 & Konijnendijk et al., 2013). Urban green space, may it be parks, bioswales, rain gardens, green roofs or other green infrastructure, hold a high capacity for infiltration due to its large amounts of impervious surfaces (Konijnendijk et al. 2013, p. 35-36). Infiltrated and stored water in green areas inherently reduces maintenance costs,

by potentially limiting the need for water from external sources(Zhang et al., 2012 in Konijnendijk et al. 2013, p. 36).

Mature trees are an important component in urban settings as they take up a large amount of water and release it back to the atmosphere through transpiration. Trees and other vegetation also limits erosion by holding it with its roots. Planting trees may be a cost efficient way to deal with water management locally (Länsstyrelsen i Stockholms län, 2012 in Colding et al., 2013, p. 10). Hence, vegetation allows for local, and regional water cycles to be kept and maintained within an area or landscape (Colding et al., 2013, p. 17). This allows for a recharge of the groundwater storage, improved climate conditions within the city through evapotranspiration (see Figure 2) and flood mitigation (Pauleit and Duhme, 2000; Pataki et al. 2011 in Konijnendijk et al. 2013, p. 35 & Colding et al., 2013, p. 20).

Design considerations:
Though many surfaces in Dar es Salaam are not yet paved, it is a trend connected to urbanisation and modernisation of the city. The occurrence of heavy rain and potential flooding needs to be addressed by providing a balance of permeable ground and surfaces that can carry humans and cargo.

Dar es salaam faces problem with seawater infiltrating the groundwater resources. This is due to its proximity to the coast and large uptake of groundwater and reduced infiltration. By increasing infiltration, this trend might be mitigated and reversed.

Keeping the most parts of the permeable surfaces and adding vegetation also allows for local water management to occur. Gathering the excess water form the hard surfaces and the park into a pond can prolong the parks ability to be self-sufficient in water. This can create a park with low maintenance and lower costs. Yet, consideration of potential water born diseases and Malaria must be taken in consideration, as well as solutions to these problems.

Cooling effect
Studies show that urban vegetation can have a cooling effect locally and to some extent on its surroundings (Konijnendijk et al. 2013, p. 38).

Lowering of temperature is particularly important in urban areas since they are already warmer than their surroundings. Increased temperatures comes from the amount of hard surfaces that store heat, such as concrete and asphalt. This is often referred to as the urban heat island effect. A constrained living environment is created by a combination of increased temperature caused by climate change, higher temperature from exhaust fumes and the urban heat island effect (Colding et al., 2013, p 17). Higher temperature and heat waves are a threat to human health and increases morbidity.

The role of vegetation
Trees directly bring ease through shading. Apart from making the environment more pleasant for humans, this lowers the energy needed to cool buildings (Bolund & Hunhammar 1999 in Colding et al., 2013, p. 16).

Vegetation also cools the air through evapotranspiration. (Colding et al., 2013, p. 16 & Konijnendijk et al. 2013, p. 38) Evapotranspiration is the combined effect of evaporation from the ground and transpiration when plants give off water vapour (see Figure 7). Transpiration requires heat energy in order for the water to vaporise, this cools the leaf and its surrounding air (Konijnendijk et al. 2013, p. 38 & Hough, 1989 in Colding et al., 2013, p. 16)

On average, green urban areas hold a temperature of 0.94 degrees lower during daytime and 1.15 degrees lower during nighttime, compared to its built surrounding (Konijnendijk et al. 2013, p. 38). While five degrees difference is more common, a difference of twelve degrees between urban and rural areas have been measured (Johansson et al., 2009 in Colding et al., 2013, p. 45). The temperatures

varied a lot depending on the size of the green area. Parks larger than three hectare were steadily cooler than their surrounding areas while smaller parks had more variation in temperature (Konijnendijk et al. 2013, p. 38).

Micro breeze
The difference in temperature that occurs between a park and its built surrounding area creates light winds that spreads in the neigbourhood (Länsstyrelsen i Stockholms län, 2012 in Colding et al., 2013, p. 16), which may also affect the air quality positively.

Design considerations:
Again trees and especially mature ones, have a positive impact, this time on the local air temperature, which in Dar es Salaam can reach up to 35 °C during day time. In a tropic climate like this, it is important for people to find ease from the gazing sun and rising temperature.

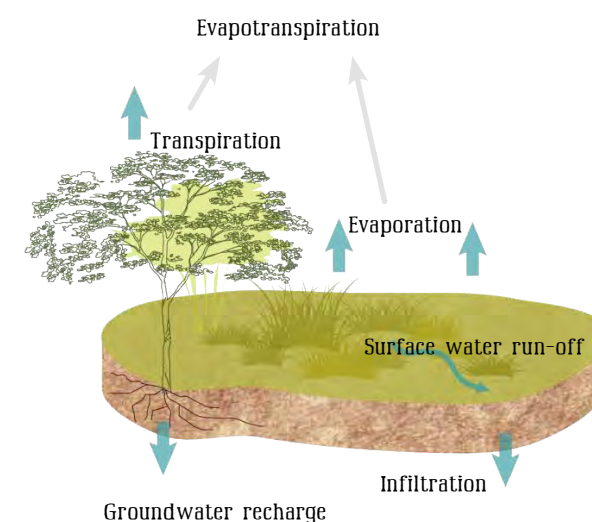The airflow generated by the parks vegetation may benefit the surrounding area of Magomeni garden.

Figure 7. Evapotranspiration is the total water vapour released by both transpiration and evaporation back to the atmosphere (after Colding et al., 2013, p. 7)

SUMMARY OF THIS CHAPTER

Through this chapter we have gained new arguments for the need of parks in urban settings. We have highlighted useful elements and considerations to have in mind for the design work.

Access to parks is especially relevant for public health gain and creation of social cohesion. Design elements that we can affect are on a small scale, such as accessibility by safe crossings, providing needed facilities and amenities and a natural environment.

By creating a space with diverse activities and flexibility a large group of citizens can be reached, thus strengthening the social cohesion.

Trees in diversity and numbers brings various benefits concerning; health, biodiversity, economy, air quality, water management and temperatures. Therefore, we intend to provide the park with plenty of trees to give the site and its users several benefits.

Dar es Salaams vegetation have gone from native to exotic, which can bring negative consequences for native flora and fauna. By using mainly native plants in the design a statement of their function and beauty is made and biodiverse benefits may occur.

Permeable surfaces, stormwater management in combination with a local water supply for the garden will not only benefit the vegetation on site but also the humans. A self sufficient garden is easier maintained and may keep its beauty through droughts or floods.

Implementing the benefits on the whole of Dar es Salaam will affect the city and green structure positively.
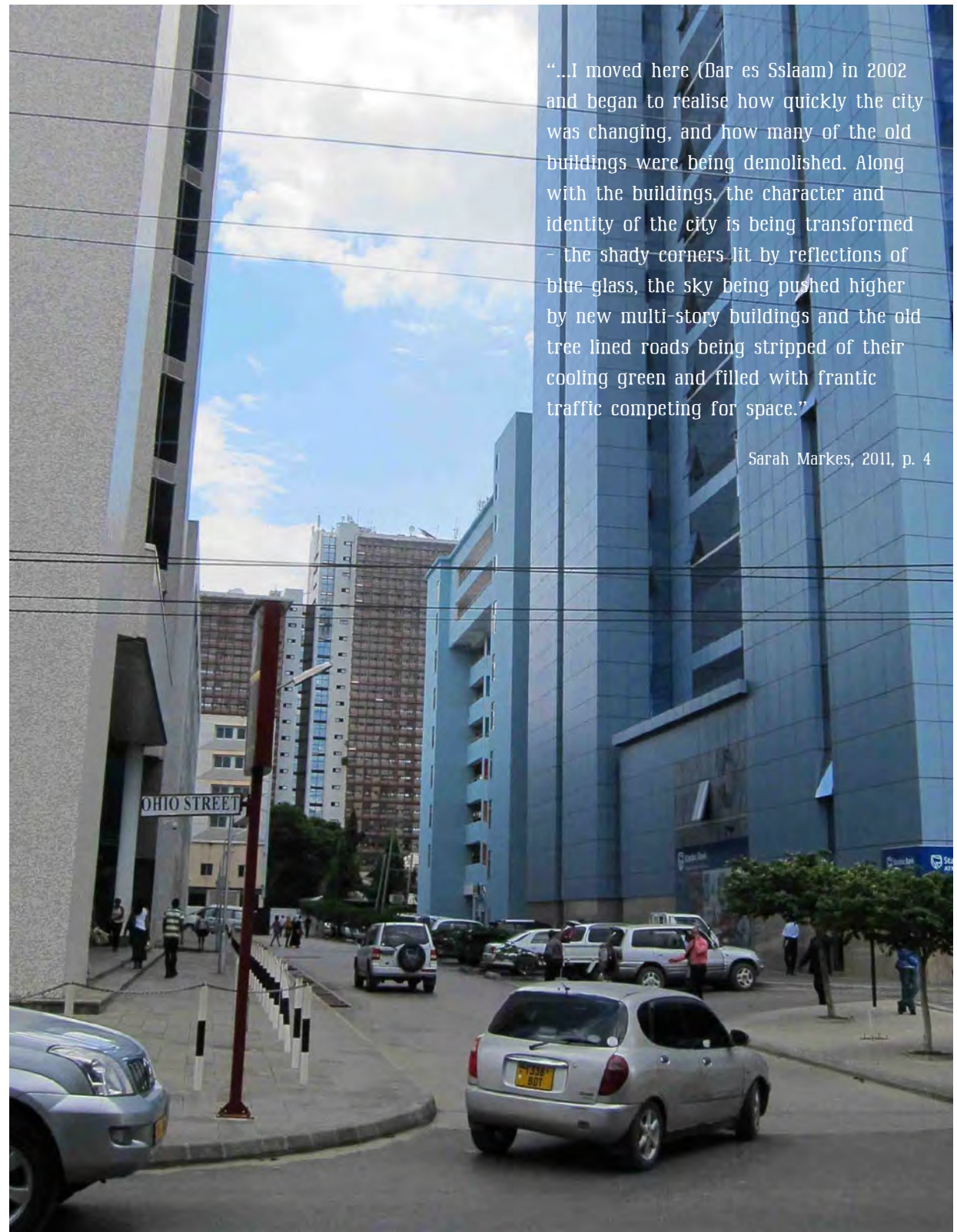
"...I moved here (Dar es Sslaam) in 2002 and began to realise how quickly the city was changing, and how many of the old buildings were being demolished. Along with the buildings, the character and identity of the city is being transformed – the shady corners lit by reflections of blue glass, the sky being pushed higher by new multi-story buildings and the old tree lined roads being stripped of their cooling green and filled with frantic traffic competing for space."

Sarah Markes, 2011, p. 4

Nature and ecostystems are not yet prioritised when new districts are beeing built/upgraded in downtown Dar es Salaam.

Dar es Salaam is a visually green city and vegetation grows fast in the warm and humid climate.

Dialogues about Magomeni Garden

In this chapter a presentation of the conducted conversations with both users of the garden and municipal staff. Knowledge and ideas of Magomeni gardens history, the present use and of future plans was received.

Magomeni Garden
- past, present, future

Receiving information by meeting people have been essential. It has contributed to knowledge about everyday use and future plans of Magomeni Garden.

The meetings with the staff at Kinondoni municipality lie first in this chapter and is followed by the conversations with the users of the garden.

Dialouge with Kinondoni municipality

Mr Israel Esra Mabiki, Agnes and Beatrice, Kinondoni municipality, 2 nd September, 2013

Kinondoni Municipality is the owner of Magomeni Garden. According to Mr Mabiki the area has been green and open for a long time. The exact construction year is unknown, but Mr Mabiki informed us that the garden existed in 1963 when he first visited Dar es Salaam. Further he explained that Magomeni Garden was built as a botanical garden, but it was also meant to serve the neighbourhood.

We asked Mr Mabiki about the current condition of the garden, and he said due to an ever decreasing level of funding, which has now ceased, the garden has not been maintained for the past fifteen years.

A part of the garden that is well kept is the area that belongs to the bar. Discussions about public and private arouse and Mr Mabiki and his colleagues are concerned about the fact that public land has gotten into private hands. According to them the bar appeared two years ago. This situation made the municipality build a wall along the east side of the garden, with the intention of protecting the garden from future land grabbing. The construction is further delayed since oppositions, made by the bar owner, on the wall have lead to a juridical process.

Occupation of land occurs in several ways. Apart form the establishment of the bar, Magomeni garden is also an object for land grabbing by individuals. We talked about the group of young men that currently are living in one of the corners of the garden. According to Mr Mabiki they do not disturb anyone in particular, but they contribute to an unsafe feeling, since, robberies have occurred after dark. Mr Mabiki believes that if the garden were to be upgraded the group of people residing there would probably have to find somewhere else to live.

Apart from robberies that have occurred in the garden after dark, the traffic situation along Kawawa road is a concern. Intense and unpredictable vehicular traffic is an issue of safety for people visiting the garden. To make it safer for pedestrian, we suggested that the zebra crossings would have speed bumps, but Mr Mabiki informed us that the small speed bumps are not allowed on the main roads. However, larger longer ones are possible to place, and that would be an option according to Mr Mabiki. Further, we discussed the use of active transportation and Mr Mabiki and Agnes

initially showed some scepticism towards an increase in bicycles. Instead they pointed to the increase in use of motorbikes that have occurred. In the end, Mr Mabiki and Agnes said that if the new generations like to bike the change will happen.

We finished our conversation by walking through the garden to get a closer look at the recently built wall, old concrete structures, the bar and the accumulation of litter among other things. The municipality staff showed us both enthusiasm for a the future Magomeni Garden together with care and concern for the existing one.

Design considerations

Recognising that Magomeni Garden has different users and functions, including the function as a home to some people, advocates a flexible design. The traffic situation and lack of safe crossings will be addressed in the design so that motorized vehicles do not hinder visitors. Also, planning for a potential upswing in bicycles may be made in relation to increased pedestrian accessibility.

Walking through Magomani Garden together with Mr Mabiki and Agnes.

Magomeni Garden and the future

Mary Kumba, principal city planner at Kinondoni municipality & Esra Mabiki,
Kinondoni municipality, 17th September 2013

Mr Mabiki introduced us to Mrs Kumba who is the principal city planner in Kinondoni municipality. During our meeting, we talked about the future scenarios of the garden. At our previous meeting with Mr Mabiki (2nd September, 2013), we recieved a plan showing a design proposal of Magomeni garden. Mrs Kumba is responsible for the suggested design. She informed us that the design was presented in 2012, and upgrading the garden is in the budget for 2014/2015. While discussing the proposed layout, a willingness to receive our thesis project was put forward.

Since the maintenance is absent today, we wondered how the garden could develop after a potential reconstruction. According to Mr Mabiki and Mrs Kumba there is no budget for maintaining the garden, hence, they raised the idea of an entrance fee. We questioned how public the garden would be if an entrance fee would be taken. Further, we wondered how it would affect low-income people, the people who to some degree live in the garden today, and the people who use the garden as a short. Mrs Kumba tells us that the ambition of the municipality is to keep the garden public. However, they might have to collect an entrance fee. Mr Mabiki emphasised that the politicians care about the low-income groups since they make out the majority of the citizens. Mr Mabiki encourages us to provide facilities like toilet, showers and cooking area. Creating a garden without an entrance fee still seems troublesome due to lack of funding.

During the meeting we also received a copy of the "Magomeni Redevelopment Scheme/plan, 2011-2013". The neighbourhood around the garden is facing densification, on unbuilt land and through construction of higher buildings. Mr Mabiki states that it is necessary to start to build vertically.

Mr Mabiki outside Kinondoni Municpality Office.

"We would like the garden to have a rain-harvest pond to make the garden more self-sufficient."

Mr Mabiki

Later that day, Mr Mabiki pointed out that the new design does not include any rainwater management. He and his colleges suggested to build a rain harvesting pond or similar in order to make the area more self-sufficient in terms of water. Their idea was to locate a pond in the lower part of Magomeni Garden. Mr.Mabiki has a lot of knowledge about rainwater harvesting and runs other projects in Dar es Salaam. In one of his projects, he educates students in primary school how to collect rainwater on rooftops. He believes that rain harvesting and similar is well connected to the nation, city and municipal goal of improving the well being of the people. He also thinks that it is possible to carry out projects like this since it is rarely more than six months in between heavy rains.

"The ambition of the municipality is to keep the garden public, however we might have to collect an entrance fee to fund the maintenance of the garden"

Mrs Komba

Mrs Kumba at her office at Kinondoni Municipality .

Design considerations

Upkeep of the garden is clearly an issue for the survival of Magomeni Garden. Funding also seems to be largely connected to the gardens future as a public or private place. A private garden may lead to a loss of benefits, discussed in the previous chapter "Seven reasons for Urban Parks" (p. 41-48), for the users of the garden.

In our design we will seek for low maintenance solutions as well as cost effective constructions and material. Since there is interest and potentially good conditions for rain harvesting that will be implemented into the design. Rain harvesting may increase several benefits such as water management and self-sufficiency.

Conversations with users of the garden

Rehema, Frida, Osna, Happy, Grace, Latisia,

16-19, Students

12 September, 2013

The girls live close to the garden, but the only time they spend here are on their way back and forth to school. They feel uncomfortable sitting in the garden, since, the few seating areas are occupied by men. Instead, the girls usually choose to sit by the bus stop to talk. Within the garden, they like the fresh air and the shading trees, but not the garbage and the old damaged trees.

They would like to have a nice place for resting, a meeting point where they can stay and talk after school. Preferred seating furniture was swings. "If the garden would be designed better maybe we could hang out here".

Mr. Abdalla Sako, 63, Businessman
12 September, 2013

Mr. Sako visits the garden often. In the past he used to come here when he wanted to think through a business idea or to reflect and relax with his friends. He grew up in this neighbourhood, and he used to play football in the garden. He also told us there used to be fishes for decoration in the ponds that you could sit and watch. Pictures used to be taken with the garden as background for wedding, ceremonies and during holidays.

He likes the shade of the tree and dislikes the garbage as he said: "It stays in the ground for hundreds of years. They filled this place with garbage, like a landfill but earlier it was more of a valley."

He would like to have new and more seating, such as benches and chairs. He also suggests taking away the old trees and plant new ones. He thinks it would be nice to have a swing for the kids and a place where they could play and maybe a swimming pool.

Chris, 30, Artist
10 September, 2013

Chris walks through Magomeni garden on a daily basis as it lies between Kariakoo Market and his home. Chris has lived in the area for over ten years, about 1 kilometre away from the garden. He often sits under one of the trees and makes his artwork. He believes that the tree makes out a perfect seating spot, consisting of a root and the stem functions as backrest. He dislikes the fact that the garden is full of garbage.

Chris wonders how the municipality will make sure no one destroys the garden if it gets restored. He also wonders if the municipality knows about the future of Magomeni garden. He heard people say that the whole land is sold, and something else, like a petrol station, may be built here.

"We only walk through the park on our way to school. We can't sit in the park because there are no seating place for us, mostly men sits here. We usually sit by the bus stop to talk".

Rehema, Frida, Osna, Happy, Grace, Latisia, 16-19

"I often sit under on of the trees, a perfect sitting spot with the stem as backrest and comfortable shade."

Chris, 30

Timmo, 28, unemployed
Martin, 30, art dealer & teacher.
27 August 2013

Timmo and Martin are in the garden every day, Timmo live here and Martin lives close by. Both of them tries to earn their living. They both appreciate the fresh air in the garden. They recalled that Magomeni Garden had swimming pools were kids used to swim. The garden used to have more trees but they were taken down due to lack of safety, people were being robbed.

According to them, the area functions as a meeting point. Couples come to Magomeni Garden especially in the weekend, and often go to the bar. However, schoolgirls and boys visit the garden too. Most of all, the place is used as a meeting point or for passing through. The lack of maintenance makes few people to come here and spend their leisure time.

We asked Martin and Timo why there is so few women in the garden. They said that it depends on the different chores within families.

According to them, the rain season does not cause problems as water only gathers in the gardens low point.

They are concerned of the lack of maintenance. They believe that the government does not take care about the place anymore. They told us that people generally don't know what they are entitled to in the public realm, such as, green space and a clean environment. They believe that there is a lack of education that makes people unaware of their rights and responsibilities.

They also heard rumours that the garden is threatened and might become privatized. Since, the new bar and restaurant already took some of the land through corruption.

Shade and seating were their main concern for the future garden. Also, planting of more trees that could help with oxygen and cleaning the air. They especially wanted Acacia trees on the site.

"It is a lack of maintenance, the government don't care about this place anymore [...] Corruption is how public land became sold."
Timmo, 28

"I would like to have a better place for selling our goods, where we can display our products better -like a market place."
Mr Solomon, 45

Mr Solomon Lenditiai, 49, vendor.
12 September, 2013

Mr. Solomon is in the garden almost every day. The exception occurs when he is travelling between Dar es Salaam and Arusha, which happens a few times per year. He comes there in the morning and leaves around 5pm.

Mr. Solomon has been here for 16 years and now days lives close by. Earlier, him and his family lived in the southeast corner, where the young men live today. At one point, the military came and drove him and his family away by force. This was earlier when it was not allowed to sell things in the garden. If you were caught you had to pay a fine of 50 000 Tanzanian schilling.

He tells us that it used to be a well and a water tap in the garden that people were allowed to use. The water was free and was used for washing and cleaning. The government later removed that service, since at that time, the waters main purpose was to irrigate the trees and other plants in the garden.

Mr. Solomon likes the shadow from the trees most; "We really like to sit here in the shade of this tree. We are resting but also selling medicine and jewellery." He thinks that the garden is bad maintained and that it is too much garbage.

Mr. Solomon wish to have a better place where he can sell his goods. Something that allows him and his family to display their products better, like a market place. He would also like a better drainage system or at least maintenance of the old channels. The garbage and the old trees should be taken away and new vegetation planted. He experiences the single public toilet as a problem, several are needed he says.

Stanley Mchunga & Maximillian Mushi with friends, 30-50, various occupations, 12 September 2013

This large group of men like the garden, since it is close to the bus stop. This provides easy access to the garden. They think that the vegetation is lacking in aesthetic. "Now it is a bush, but no garden". They would like for the space to be restored and to functions as a garden again.

The lack of security during the night and evenings is an issue. Before, people used to bring children to the garden, but due to its degradation and safety issues that does no longer happen.

In a future garden they wish to have a television set for broadcasting public information as well as for entertainment. Small shops that sell juices and snacks and a better public toilet are also needed. They wish for a library or somewhere to read your book and a playground for the kids.

They also wish for security light. This, they believe, might prevent people to sleep in the bushes. It may also reduce prostitution in the area. Another solution could be security guards. They believe that a small entrance fee of 500 Tanzanian schilling, could make it easier to maintain the garden.

Learning experience
On the following page a summary of the knowledge gathered from these interviews is presented. The summary displays how Magomeni Garden is experienced today and how the stakeholders wish to experience it in the future.

"What we are missing in Dar is a place to hang out."

"There are no nice shrubs here, we would like to restore this place to a garden. Now it is a bush but no garden."

Stanley, Mchunga, Maximillian & Mushi with friends 30-50

SUMMARE OF THE DIALOGUES

The dialogues with the stakeholders of the garden presented a picture of a garden that people care for and they want it to be developed. The everyday site and a hub emerged, which is something to keep in mind and preserve within the new design. The description of the former function and look of the garden pictured another scenario than the current. The garden also holds issues such as lack of public facilities, water, commercial opportunities and seating possibilities that needs to be addressed in the design. The garden is degraded and is in need of restoration if people should want to come here and for the present users to enjoy it.

How people experience the garden today:

Social

- An everyday site.
- A meeting point.
- Place for contemplation, rest and relaxation, socializing.
- Sitting in the shade. Lack of seating possibilities (which is also a gender issue).
- Lack of security.
- Threatened or fear among the public that it will be privatise. Corruption.
- People live in the garden, uses it as their home for most of the day or parts of the day, activities like cooking, eating, washing and sleeping occur here.

Vegetation & water

- Shade!
- Now more bush than garden.
- Vegetation has been a contributing factor to lower safety.
- Issues with water during the rainy seasons. Gathers in the low point.

Transportation

- Easy access by daladala.
- People use the garden to pass through. Shortcut.

Functions/Facilities

- Bus stop.
- Vendors.
- Lack of public toilet, only one, and other facilities.
- Run down structures.
- Historically there was water features that kids were swimming in.
- Want more kids to play in the garden.

Maintenance

- Lack of maintenance.
- Garbage. The site is filled out with garbage.

How people wish to experience the garden in the future:

Social

- Provide seating.
- Education - about the benefits of this garden. Engagement and motivation.
- Make sure the garden is saved for the public.
- Higher security through street light etc.
- A library or somewhere to read a book.
- Cooking, eating, washing and sleeping facilities.
- Information TV and maybe also for movie nights.

Vegetation & water

- Provide shade.
- Plant new tree and plants, consider visibility.
- Better and maintained drainage system.

Transportation

- Accessible pathways.
- Improved bus stop.

Functions/Facilities

- Provide toilet facilities.
- Swings are wished for by young and old.
- Play ground and football.
- New or revitalise water feature.
- Vendors need better display area. Market.
- Controlled entrances and fees to maintain the garden.
- Use the bar and restaurants for events like concerts that include all visitors.

Maintenance

- Future maintenance.
- A clean garden!
- Ownership.

Workshop - Conversation with Ardhi University Students

Early during this project we invited the landscape architect students at Ardhi University, Dar es Salaam to a workshop to get the opportunity to influence our work. During a few hours, Elvis, Alphonce and Ikupa joined us to discuss four topics, namely; Personal Relationship to Nature, Public Space, Greenery of Dar es Salaam and finally a SWOT Analysis of Magomeni Garden. The SWOT analysis was possible since the students had an assignment connected to the site last year.

Personal Relationship to Nature

Favorite places: Places containing water, sand and wind. Or places with a long history, so you can experience the same thing as your ancestor.

Their latest experience with nature: The parents' garden, a natural garden, and a friends deck with a nice view over a big tree and wild birds.

First strong memory: Different flowers and playing in the sand. Big fruit trees. Walking around in the forest and taking photos. Waterfalls.

Greenery of Dar es Salaam

Qualities: The government has left open spaces to improve the air quality. Replace one tree that gets cut down with two. Dar es Salaam looks green (from above)! Visual greenery vs Actual greenery.

Unique: The value of trees are well known by all.

Use: In every private plot – people try to have some trees. Everyone loves shaded places. Trees along the downtown streets near Posta, unique for Dar es Salaaam.

Negatives: Small open spaces might be built upon. Lack of laws and their non compliance. Corruption and sale of public land by local government.

Public Space

Defined: Owned by municipality or government. Democratic. Belongs to the people. Used for everyone and anyone for free i.e. all ages, disabled. Public space and home is sometimes the same here.

Negatives: Not including everyone. Need for more than one public place to meet the needs of the citizens.

Qualities: Space for people, resting, meeting, recreation, usable.

Gender in public space in Tanzania? In Tanzanian culture the men are the provider. Divided tasks from the society. The system pushes the man out of the house to find work if you don't have one. The wife always prepares the rest, take care of the kids etcetera. Mama is the boss. Public space is not as safe for woman as for men.

SWOT Analysis of Magomeni Garden

Strengths: The people using it today. Active! Many people passing.

Weaknesses: No trash cans. (Vendors create garbage – provide possibilities to keep it clean. A dirty place is bad for business hence vendors are generally keen on keeping it clean). Lack of maintenance. What is good security? Few vendors. Not safe late at night – even for locals due to neglect.

Opportunities: To make people the owner of the garden and maintenance will be less of a problem. Mixed place – Mixed activities. Streetlights on paths! Water is a good feature but it is hard to maintain.

Treats: Privatizing

Design considerations

The poor waste management is an issue as it reduces the use of the garden. A potential solution would be that vendors located in the garden direct or indirect helped with the maintenance.

Safety for users after dark is another issue to address within the design. Lighting may be used but issues such as unreliable electricity, funding and vandalism may hinder this.

As men and women perform different duties during the day the design needs to address both female and male activities to attract a diverse crowd.

The design should implement the use of trees, as they bring shade and fruit, which makes them an appreciated element.

Take advantage of that the fact that home and public have a tendency to merge. Have this in mind when providing space for a variety of activities that secures the use of the place.

Use vegetation that the public may enjoy and can benefit.

SUMMARY OF WORKSHOP:

- At a personal level the students emphasized trees, wind and water and the historic connection to a site.

- The students latest experience of nature was within a private setting which indicate, along with observations made in the city, that greenery is not necessarily something public to enjoy.

- Public space should be for everyone to enjoy for free! Public space and home merge in Tanzanian culture. The culture and society hold strong male and female roles, which affect the use of the sites.

- In Dar es Salaam the awareness is both low and high about greenery. The shade and fruit given by trees are highly appreciated. There is a risk that public space will be built on.

- Magomeni is a strong site due to its users but the lack of maintenance and collection of garbage brings the site down. If people, and in particular vendors, would have a larger ownership to the site it might be cleaner. The safety after dark is also an issue to address.

Charlotte, Kajsa, Alphonce and Ikupa are ready to start the workshop.

Elvis, Alphonce and Ikupa was the students who participated.

SUMMARY OF THIS CHAPTER

Stakeholder have given us information about the use of greenery in general and within Magomeni Garden in particular. Ideas of needs and how to best maintain and develop Magomeni Garden has also been received.

There is a variety of people using and caring for Magomeni Garden as a public space. Magomeni Garden holds a variety of functions from home to business place to a hangout spot. This makes the site popular and the users are an asset to the site. The users need should be carefully considered and addressed.

The connections to the garden are good regardless of transportation use, but safer conditions for active transportation needs to be done.

Maintenance is an issue within the garden and may also affect if the garden can continue as a public place or has to become privatised. This calls for the development of an cost effective design that eases maintenance. Rain harvesting may be one solution in making the garden more self sufficient which may ease maintenance. Greenery and trees are cherished elements, bringing shade, and in some cases both food and wood. Several stakeholder emphasised their liking in shading trees.

The garden is in need for restoration which makes it malfunctioning today but provides an opportunity to address the many needs and wishes for the future garden.

Case Study
- Magomeni Garden

This chapter describes Magomeni Garden today.
After that an inventory and analysises of Magomeni garden is done.

Magomeni Garden

Memories of a beautiful place

From interviews and conversations we have received descriptions of a beautiful and lively garden where ponds were full of fishes and wedding pictures were taken. One can imagine that it was a joyful and relaxing oasis for many people.

Magomeni Garden was built sometime before 1969 (the exact date is unknown). The intention with the garden was to offer public health benefits to the residents through exposure to a natural environment and provide a better air circulation within the neighbourhoods. Since then, years have gone by without maintenance and the gardens former structure and functions have degraded.

However, Magomeni Garden is still full of life, many people pass by here everyday since the area is a hub consisting of the dala dala stand, the religious buildings, the hospital, Kinondoni municipality office and all the paths connecting the west neighbourhood with Kawawa road. Street vendors and bajaji (local taxi moped) drivers offer their services along busy Kawawa road, which is bordering the garden.

Physical elements & spatial order

The garden is surrounded by walls on tree sides and by Kawawa Road on the fourth side, which gives the garden a distinct boundary. Kawawa road makes out one long entrance and there are two openings in the wall that functions as entrance points (see pictures on next spread).

The garden gently slopes from the southwest corner, which creates a division in elevation. This typography frames the inner part of the garden from noise generated by the traffic on Kawawa road.

The garden is run down due to the lack of maintenance, trees and shrubs have grown and spread freely and the old concrete structures have fallen apart. This contributes to a lack of spatial division within the garden, which creates an impression of an undefined space. The discrete but noticeable borders is often made out by functions and activities.

There are many nuances to the site but one rough description could be explained as a 'left-over-space', a space that no one has cared about for a long time.

Social activities & facilities

A wide range of social activities takes place in the garden. Vendors sell their goods; people cook and wash their clothes, some people are resting and sleeping. Kids play, for example football, some men deal with small business, many people use the garden as a short cut and some just meet up with friends.

The garden does not have any litter bins, which results in a lot of garbage spread all over the site. And the only public washroom is situated in a corner which a group of young men have settled. This unfortunately makes it unattractive to use due to safety and informal ownership.

There is no benches or other seating furniture, but informal seating furniture exists. People use the old concrete structures, the water well and moveable objects, like small concrete bulbs, to sit on.

The days can be extremely hot and people automatically seek shade under the canopies. When the sun is sets the temperature becomes more comfortable, which shows in activities such as football.

Magomeni is located close to Morogoro rod and a river creek.

Magomeni is situated with many different facilities close by.

There is a gentle slopes, during heavy rains the lowest part gets flooded.

Kawawa road is functional for traffic flow, but blocks safe crossing for pedestrians.

Kawawa Road

Dala dala stop

Natural sandy pathways, defined by the users.

Concrete structures, remains of the former park design.

Trees provide shade, and create and defines areas.

Water well

Old watchman house

Container

Water pump

Toilet

The wall, in one way frames and encloses the park, in another way blocks flow into the park and excludes the surrounding.

1:700/A3

10   50m

Magomeni Garden in relation to its surroundings.

Magomeni Garden in pictures

Ongping commercial activities in the dala dala stand.

View from Kawawa road. Traffic jam and the big mother tree in tha background.

View from Kawawa road. Traffic jam and the big mother tree in tha background.

Dala dala stand, metal sheet structures in bad condition.

Vendors find their place in the shade and some people use the garden for cooking.

Lack of maintenance leads to piles of garbage.

Magomeni garden has a lot of trees in varied condition.

Old structures remains in the garden and people are creative with finding a seating spot

The small entrence next to the bar.

Magomeni Garden at first glance...

To grasp the site at a first stage and to get a quick understanding of the site we made a SWOT analysis during one of our first visits, followed by second one a month later. The adjacent information is the combination of observations and dialogues with stakeholders made during these two visits.

STRENGTH	**WEAKNESS**
• movement and life	• litter and garbage piles
• active surroundings	• lack of maintenance
• larger grown up trees	• run down
• accessible	• noise from Kawawa road
• well defined area	• old and damaged trees
• the bar/restaurant	• the wall surrounds and cuts the area off
• terrain	• homogeneous look, lack of identity.
• size of the park	• soft material on path ways, difficult to walk on
• natural drainage, permeable surface and existing terrain.	
OPPORTUNITY	**THREAT**
• better seating areas/possibilities	• lack of maintenance
• lighter efforts to improve the park can have a large impact.	• littering
• rain harvest pond	• crime/vandalism
• market opportunities	• funding
• provide a wider range of functions for all people	• corruption
• lighting	• privatization

Design Considerations

• The active and available site should be maintained so that the park can continue in to work as a hub and be an active site. Strive to include new functions and improve existing ones may benefit the use of the garden. Additions that may benefits this is to provide seating opportunities, a market space and improved lighting.

• The terrain and permeable surface sets a base for locally dealing with stormwater in the park and potentially from its surrounding.

• Managing the existing garbage and future disposal needs are essential to improve the use of the garden. Replacement or upgrade of built structures and vegetation will contribute to extended use.

• The proposed design should aim at strengthening the visual character of Magomeni Garden.

• Attention needs to be made to cost effective solutions regarding all components of the garden.

Neighbourhood development & proposed design

During our visits at Kinondoni municipality we received a neighbourhood development plan and a proposed design of Magomeni Garden.

Neighbourhood development

Green patches mark the location of open space and Magomeni Garden will remain as a garden. The large open area opposite to Magomeni garden will probably be built with eight to twelve storey houses. It is positive that public space will be preserved or developed as it increases the possibility of several neighbourhoods having access to smaller gardens and parks. If the space opposite to the garden would get built it is unfortunate as it has potential to be developed into a qualitative green public space. Together with Magomeni Garden this could be a step towards a more implemented green structure in Dar es Salaam.

Proposed design for Magomeni Garden

The proposed design for Magomeni Garden resembles other gardens that we have seen in Dar es salaam. For example, the green space outside NBC bank, the Botanical Garden and Mnazi Moja, all located in the city centre.

From the perspective of landscape architect students, we find some obstacles that need further consideration:

*   The rigid street patterns indicate that the design does not consider existing movement patterns, which also affect the gardens connection to the surrounding area.
*   The scale of the benches and sparse vegetation does not relate to a human scale.
*   Through only providing seating the design promotes a mono-functional garden. No zoning between active and calm areas seems to be made.
*   Insufficient micro climate due to lack of shadowing trees.
*   Design does not consider elevation and natural water runoff.
*   Design and plan aesthetics is not adapted to the sites culture or society.
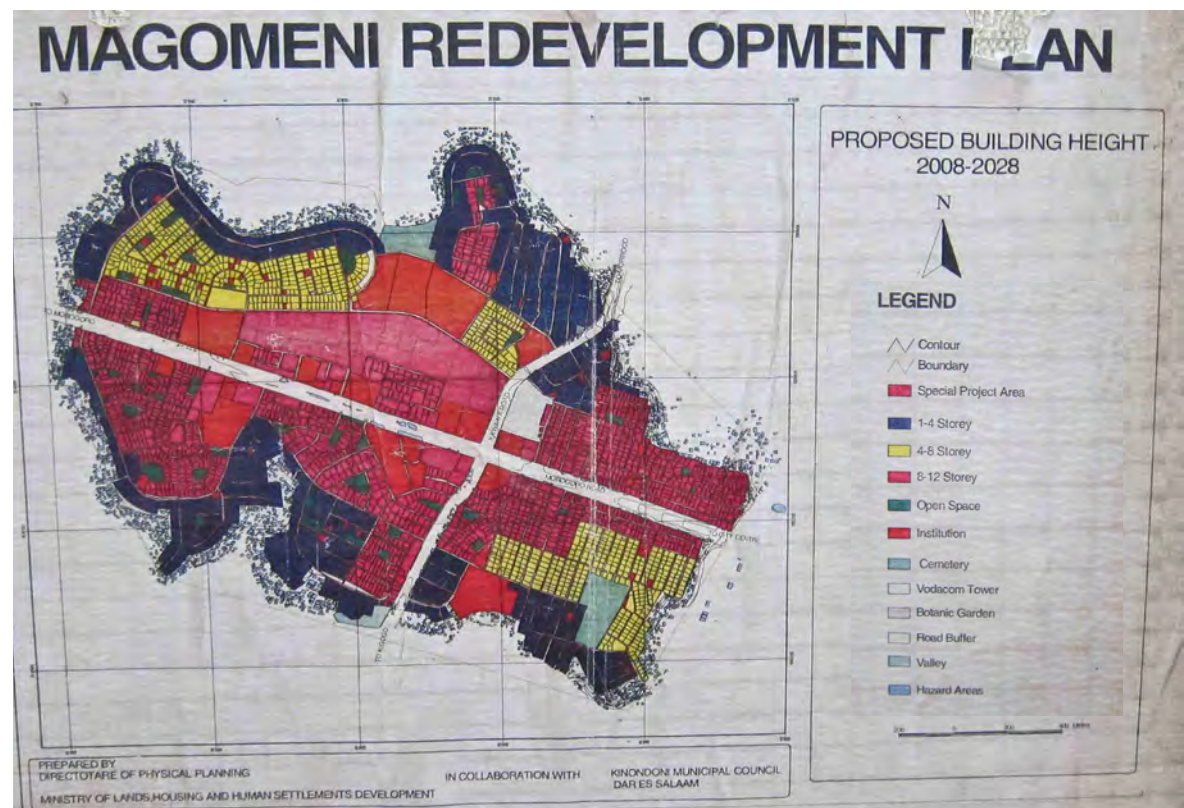
Redevelopment plan over Magomeni. Prepared by Director of Physical Planning, Ministry of Land, Housing and Human Settlements development in collaboration with Kinondoni Municipal Council, Dar es Salaam.

The label of the drawing reads "Suggestion to develop Magomeni Garden into a park".

A closer look at the surrounding area

The method used for mapping and description of the area is based on a Lynch analysis.

Districts

There are five types of districts surrounding the garden, and the garden makes out the sixth one.

Residential neighborhood

The neighbourhoods that lay in proximity to Magomeni garden have similar characteristics but larger roads separate them.

The neighbourhood districts mostly consists of single-storey houses. These are both residential and hold smaller companies and shops. Most building consists of concrete blocks that are either kept neutral or painted in bright colours.

The streets are small and mostly unpaved but variations do occur with more open areas and more paved surfaces. There are sparse vegetation made out by scattered trees located in the streets and in peoples' private backyards.

The neighbourhoods generally have a friendly and vivid feeling thanks to a lively street life made out by the many small shops, hair salons, tailors and restaurants that are facing the streets. The feeling of a pleasant community is highlighted by kids playing in the street and people sitting outside their houses, socializing or just watching the street life.

Along Morogoro Road

The transportation corridor around and along Morogro road makes out one district. Here the buildings are higher in comparison to the buildings in surrounding neighbourhoods. As Morogoro road is one of the mayor roads in Dar es Salaam, this linear space is bustling with different kinds of transportation and the construction of Dar es Salaam rapid Transit, DART. All this creates high noise and pollution levels.

The open field

The area west of Kawawa road and the garden is open with patches of grass and small pathways made by people crossing the field. The history of this land is unclear, but the municipality has plans on building an area consisting of 8-12 storey buildings or a "special project area" (see Figure 3, p. 67). In one of the corners, there is a taxi stand and a parking area belonging to the office buildings and to the hospital.

Institutions

The area around Magomeni Hospital and Kinondoni municipality consist of several buildings. A wall that surrounds the two plots separates the two institutions and offers few entry points. The municipality is active during office hours and the people moving in the area either work there or have an appointment in one of the offices.

Magomeni garden

Magomeni garden is the only area with continuous vegetation in the shape of trees and lower shrubs. The area is one of few public places in Dar es Salaam where people can gather due to its central location in proximity to homes, transportation nodes and other facilities.

Mixed

This area is a mix of high buildings that characterize Morogoro road and the neighbourhood scale. A small but bustling market also ads to the district identity.

Paths

Kawawa road is a paved four-lane road, situated next to the garden and intersects with Morogoro road. Kawawa road carries loads of traffic, which results in traffic jams several times per day. Transportation occurs by foot, bicycle, moped, motorbike, car and dala dala. The concentration of dala dalas is evident in the area due to a stop by Magomeni garden.

Both Kawawa and Morogoro road have sidewalks but mopeds, motorbikes and sometimes cars use this as a way of avoiding traffic jams or taking short cuts.

Morogoro road is one of the main roads leading into Dar es Salaam city centre and Kariakoo, which is the main market area, therefore; it overloads with traffic. The former four lane road is becoming even wider due to constructions of DART, Dar es Salaam Rapid Transit system.

The bigger streets in the surrounding neighbourhoods are mostly paved while other streets consist of gravel and sandy soil. On these streets, there are no special space for pedestrians, but cars tend to drive relatively slowly often as a cause of the poor road conditions.

The paths in Magomeni garden and the opposite field are trodden paths that cross open areas and ease access between the neighbouring districts.

Landmarks

The (North East) church is visible from many places in the park and along Kawawa road.

The Mosque can be seen from the whole junction. The minaret is one of the highest points in the area and the sound of the praise reaches all the way to the park and the surrounding area.

Located in the garden, the **large Ficus tree** dominates the view. Its large and dense canopy provides plenty of shade throughout the day, which invites people to sit underneath it. The tree functions as a reference and meeting point.

The high structure that will become a church can be seen from far, but as there are several other high and big buildings along Morogoro road this church becomes a weaker landmark. It is possible and most likely that the church will be a stronger landmark in the future when the construction is complete, and activities draws visitors.

The hospital building is anonymous, hidden behind a concrete wall and trees; still many people refer to this institution when they want to orientate themselves or give directions.

The dala dala stands, on each side of Kawawa road, is not visually significant by its tin sheds, but it serves as a landmark since many people arrive by bus, hence most people know where the location.

Edges

The most significant dividers in the area consist of **Kawawa and Morogoro road**. Kawawa road has a direct impact as a barrier to the garden due to its proximity. The edge compounds of differentiation in ground material and elevation from the curb and the heavy traffic. It is difficult to cross the road safely due to this fact. During rush hours, the noise from the traffic also becomes a sound barrier.

Morogoro road has similar characteristics as Kawawa road but is wider, and its straight direction increases the experiences of vacuum between the opposite neighbourhood districts. The roadside and the concrete island that hosts DART compose the edge.

Several **walls** frame some of the properties, which limit the movement patterns in the area. They create barriers to protect, but they also screen the buildings from the road and street life. Walls, depending of their design, contribute to decreased safety as they block or obstruct the view (Kaplan & Kaplan, 1998, p 33).

Magomeni garden and the opposite green field make out **a larger green area**, used for short cuts and relaxation. The created movement patterns make them important as a way to link areas, this can be of significance for continuous movement patterns in the city.

Nodes

The infrastructure and the flow of traffic make out several of the nodes in this area. Morogoro road and Kawawa road merge and make out **the largest traffic node**. The many destinations situated in the area also makes out nodes, for example, the hospital and municipality buildings.

The **hospital** and **municipality building** function as nodes because of the concentration of activity from visitors and staff.

High concentrations of activity also occur by **the dala dala stands** situated along Kawawa road.

The garden is a node consisting of smaller nodes where people meet and gather, and pass by for various reasons, the concentration of activity is evident.

The narrow passage between the garden and the eastern neighbourhood creates a transition were many people and vendors gather.

A smaller node is **the bar** in the northeast corner of the garden.

A closer look at Magomeni Garden

As the previous text, "A closer look at the surroundings", this analysis is also based on Lynch analysis method.

Districts

When we used Lynch's method of analyses we expanded the description of districts from including visual differences to include social structures, activities and user groups.

1."The home" In the northeast corner, a group of younger men in the age of 22-30 years old has established an area that they call home. The wall frames their corner to approximately 59 percent. The wall is constructed by the municipality to protect the park from land grabbing and divides the garden from the church. The wall, in combination with the container and public toilet make the area fairly hidden and private. The public toilet seems to be mostly used by the "men in the corner". The area perceives as a private sphere to the young men having their everyday life there. They are preparing and cooking their food, drying their laundry on the ground and cardboard pieces functions as beds. The people living here show ownership and territorial belonging to the area, which excludes other users. The men living here also have a reputation to be robbers and drug dealers. The site is active 24-7.

2. "Masai vendors" The linear shape, sandy groundcover and the presence of Masai vendors defines this area. A smaller drop in elevation limits the area towards the garden. The location for the Masai vendors is beneficial, due to the proximity to the sidewalk that generates activity, and in combination with the shading canopies. The vendors are selling handmade jewellery from small colourful beads, and herbal medicine. The Masai group consists of both men and women that sit on the ground, on plastic or wooden chairs or concrete structures. Their kids are often nearby or around them. At the edge of the area garbage is collected, which seems to limit the spread of garbage over the park.

3. "The dala dala stop" The paved sidewalk, the bus shelters and the high concentration of people, traffic and noise define this area. Most people are getting of or waiting for the dala dala, while others walk along the street. Some bikes, both for the transportation of people and goods, motorbikes and baiaji also compete about the sidewalk space. Vendors sell a variety of things, from snacks to newspapers. Services as shoemakers are also available. Most vendors are sitting on the concrete benches belonging to the bus shelter with a metal sheet protecting them from the sun. Prime activity 6-21

4. "The kitchen" The wall makes a physical barrier that frames and defines the area. The ground mostly consists of bare soil and free growing trees in varying sizes. There is a pathway leading through the area. Many people come here to get water from the tap for washing and cooking chores. People, both men and women, tend to use this area for cooking. Prime activity 7-19

5." The mother tree" The tree canopy defines an area with a good overview towards the busy Kawawa road. The tree functions as a landmark and can be seen from the whole park. The big tree supports the area with shadow and seating options. Many people, mostly men in their 30-50ies, are sitting under the tree facing the street. Most of them are using old wall structures and logs as seating furniture. People, some Masai, are selling things displayed on small tables or plastic boxes. Due to the intense use of the area, and the limited amount of water resources made out by the tree the ground cover is sandy. It mostly consists of bare soil since the grass would have a hard time to grow here. Prime activity 7-19

6."The Savannah" Situated in the southwest corner, where the elevation is among the highest in the garden lays an open field. The ground cover consists of a few grass patches, but mostly sandy soil. There are a few scattered trees of varying size and condition, most of them are different Acacia species. This area holds mostly calm activities, with less people walking, and a few persons sitting on the old wall structures. Nevertheless, when the sun is about to set, and the air gets cooler young kids gather to play football in this area. Prime activity mornings and evenings due to commuters and football.

7. "The bar" The bar was established in 2011, in the northeast corner of the garden. It is framed by the wall and partly with a barbwire fence. Plastic tables and chairs are standing in a lush part of the garden with several shrubs and trees around them. The lush impression comes from newly planted trees and shrubs that receives high maintenance. People are relaxing with food and drinks here. A group of younger men, that we interviewed, used one of the tables as their 'private office'. Prime activity occurs during lunch and afternoon/evening and during the weekends.

8. "The grove" In the northern part of the garden a low point area with several trees and a shrubby groundcover creates an area, which has a bushy appearance. Kids play in this area. The concentration of people and activity is usually low. We have heard that the area occasionally functions as a public toilet, due to its partly sheltered vegetation and the distance to active paths. We also heard that prostitution occurs here by night because of the proximity of the bar.

9. "The centre" In he centre of the park several paths meet and cross. This is a node as many paths cross and the concentration of peoples is, therefore, evident. Some people takes a moment to sit on some of the old concrete structures.

10. "The door step". There is a narrow passage connecting the garden with the western neighbourhood. Along this linear, wall bordered passage, vendors sell fruit, candy, food, and jewellery. Most people that cross the garden are forced to walk through this area, which makes it busy and active.

12. "The tree row" along the south wall a line of large and full-grown trees stand. This linear space borders towards "The Savannah" and "The hidden corner". The canopies shade the area well, and the low activity on the pathway makes the area attractive for sleeping.

Kawawa Road

3

6

5

9

12

2

8

1

4

7

10

1:700/A3

10m

50m

Magomeni gardens different districts and symbols showing concentration of people.

Paths

The existing paths in the garden have occurred through the movement of people and restrictions from old concrete structures. The paths consist of compressed sand that creates a walkable flooring, but at some places the sand has dissolved which makes these areas less accessible. During rainy seasons, paths easily get muddy and difficult to tread.

Four paths dominate the garden due to more intense use, these paths connect Kawawa road with the eastern neighbourhood. The paths mainly serve as connections to areas beyond the garden, which in a way makes the garden lively. Occasionally bajaji and boda bodas use the main paths as a short cut.

Movement by the eastern wall but eased by **the two passages** piercing the wall. Three of the paths merge in the southeast opening of the wall while the fourth main path connects to the northeast opening in the wall by the bar.

Smaller paths piercing through the park connect areas within the park and the main paths; these makes out shortcuts for pedestrians.

Landmarks

1. The mother tree can be seen from far, people gather under and around it.

2. The container is visually present from the whole garden.

3. The dala dala stand is a meeting point and act as a landmark, because its well known and visually noticeable due to the concentration of people, traffic and the metal sheds.

4. The bar acts like a landmark because it is the only restaurant by the garden. It visually stands out due to high maintenance, which make out a defined edge in contrast to the rest of the garden that is not well kept.

5. The old water well is not visually striking but gives direction and functions as a gathering point. The concrete edges works as seating furniture.

6. The watchmen house is a small building in the garden that is noticeable.

Nodes

The nodes shows concentrations of activity, and are in many cases connected with the districts.

1. The old water well: A concrete square, make out a seating area right next to one of the main paths in the garden. Many people tend to gather and hang out here either by themselves or in large groups.

2. The mother tree: Under the big tree both vendors and other people gather to find work and socialize.

3. The dala dala stand: Concentration of people waiting for the bus, getting of the bus or selling their goods to passengers and passers.

4. The bar: During evenings and weekends this bar draws many visitors for drinks and food and sometimes entertainment such as live music and sport games shown on TV-screens.

5. The home: A concentration of younger men who lives and hang out here, see districts.

6. The doorstep: As the main paths merge in the northeast wall a narrow passage gathers many pedestrians on their way to or from the garden. A line of street vendors has also gathered here due to the concentration of potential costumers.

7. The kitchen: In this area people gather to cook, do their dishes and occasionally wash their clothes.

Edges

1. The 2.5 meter high wall limits people from entering the park. The wall also increases the privacy for people living in houses facing the garden. The wall helps to frame the garden and possibly prevent it from future land grabbing (which was the purpose of it). It also creates backsides that are mono functioning and unsafe areas.

2. Kawawa road is a substantial barrier with its heavy traffic that makes it difficult for pedestrians to cross.

3. Concrete structure that used to be ponds take up parts of the elevation that drops from south to north. These structures make out non-walkable areas that restrict the movement in the garden. The structures function as seating furniture.

4. Elevation, a shrubby groundcover and a shallow drainage channel restricts the movement. There is a visual distinction between vegetation and sandy parts in the northern parts of the garden.

5. The container is both a physical as well as a visual barrier.

6. A fence of poles and barbwire and plants frame the space belonging to the bar. The maintenance in the bar area creates a visual distinction as the grass and other vegetation is lush and well kept.

SUMMARY OF ANALYSIS:

+ Paths of different sizes creates easy access to different parts of the park and surrounding area.

+ Magomeni neigbourhood consists of a diversity of areas and functions.

+ Magomeni Garden itself is a strong landmark especially in combination with the big mother tree.

+ The walls protect the garden from land grabbing to some extent.

+ The roads make the site accessible from other parts of the town. The green areas have potential to connect areas for pedestrians.

+ The area is diverse in function and a variety of nodes occur here, which vouch for interaction and meeting points.

+ The area holds both physical and visible landmarks such as the mother tree and church, while the hospital is not visually significant. The hospital's location is still well known partly due to the name of the dala dala stand that is "Magomeni Hospital".

- Poor ground material may hinder accessibility. The mix of pedestrians and heavier vehicles is a safety issue.

- Complex site due to local ownership of sites within the garden that creates exclusive user groups and sometimes mono-functions. The ownership is particularly strong by the persons more or less living in the park.

- The bar might be a positive feature to some while others perceive it as a contributor to decreased safety and noise in the area.

- The walls limits the access points to the park from the surrounding.

- Walls as dividers among the districts are common and hinders movement

- Traffic in the area is intense and without strict rules, which creates a safety issue.

- Most of the edges are roads that hinder or limits movement, are mono-functional and has non- permeable surface material. + Paths of different sizes creates easy access to different parts of the park and surrounding area.

Design considerations of the surrounding area

Sparse vegetation in the public areas promotes importance of Magomeni Garden as an area of concentrated greenery where benefits from naturalistic features can be enjoyed by everyone.

Proximity to Morogoro Road and its development increases access, increased number of visitors may strain the garden with higher maintenance needs as a consequence.

The roads surrounding the garden also face heavy loads of traffic. The people of the growing city, shown in road and building constructions, is in need of a place where recovery is possible (See The Attention Restoration theory by Kaplan & Kaplan on page 43).

Existing and increased traffic creates an unsafe situation for pedestrian due to lack of safe crossings and regulations.

Today the area of paved surfaces is relatively low but increase in paved surfaces may require increased stormwater management.

Potential to expand Magomeni Garden and create qualitative greenery exists opposite on the green field. Doing this could improve and strengthen the over green structure of Dar es Salaam and the benefits connected to it (read about the benefits on page 41-48 in the chapter "Seven reasons for urban parks").

Several landmarks exists in the neighbourhood. These institutions feed activity and visitors to the park.

Design considerations of Magomeni Garden

Different kinds of land use by different groups sometimes makes interests collide. The young men in the corner, prostitution and the use of the gardens shrubby areas as a public toilet may spread insecurity among other users. These conditions should be considered when designing the garden. Limiting inappropriate behaviour through viewable areas need to be balanced with the need of areas that creates a sense of enclosure.

Clusters of garbage and the even spread of waste creates an unpleasant environment and negatively affect both humans and environment. Considerations to solutions of waste management should be made during the design.

Cooking and washing are performed by both men and women within the garden. Referring to the patriarchal structures of Dar es Salaam (see "Gender inequality" on page 35) gender equal activities that bring life to the garden and their implementation should be explored within the design.

The use of grass in the design should be limited due to the intense use in some areas, limited water resources, and its high maintenance need.

Consideration to accommodate the stream of people that goes through the "door step" as well as the vendors should be taken. Opening up this area may highlight its function as an entrance.

Existing pathways are laid out and functions well apart from the sandy material they consist of. Main pathways may be paved to increase accessibility. Limiting access for motor vehicles to these paths should also be considered to increase safety for pedestrians. Other ways to ease access within the garden and to its surrounding areas are safe crossings over Kawawa road, and limitation of concrete obstacles, and elevations within the centre of the garden.

The strongest landmark that holds several beneficial functions should be preserved and highlighted through the design. This may increase the tree as a landmark and strengthen the identity of the garden.

The big mother tree, functions as a strong landmark for the garden, that contrasts to the surrounding built and trafficed area.

Landscape, Climate & Vegetation

Within the garden, the landscape, climate and vegetation gives character to and affects the area.

Landscape

Dar es Salaams landforms vary between plains, ridged slopes and valleys (White 1983; Mung'ong'o et al 1997; Kusimba 1999:71-79 in Mng'ong'o, 2004, p. 37). Magomani Garden lay approximately sixteen meters above sea level. This makes the garden situated rather high in relation to a river located a couple of hundred meters northeast of the garden. The elevated location makes the garden dry, and water is only accumulating during heavy rains, and the longer rain seasons.

Climate

The annual precipitation for Dar es Salaam is 1000 - 1500 mm. The garden functions as an infiltration area, due to its permeable and non-paved surfaces and the sandy soil contributes to a faster drainage. During heavy rains, water gathers in the lower parts of the garden, which makes this part difficult to tread. The climate is in general hot and humid, ranging from 26-34°C to 16-25°C over a year. The sea breeze developed by monsoon winds over the Indian Ocean eases the weather condition. On a microclimate level, local winds, partly undulating landforms and vegetation cools off the air (Mng'ong'o, 2004, p. 33). The trees provide shade to several places in the garden this makes the site more comfortable.

Vegetation

There is a mix of indigenous and exotic plants in the garden today. Trees vary in age, quality and size. Most of the trees are old and in bad condition while a few stand out as strong and large. Overall, there is little shrub vegetation in the garden, the ones that exist are scattered and in varying condition. The ground cover is slightly more vivid, consisting of succulent plants, cactus and brushwood.

Magomeni Garden, in general appears green, but people using it tend to define it more like 'bush' than garden.

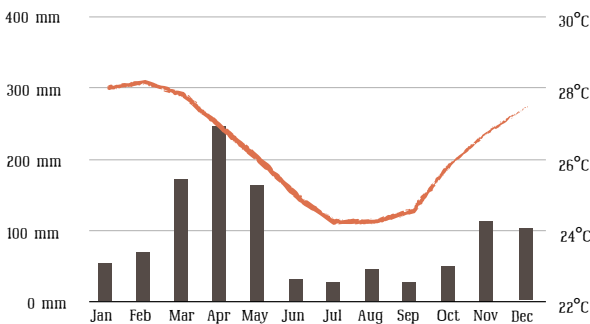See next page for a selection of the plants found in the garden today.

Figure 8. Average monthly temperature and rainfall in Dar es Salaam from 1990-2009, Tanzania. (After The World Bank, 2013)

Design Considerations

The pleasant microclimate provided by the trees should be used in the design to safeguard the use of the garden.

The warm climate and sandy soil promotes the use of plants adapted to existing conditions. Native species, that have adapted to the situation for a long time, may therefore be suitable.

Increase in shrub vegetation, also called woodland vegetation, may increase the removal of air pollutants (see page 46), and be beneficial for biodiversity (see page 45).
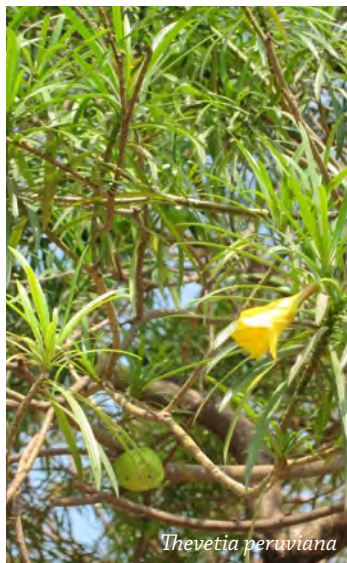

A savannah like character the south west area, which also is the highest part of the garden.

Scattered Bougainvillea shrubs and trees along the sandy paths., in the center of the garden.

In the noth east part of the garden is of a growe character.

Thevetia peruviana

Bougainvillea glabra

Succulent ground cover

Cactus ground cover

Accacia brushwood and succulent is lush and green groundcover after a week of rain

The most striking tree in the garden is "the mother tree", which potentially is a Ficus specie. It is most likely a Ficus religiosa or Ficus benghalensis.
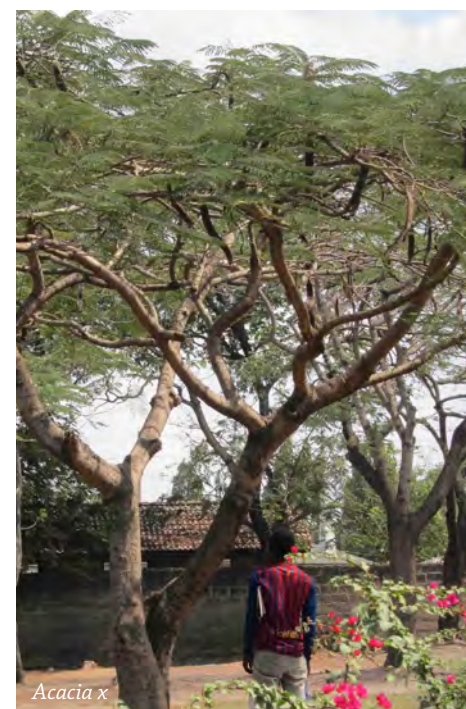

Albizia x

Casuarina equistetifolia

Terminalia catappa

The soil consists of sand and filled with garbage.

Boscia angustifolia

Acacia x

Benefits found in Magomeni Garden

The knowledge gained from the theoretical background "Seven benefits of urban parks" was applied on how Magomeni garden functions today and structured according to the SWOT-methodology.

Figure 9. Gradient showing the benefits of urban parks and their estimated quality in Magomeni garden.

Health

Strength: Magomeni garden is a unique place in Dar es Salaam since it is one of few public gardens. Magomeni garden contributes to an everyday exposure of nature. This is achieved through easy access for people living in the neighbourhood, and people walking through greenery instead of walking elsewhere or using motorized transportation.

Weakness: Both physical elements and vegetation have degraded over the years.

Opportunity: By providing a place for recovery from the busy city life through increased accessibility by safe crossings, providing needed facilities and amenities and a natural setting, an increased general quality will hopefully affect the time spent and frequency of visits to the park.

Threat: Continuous degradation of the garden will result in loss or decrease of several health benefits.

Biodiversity

Strength: Large trees provides the garden with a comfortable microclimate for humans, flora and fauna. Compared to the surroundings the garden is biodiverse, since, it holds several plant species.

Weakness: Occurrences of exotic species in combination with a sparse groundcover and shrub layer make out weak vegetation.

Opportunity: Biodiversity may be increased through creating a heterogeneous park with different habitats of varying sizes using native species and enhancing a cooling microclimate with vegetation.

Threat: Degradation (even though old wood may host many insects) and the disconnection from other green areas may lead to loss of biodiversity. Poorly designed or managed vegetation may interfere with safety of the garden, this can however be prevented through careful design and proper maintenance.

Social cohesion

Strength: In Dar es Salaam, greetings and small talks are a common and important component of the social life and culture. Magomeni garden provides a range of social activities such as; space for workers and vendors, cooking, laundry and washing. Kids are also able to play, people can relax, and commuters of different background and profession meet and socialize. We believe that Magomeni garden with its many visitors, surrounding neighbourhood, institutions and activities already holds social cohesion, but it can be enhanced.

Weakness: Men dominates the overall realm.

Opportunity: Providing a platform where citizens can meet has potential to boost the community. A large group of citizens can gain social benefits through the creation of space with diverse activities, flexibility and seating. A diverse space may also attract a wider crowd and hopefully this may attract a larger female crowd.

Threat: Continuous degradation of the garden may impose the community negatively. Increased need for management due to increased activities. This need may potentially not be met, due to insufficient funding.

Cooling affect

Strength :The shade provided in the garden today indicates a good microclimate that is benefiting both humans, fauna and flora. This might also mitigate the temperature rise during heat waves and the difference between night and day.

Weakness: Magomeni Garden is only two hectare, which makes the cooling affect variable according to Konijnendijk et al. (2013, p. 38).

Opportunity: A healthier canopy and ground cover would increase the cooling effect on a local scale, and a potential network of green areas can create an effect on a regional scale.

Threat : Degradation of trees, shrubs and ground cover may default the cooling effect. A more extensive vegetation may lead to increased management that need to be met.

Air quality and carbon sequestration

Strength: The old trees hold a fair amount of carbon, which is important in the role of mitigating climate change. Increased removal of air pollutants may be achieved through the year around foliage.

Weakness: The degraded vegetation could have a limited effect on the air pollutants.

Opportunity: The use of different species and a large quantity of trees in the design are justified by their positive affect on air quality. Woodland vegetation together with a large number of canopies is documented to give the best effect.

Threat: Continued degradation of the vegetation is a threat to the air quality, Removal of all the existing trees may release the carbon they have accumulated. Poorly designed or managed vegetation may interfere with safety of the garden, this can however be prevented through careful design. Increased demand of management of the garden as a result to increased vegetation.

Economic benefits

Strength: Magomeni garden has a central location in the community, and increased attractiveness is something that the surrounding can benefit form. It is likely that Magomeni garden already has increased some of the closest property values, the addition of the bar also indicates that it is a desirable location. The large number of people that pass by the garden every day provides the area with a business foundation.

Weakness: An overall degraded garden, which decreases its attractiveness.

Opportunity: An upgrade of the garden could lead to an increased property value. This is something that the municipality should see as an investment, since they are planning to build along Morogoro road and opposite Kawawa road.

Threat: Failure to recognize the economic gain from urban parks might decrease willingness to invest.

Water management

Strength: The garden and the opposite fields mainly consist of sandy soils and functions as permeable space in the area. Magomeni garden has the shape of a gentle bowl, which can be used in the gathering of stormwater.

Weakness: The sandy pathways become muddy during rainfall, and in some areas the sand is resolved all year around, this makes the paths hard to thread. Dar es Salaam is facing shortage of groundwater due to the many wells and built hard surfaces. The seawater is threatening to enter the groundwater sources hence all opportunities to be water smart is needed.

Opportunity: Providing the garden with a rain harvest system, by gathering of excess water form the hard surfaces into a pond, can prolong the park's ability self-sufficiency in water. Creating few non-permeable surfaces in the park will keep its permeable function rather intact. Adding vegetation also allows for local water management to occur. This can create a low maintenance park with lower costs.

Threat: When creating a body of water awareness off potential water born diseases and Malaria must be stressed.

Though many surfaces in Dar es Salaam are not yet paved, it is a trend connected to urbanisation and modernisation of the city. The occurrence of heavy rain and potential flooding needs to be addressed by providing a balance of permeable ground and surfaces that can carry humans and cargo.

Summary & design considerations

Many of these benefits are intertwined, they either correlate, affect or are dependent on each other for their function.

Biodiversity, Health, Social cohesion, Air quality, Water management, Cooling affect, are all interlinked through trees. As a common park feature trees; they provide habitats and therefore promotes biodiversity; trees ; provides a pleasant microclimate, which benefits human health; shade is also a necessity in this warm climate in order for a site to be usable, thereby, trees can indirect affect social cohesion; They cleanse the air from pollutants, which benefit health; their capacity to absorb water is evident in when dealing locally with stormwater.

It is evident that trees, and other vegetation through its similar functions, should be considered as an important design element. Nevertheless, vegetation needs to be planned out throughout the garden to meet requirements of safety, management, and activities on site.

Further, strengthening Magomeni Garden through revitalisation brings several benefits for the community and is a opportunity to seize for the stakeholders in charge.

The social and cultural strength not only found in Magomeni Garden, but also in the overall society of Dar es Salaam should be celebrated. Creating places for meeting and interaction can build on the social bonds and potentially secure or maintain future social cohesion.

A evident threath to the garden is lack of maintenance. Economy agffects maintenance, but design solutions may very well ease this pressure. Therefore, cost effective solutions and inventive ways of dealing with, for example, waste management should be present in the future design.

Nitty-Gritty
Design guidelines

Knowledge collected and clarified in to guidelines for the design.

Shaping of knowledge

Learnings and knowledge from the previous chapters have been crystallized and formed into design guidelines, named nitty-gritty.

The guidelines have the aim to lead the way to a design that answers the site-specific conditions and is sensitive to the local context and the users needs. The guidelines is therefore shaped by all knowledge that this project have given us so far; observations, dialogues, literature studies and analysis.

The gathered knowledge has been refined into seven principal guidelines, resembling the heart of the matter, we call them the *nitty-gritty*.

Nitty-gritty stands for:

"the most important aspects or practical details of a subject or situation"

(Oxford Dictionary, XXXX)

The nitty-gritty, therefore, summons the most important aspects to consider and the practicalities that needs to be addressed when designing Magomeni Garden.

• PEOPLE FIRST!

Aim: Creating a mix of flexible yet defined areas that open up for socializing and interacting as well as room for relaxation and contemplation.

Origin: The literature study showed that flexible park spaces might increase social cohesion. Dialogues and observations have shown an active site in a degraded condition. Thus, strengthening the space for the activities is a need in order to serve the users.

Both dialogues and observations indicated a lack of seating possibilities.

Strengthening the vendor's role in the park came from dialogues with them and through the workshop as a way to ease the waste management situation.

Lack of safety within the garden arose during dialogues, small talks in the garden and through the workshop. Since, previous clearance of vegetation for safety purposes the design addresses the need of overview. We choose to exclude Safety through lighting at this stage due to insecurity about funding and upkeep.

Observations showed kids playing in the garden, but their presence has not been recognised in the existing design. Men dominate as users of the garden, and literature studies, workshop, and dialogues strengthened the image of a patriarchal society. Together with more seating and a good overview, the play elements may draw women to the site as they look after their kids.

• SPATIAL PLEASURE!

Aim: Create spatial division between the quieter and sheltered or bustling, and loud areas.

Origin: Observations showed that the there are few visually defined edges within the garden and that connections to its surrounding is visually low.

Observations also highlighted the gentle typography as a mean of naturally and site specific create spatial dividers.

• EASY ACCESS & MOVEMENT!

Aim: Facilitate pathways and connect destinations within and outside the garden for pedestrians. Let the garden be a sanctuary for pedestrians.

Origin: Observations showed an extensive movement pattern and a steady flow of pedestrian. Dialogues confirmed that many walked through or to the garden. The literature study emphasised the use of urban parks or gardens, and the many benefits that come with this use.

Observations indicated that the existing entrances were evident for the ones going through the garden, but little attention to the design of these places had been made.

Observations, as well as dialogues, showed that pedestrians had to compete with vehicles around and within the garden.

nitty-gritty

• DESIGN in CONTEXT!

Aim: The new design should be rooted in the context and culture. The aim is an including design that engages and makes the users interact and giving them possibility to relate to the place.

Origin: Dialogues gave an image of caring stakeholders, attached to Magomeni Garden, in one way or another.

The literature study gave context to Dar es Salaam and Magomeni Garden that together with observations and dialogues created an image of culture. Answering to site specific conditions, including the culture found on the site, is a way for a design to recognise its surrounding. This also creates preconditions for ownership and usability.

• COPE with NATURE!

Aim: Creating a vegetative generation shift, thus; celebrating the existing healthy vegetation and their benefits, such as the "Mother tree" that provides shade and identity through its landmark character. Increase biodiversity and water management to contribute with benefits on site.

Origin: Observations and dialogues showed decaying but still highly appreciated greenery within the garden.

The literature study emphasised the role of vegetation, especially trees and its many benefits for users and the environment.

• MANAGE MANAGEMENT!

Aim: Create a pleasant garden that people are proud of by limiting littering. Design a garden that requires low maintenance.

Origin: In a context where little is organised on a governmental level, nor very clear when it comes to public parks, a low maintenance is to prefer. A low budget project also requires low maintenance costs.

The garbage collected on site was hard to miss during observations. During the dialogues, the waste was repeatedly an issue in the liking of the garden.

The use of vendors as help to keep the garden clean was raised during the workshop and through observations in the city. It is one solution that may limit the willingness to collect an entrance fee to the park, which came up as a solution during dialogues.

The municipality is unsure about their budget for maintaining the garden, hence, the future of waste management in the garden is unsure.

In Dar es Salaam, with its current structure, one have to plan for the unplanned and informal. Informal activities occur all over Dar es Salaam and within Magomeni Garden. Activities such as sleeping, cooking and doing laundry takes place here and there. This has lead to a design that is focused to the central areas of the garden, leaving the outskirts of the garden less programmed. This allows for informal activities and groups to still occur in the garden.

The commercial activity that occurs all over town is also an informal activity that the design tries to support. Vending opportunities is located to the central areas, since that activity requires a more central location to function well.

• TODAY BUT BETTER!

Aim: The garden should continue to work as a landmark in the neighbourhood. Overall, keep the parks many functions but give them more character.

Origin: Observations showed several park elements that was in need of upgrade or had potential of holding more functions.

Observations and dialogues indicated several functions of the wall that in the end suggested that it could be more than a spatial divider.

One could not miss during the observations in the garden that the bus stands were decaying. The dialogues emphasised the importance of bus stop as a part of the gardens function as a hub. The bus stands do function as an entrance to the garden for people arriving by bus.

Dialogues showed that the bar in some way was a positive feature to the garden and in some ways not. Regardless, the bar exists, and the dialogues further indicated that it was an element that would not easily be removed.

Need for accessible toilets were highlighted during dialogues and observations confirmed their isolated location.

Nitty-gritty applied

Here follows the implementation of the guidelines which is partly illustrated in a map on the adjacent page.

• PEOPLE FIRST!

Implementation: Reinforcing spatial capacity for occurring activities. The whole garden obtain additional seating structures that creates good views and interacts with the existing use and functions. This constitutes of providing;

- different seating opportunities which allows for multi- purpose use

- a unified and centralized market area, which simplifies the daily work for the vendors as well as for the costumers

- increased safety through a site that is easy to survey

- and a playground area with pedagogical initiative and possibilities.

The diagram shows the elements in the park that need an upgrading, which connections that need to be accessible, and how the garden can be divided for better spatial order.

• SPATIAL PLEASURE!

Implementation:
In order to apply the nitty-gritty on the garden we have divided the site into five areas. The areas avert the existing spatial homogenous pattern and establishes a new spatial order. They are both divided by vegetation and topography.

The different areas offer a memorable experience for the visitors and gives a place of belonging and enjoyment.

The two yellow areas in the edges are of the same character and frame the park with an open and less programed character.

In the light pink area there is room to sit down, meet and interact. The area allow people to take their time for a long conversation, to slow down, read a book or just watch the adjacent stream of people.

The central area (dark pink) becomes a bustling and flexible place where activities can gather. Social activities and movement are the main focus. The place is accessible and allows for flow of movement through the garden with its paved surface and roof structure that provides shade. It becomes the gardens signature with its blazing design.

In the green area, nature plays an important role, and wild free growing plants dominates the area. The vegetation creates the spatial order and forms rooms and connectivity.

- Trees and vegetation works with the topography to create the mayor spatial order and provides comfortable shade.

- Limit the occurrence of 'in-between-space' by connecting rooms and edge zones. For example, by providing an area that eases commercial activities and for rambling and spontaneous ones without fixed use.

- Make use of the existing typography that creates spatial dividers in order to create a variety of "rooms".

• EASY ACCESS & MOVEMENT!

Implementation:
The new design origins form the existing walking pattern and continuous with divisions of the garden into characteristic sections (see spatial division).

- Keeping the existing movement patterns but upgrade the groundcover to be more robust for dry and rainy seasons, which eases access.

- Creating welcoming entrances that also benefits accessibility. The entrance zone (orange) along Kawawa road invites to the garden by its paving and vegetation types that reflect the characteristic sections.

- Enhance the status of the pedestrian through safer crossing over Kawawa road and limit access for motorized vehicles in the garden. Increased access of the park through slightly elevated crossings (5) over Kawawa road. One of the two other entry points (6) are highlighted and made more attractive by guiding plantation and focal points. The second entry point, which is a narrow passage, lies in direct connection to the bar. Therefore, it has been excluded from left this design.

• DESIGN in CONTEXT!

Implementation: To embrace the site the design uses familiar expression and attributes, such as:
- local materials and traditional colours.
- existing activities.
- a low maintenance design.

• COPE with NATURE!

Implementation:
The green area makes nature visible by displaying natural processes, such as, the water cycle; rainwater infiltrate planters or is gathers in swales to accumulate in an open stormwater pond, located in the garden's lowest point. The area engages nature with play in an inquiring way, which also relates to People First!).

- upgrading the overall vegetation, from tree cover to groundcover.

- Increase the potential for biodiversity through the use of native plants. Use of free-growing plants that only require little maintenance.

- Take advantage of the climate that allows vegetation to grow quickly and the fact that vegetation eases from both the gazing sun and the dry period as well during the heavy rains. The later is done by establishing a local sustainable storm water system, both visual and ecologically attractive.

The healthy vegetation stays while old and sick plants are replaced. The area is both visually attractive and reflects the sites origin by the use of native species

• MANAGE MANAGEMENT!

Implementation: The design together with the material makes the management easy and keeps the garden design within a low budget. Maintenance is also reduced through the use of native species that are adapted to the climate.

A market place has several functions and a positive side effect is that they are kept clean in order to attract customers.

Overall upgrade of the garden done with the stakeholders may increase ownership and peoples willingness to keep it clean.

Use local building techniques made by craftsman from Dar es Salaam.

Collect storm water on site and use it for irrigation.

• TODAY BUT BETTER!

Implementation: Upgrade and highlight some of the existing elements that are visible in the garden today.

The existing elements that remain and become emphasized are:

The stair (1), that allows to expand and connect two elevations and characteristic areas.

The curved low wall (2) remain its lingering shape but receives a face-lift and becomes a more comfortable seating structure.

The wall (3) receives new meaning through planting of climbing vegetation and as a canvas where local creativity can be promoted through colours, material, pattern, and inscriptions (also relates to Design in Context!).

The big mother tree (4) becomes more visually conspicuous by smoother ground cover and less distracting shrubbery.

- improved the dala dala stand.

- accept the bar as a fact and let it be accessible from the garden.

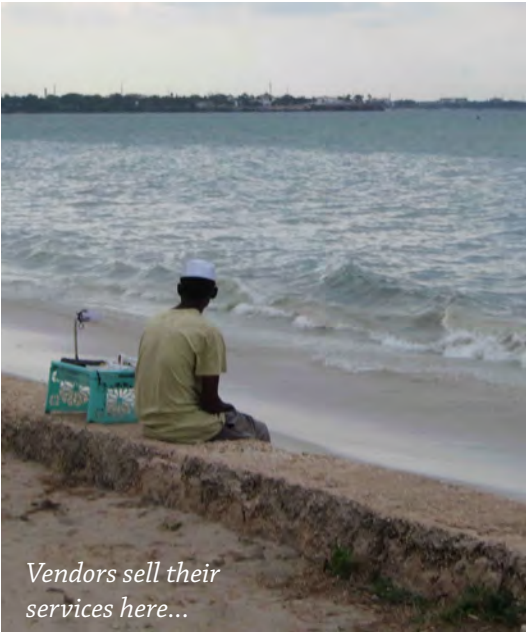- new public toilets with a more central location for increased safety and easy access.

Meeting, greeting & seating
The design proposal

The design proposal showed in plan,
section and through visualizations and perspectives.

Knowledge gained during this project and inspiration from Dar es Salaam...

Vendors sell their services here...

..and there...

..and on the go.

Hang-out with friends.

In the shade of a canopy.

Beautiful shadows on the paving

The red soil; a natural beauty

...led to the concept:

Meeting, greeting & seating

The concept consists of elements gathered from the strong social structure that colours the life
in Dar es Salaam. The meetings between people occurs all over town and human relationships are
important. Magomeni Garden is a site where many people meet and socialize on a daily basis.
In order to do so seating and shade are important components, hence Tanzanian are often inventive
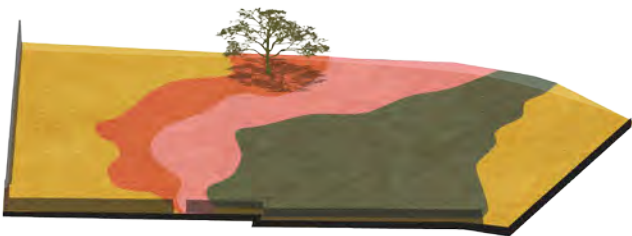creating those elements.

Mambo!
Habari za asubuhi?
Poal
Nuzuri...
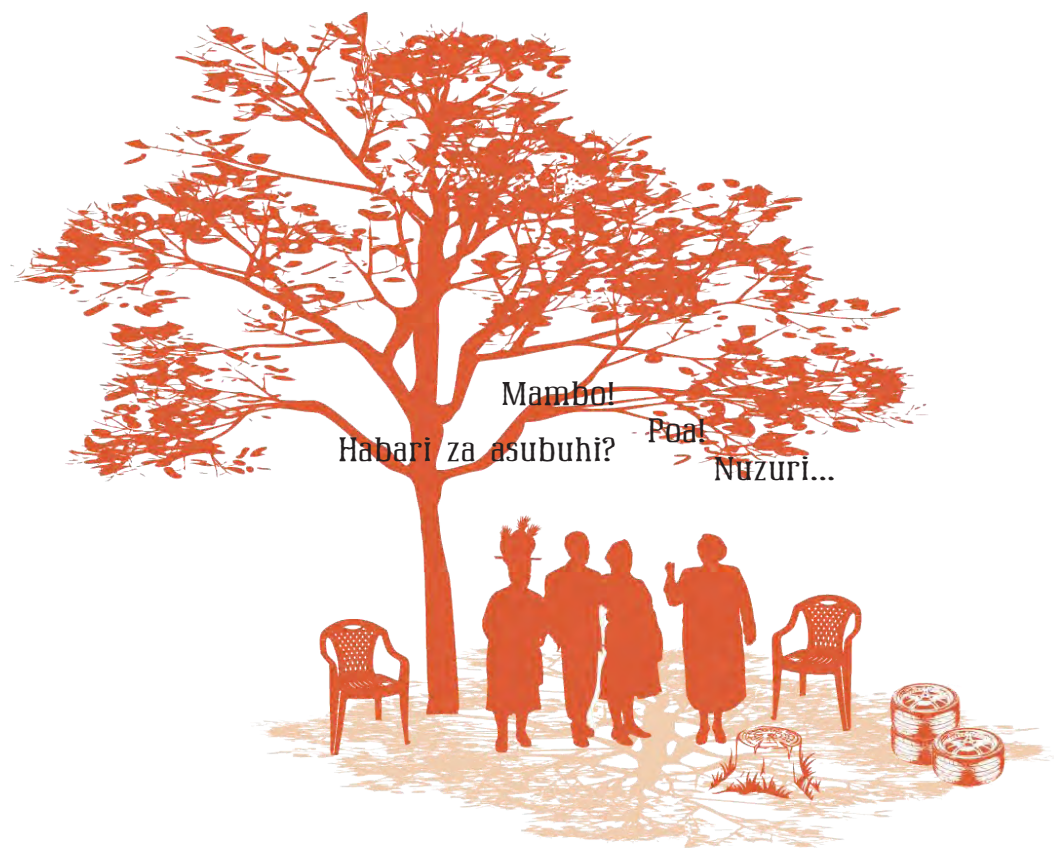
The bustling passage, with its flexible cubes, has room for commercial activities as well as socialization.

The design step by step...

Magomeni Garden today

Spatial division through five conceptual stripes.

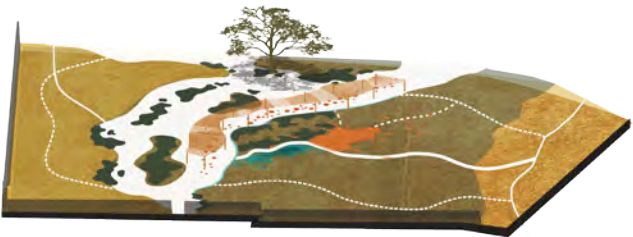Take advantage of the existing terrain. Pave main pathways.

Keep the existing movement pattern. Add the loop.

Implement stormwater management.

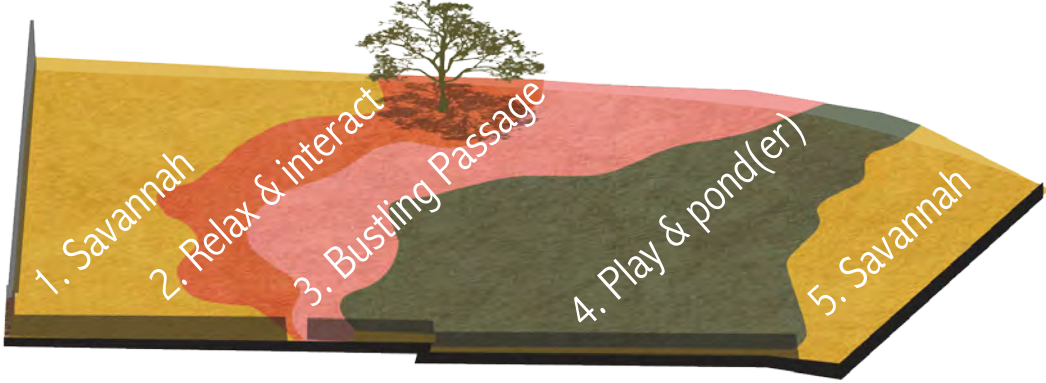Add intermediate planting layer, creating intimate rooms.

Gather activities. Shade structure with flexible seating & display furniture. Add playground and new functions to the wall.

Compilation of Magomeni Garden and the design.

The five stripes:

1. Savannah
2. Relax & interact
3. Bustling Passage
4. Play & pond(er)
5. Savannah

zebra
crossing

bus shelter

bus shelter

zebra
crossing

paved

wc

mother tree

SAVANNAH

shade
structure

stairs

BUSTLING
MARKET

swings

stairs

PLAYGROUND

plantations

concrete
cubes

POND

steppings
stones

GROVE

water
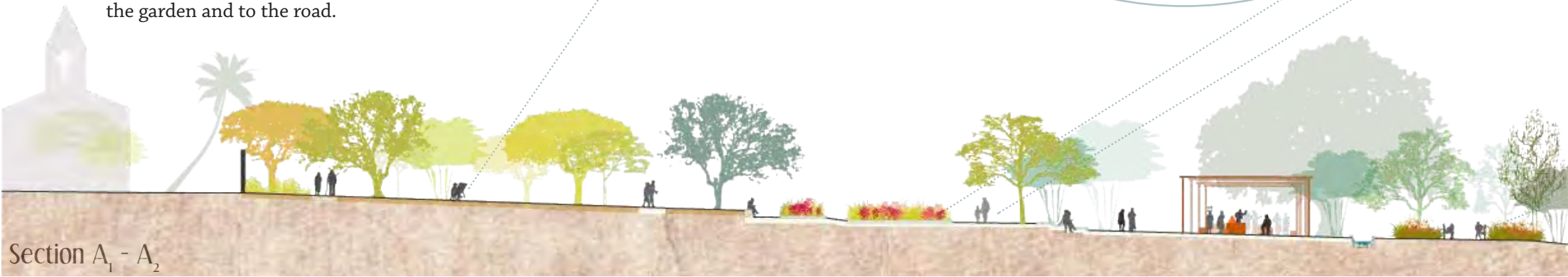tap
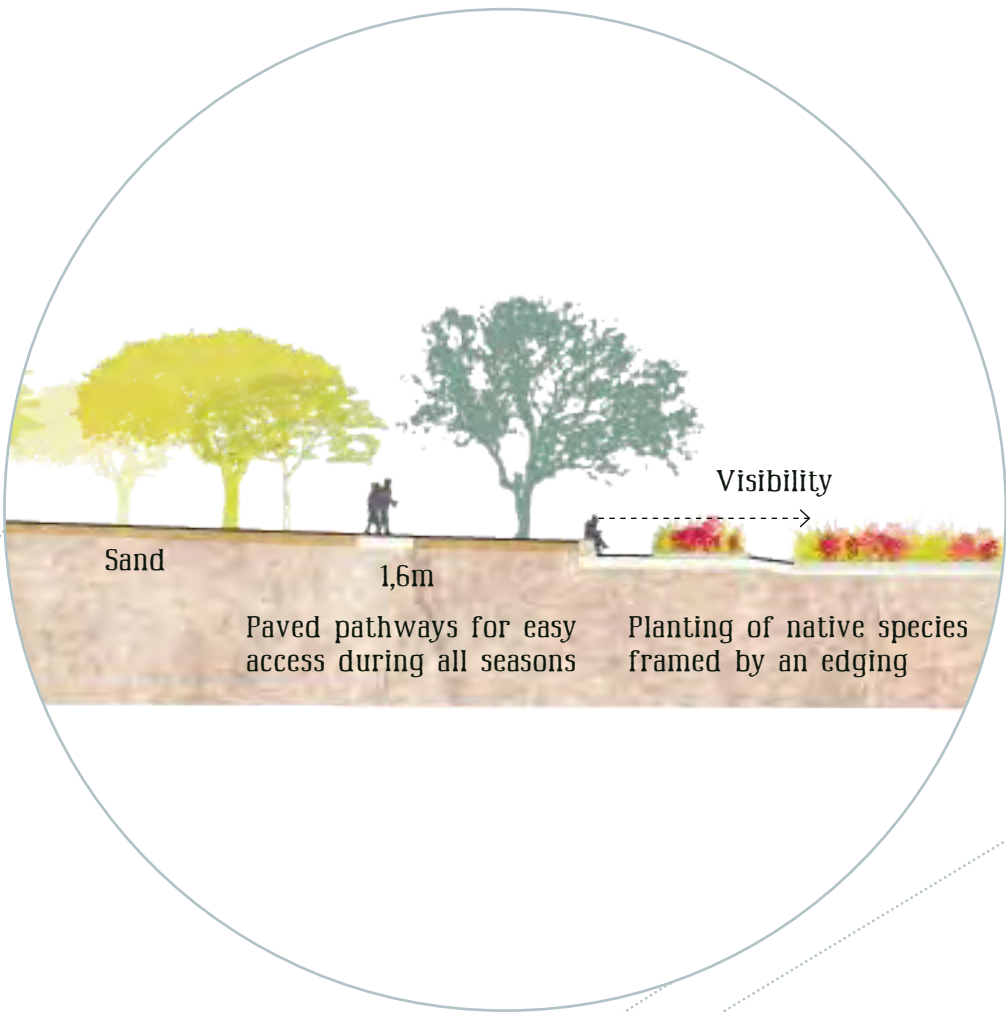
1:700/A3

10   50m

Magomeni 2.0.

Magomeni Garden gets a makeover but keeps its identity and function as a landmark, reflecting its surroundings. The existing activities receives a new platform that simplifies the everyday life, both active and calm areas are included. The different characteristics get highlighted and the garden divides, on a conceptual level, into five verges where activities, expression, and vegetation differ. This creates a more distinct zoning in respond to the existing homogenous appearance.

The concept 'Meeting, greeting and seating' associates with the Tanzanian culture and spirit found in Dar es Salaam. The garden offers plenty of comfortable rooms where you can meet and be sociable, which creates a sense of belonging.

Shade plays an important role for comfortable and restful outdoor-visits during daytime in Dar es Salaam. Keeping vigorous trees and replacing degraded ones is necessary to maintain a pleasant microclimate, to make people and vegetation thrive. The use of native species is relevant to create potential habitats and a biodiverse garden, and low maintenance is a bonus.

Magomeni Garden keeps its existing movement pattern and the main pathways become paved and reinforced, which allows for unimpeded flow for people through the garden, and easy access regardless of weather. The paved paths add to the urban feeling of the garden without claiming the main amount of green space.

Zebra crossings on elevated speed bumps offer safer connections over Kawawa Road. The dala dala stand on both sides of Kawawa Road gets the same expression to make the whole site visually connected. The bus stands get provided with shade structures without back pieces that increase visibility into the garden and to the road.

Sand

1,6m

Visibility

Paved pathways for easy access during all seasons

Planting of native species framed by an edging
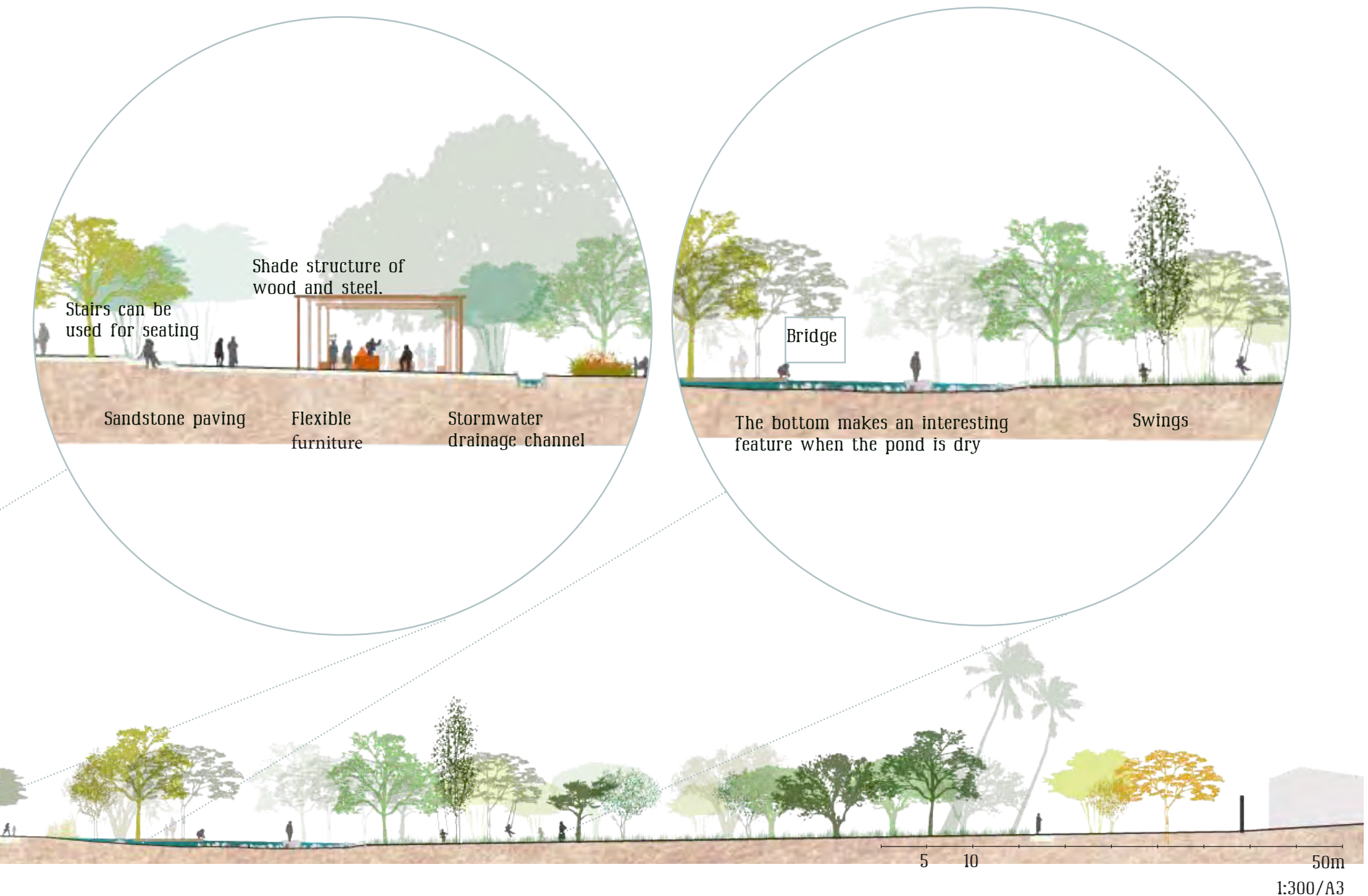
Section A₁ - A₂

Savannah

The south and north edge of the garden consists of a plain covered in sand and shaded by various species of Acacia trees. The area allows spontaneous activities but also necessary facilities such as toilets.

Relax & Interact

This area offer different kinds of seating structures, close or distant to activities, you choose. Canopies shade most seating areas and the plantations, which triggers your senses by their different scents, colours, and textures. Your senses also get aware of different flooring material as the contrast between paved surface and soft ground covers.

Bustling passage

Passing through the garden, grabbing some fresh fruit from the vendors, then you're off for a great day. The passage is covered by a shading arbour made of wooden slats and steel pillars, creating shade pattern on the ground that makes the place pleasant even during the sunny hours of the day. The flexible area under the shade structure provides a frame where people can use the area as they wish. Concrete cubes leads the way and offers seating and tables to gather around or to display your goods.

Stairs can be
used for seating

Shade structure of
wood and steel.

Sandstone paving

Flexible
furniture

Stormwater
drainage channel

Bridge

The bottom makes an interesting
feature when the pond is dry

Swings

5   10   50m

1:300/A3

Play & Pond(er)

The naturalistic play area is sighted among the trees, where swings for young and old hang and logs from old trees within the garden make out a challenging obstacle courses. The pond gathers rainwater from the garden and its proximity, which then can be used to water the plants. This reduce flooded areas, and make out an aesthetic element in the garden, even when it is dry. The water collection is not only a sustainable element but also holds an educational value

since it pedagogically shows the water cycle in daylight. The grove fringe has a higher density of trees and offers a calm place for a walk or a rest on the soft ground. To some extent bird life and other species may find the site attractive. Parts of this area also allows for the pond to expand during heavy rains periods.

Savannah

This part of the Savanna works as a transition to the bar and the north wall that frames the garden. The rather open spaces makes the area easy to survey and suits the savannah character.

A₁
A₂

Further description of the design

The following text is a description of the design and how it responds to the design guidelines.

People are the centre of attention, throughout the design for a new structures and elements of the garden, which refers to our first guideline PEOPLE FIRST! Suggestions, thoughts, and ideas regarding seating, shade and plants were received and implemented in the new design. Analysis of the surrounding area showed that there was no place like Magomeni Garden in proximity, which makes this site unique, and therefore of extra importance to keep and maintain.

Trees of life
Through literature, dialogues, observations and analysis trees and their benefits like; shade, cooling effect, and to prevent erosion, has shown to be essential, hence, planting new trees is an obvious design solution. The new plant beds works as infiltration areas. Edging with infiltration possibility on the side located uphill makes the slightly lowered plant bed to function as infiltration areas without soil littering the paved surface.

The free growing planting beds and absence of planted grass limits pruning and watering of the grass. This is something that connects to both the guideline COPE with NATURE! and MANAGE MANAGEMENT! During the establishment phase a higher maintenance would be allowed, since, watering the plants at the establishment phase is essential.

The overall upgrade of vegetation will make the garden more attractive and pleasant to be in.

Vendors and daily work
In many places in Dar es Salaam, we have seen that vendors keep their spaces neat and attractive for potential customers. With this in mind, we provided the garden with a bustling passage, cover with a shade structure, that can be used for both vendors and visitors. The idea is that vendors would lower the need for maintenance and bring more activity to the site. Since, waste is a problem in the garden today, the new design includes trash bins where the garbage can be deposited. Nevertheless, the waste needs to be taken from site and taken care of on a waste ground. The insecurity of funding makes this scenario unsure.

The theory of that "activity creates activity" was also taken into consideration when designing opportunities for vendors that also will ease their daily work. With more visitors, an attractive and therefore important place is created.

Walkability in centre
The paths in the proposed design come from the original movement pattern that emerged as well functioning through analysis and dialogues. The central axis, where most people walk today connects with the surrounding neighbourhoods. There is a constant flow of people, why enforcing this space is central in the design. In addition, the remaining paths that still hold a high usage are paved. Other paths that run in the outskirts of the garden are only improved through compaction. The paved paths and main swath provide a smooth groundcover and gentle slopes for easy access with bicycle, trolleys or wheelchair, which is related to the guideline EASY ACCESS & MOVEMENT!.

The long entrance zone along Kawawa Road invites visitors through the paved swaths and a variety of functions and expressions. The east entrance point is determined by the wall and has been expanded by the creation of the paved swath.

Creation of space
The existing topography has remained during the design. The gentle slope or bowl shape turns the garden away from Kawawa Road and creates a more tranquil and calm space in the inner parts of the garden. The existing stair has been enlarged while a second has been added to increase access from the high point by the mother tree and down to the bustling market. The stairs are designed with deep steps that also functions as seating spots. The previous in-between space that the old concrete structures created are removed and the area is replaced with plant beds and the stairs.

Division of calm, active, and semi active is also made within the garden for SPATIAL PLESURE!. The savannah stands for a calm place while the Bustling passage is active. The Relax & Interact and Play & Pond(er), which is semi-active places, give room for both relaxation and interaction.

The excess water from the paved main swath is lead through stormwater channels to the stormwater retention pond. The pond is built to provide the vegetation in the garden with water to increase self-sufficiency. This design solution is developed with future climate change in mind, would rain increase it holds water, will Dar es Salaam face drought it still functions as a decorative feature connected to the playground. This change between dry and wet will be present with the current climate as well due to the fluctuating rain seasons.
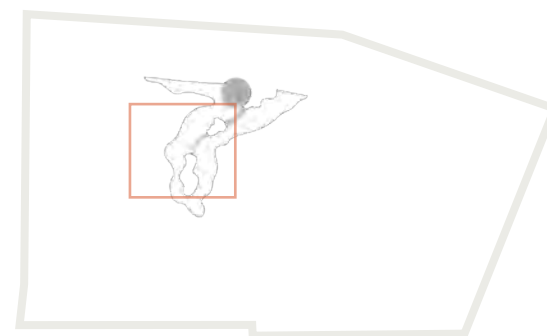
Location of detailed image on adjacent page.

The existing wall upgrades and makes out a discrete spatial divider between the Savannah and the paved swath; Relax & Interact.

Low maintenance plating beds within a defined edge.

The flexible area under the shade structure provides a frame, for dynamic and diverse activity.

Shade provided by the canopies.

This area can be used for cultural events.

5   10m

Play & Pond(er) is an area where it is room for both active play and tranquil wandering.

Materials

When selecting material the design guidelines of "MANAGE MANAGEMENT!" and "DESIGN in CONTEXT!" played key roles.

Sustainable

The materials used in Magomeni Garden can all be found and produced locally in the region of Dar es Salaam or Tanzania. Our intention is that the construction is done with local knowledge and traditional techniques. The materials should also be sustainable and easy to maintain in a low-technical manner.

This strategy assumes that the chosen material and technique have been tested within the context, and is therefore adapted to the existing climate conditions. It also reduces the need for transportation and replacing damaged parts is eased.

Through this approach the preconditions for caring out with the design is optimized and management and costs are held down.

The aesthetics

Inspiration comes from natural elements such as soil, flowers, the blue sky and the sea. All colours are much brighter in Dar es Salaam compared to Sweden, even during the rainy periods. This makes the use of colourful plantations and bright colours more attractive and motivated.

The paving

For the paving, sandstone is used. This is a natural stone common in Tanzania. The stones can be seen along the roads sold by the people in charge of the informal planting nurseries. The material is robust and the light warm colour is very attractive.

The shade structure

The roof of the shade structure is made of wood. Wood has a warm and soft expression, and lets the sun make interesting shade patterns on the ground. The soft expression of the roof contrast to the harder pillars made of steel.

Termites can be a problem, and it is therefore important to treat the wood before it is used.

Steel is used for the pillars to the shade structure. This is a durable and solid material for the foundation of the construction. These steel constructions can be produced locally at one of the many workshops located in the city.

The cube furniture

Inspired by natural beauty in the colourful red soil, the material of the seating/display cubes is made of Adobe (mud bricks). Adobe consist of a mixture of clay, fine sand, coarse sand, silt, and water. The clay-mixture then gets placed in a form in the shape and size you like. After that the bricks gets removed to dry in the sun. A similar clay-sand-water mix is used as mortar between the adobe bricks for building and shaping the cubes. The soil used for making the bricks can be taken from the local area.
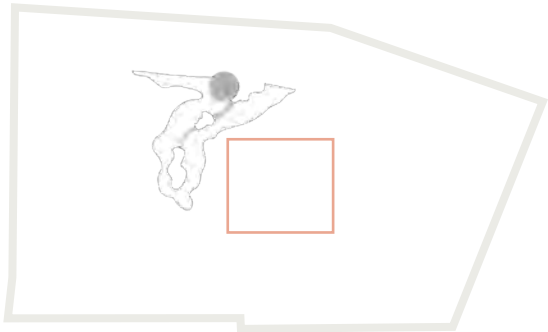

Sandstone

Adobe

Wood


Location of detailed image on adjacent page.

Stormwater can be collected from the paved areas and lead to the pond.

A private room in the centre of the garden. For small talks and contemplation.

The playground uses old logs from the garden and natural stones for motor activity and play.

Stepping stones makes you get close to the water. When the pond is dry it is still an interesting element for play, and visually attractive through the bottom stones that make out a pattern.

Swings are placed here and there, find your favourite spot!

5   10m
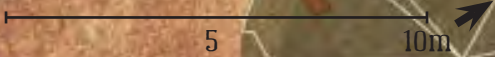
Vegetation & Water

The planting in the garden is made by a of larger plant beds with native species, preferably a base of grasses with a few blooming species that "pops up" like bulbs. Old trees get removed and new ones gets planted.

Inspiration comes from native habitats like savannah and the coast.

Low maintenance is a must to keep costs down, natural habitats adapted to the location are beneficial.

Creating shade is essential in a tropical climate like Dar es Salaam.

Rainwater collects in the pond and will be used for irrigation of the garden. During dry periods, when the pond is empty, it still has an interesting expression and functions as a play element (see picture).

Some species that might be suitable:

*   Hibiscus schizopetalus, native, shrub.
*   Calotropis procera, native, shrub. 1-4m.
*   Abutilon mauritianum, native shrub. 0.5-2.5 metre.
*   Tamarindus indica, Tamarind, native, tree, up to 30 metre.
*   Spathodea campanulata, African tulip tree, native, 10.30 metre high.
*   Moringa stenopetala, Moringa, native, up to 12 metre in height.
*   Veronia brachycalyx, Vernonina, native, shrub 1-4 metre
*   Rothea myricoides, Butterfly flower, native, shrup up to 2.5 metre or small tree up to 5 metre.

Calotropis procera

Rothea myricoides

Spathodea campanulata

Use platntings that only reguiers extensive maintenance

Example of how the bottom of the pond can look like

Hibiscus schizopetalus

Elements to consider

The dala dala stands

As the Lynch analysis indicated, the garden is a hub in the area and the dala dala stop plays an important role in that situation. Apart from providing shade and seating like the original dala dala shelters the back rests is removed to increase visibility. The bus shelters are also placed with more distance to the road to increase the space for pedestrians and bicycles on the sidewalk along Kawawa road.

The bar

The bar early became a symbol for corruption in the garden through the dialogues. This became a bit of a obstacle and was something that we hade to consider in the new design. The new design accepts the bar as a fact and keeps the visibility between the garden and the bar.

Public facilities

In the new design, the toilets are located adjacent to Kawawa Road to increase access and overview. Its former location lead to that a small group took ownership over it.
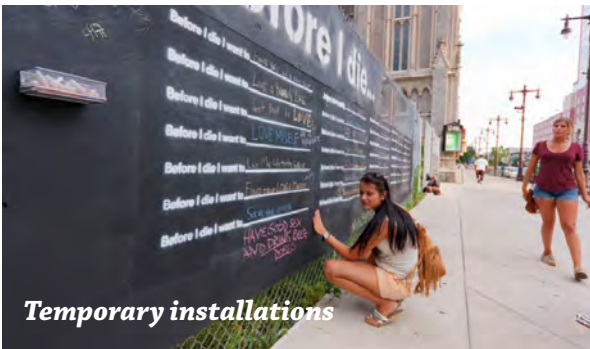
The garden does not have any artificial lighting but if would be beneficial for the garden. Lighting will extend the usage of the park, today robberies makes people avoid the garden at dark hours. With the right design, safety standards are met and tha garden will be attractive for people passing by.

The wall

The walls that frames three of four sides of Magomeni Garden is experienced as positive by some stakeholders, as it is thought to protect the garden from its surrounding and vice versa. During our stay in Dar es Salaam we found that walls are a common feature, which lies in contrast to Swedish standards. The focus, therefore, became to recognise the wall but to give it new meaning through murals, climbing plants and seating structures. Using the wall as a canvas where local creativity can be promoted through colours, material, pattern, and inscriptions. Fore example invite:

- Local artists to paint the wall

- Nearby organisations and schools can also be a part of painting or making crafts that can be added to the wall.

- Seating structures can be built from with the wall as a backrest.

- Climbing plants can linger their branches and leaves around the wall and spread on the ground like a carpet.

The adjacent images is a collection of ideas that can cast new light on the appearance and function of that wall that surrounds the garden.

Climbing plant can cover sections of the wall for a softer feeling

Murals painted by local artists

Building plant boxes from the wall

Temporary installations

Discussion & Reflections

Reflections upon our project, gained knowledge and pitfalls.

Discussions & Reflections

Throughout this project, the importance of parks is emphasized. With a knowledge of the living conditions in Dar es Salaam, the role of urban and public parks have become even more accentuated. With this background, the design of Magomeni Garden took place. Challenges regarding the public aspects of parks and maintenance did arouse but also opportunities through engaged stakeholders and a well used site.

The aim with this project has been to develop a design proposal for Magomeni Garden. In order to guide and motivate the project we asked the following questions:

- What are the benefits of urban parks?
- Why are public parks important in developing countries?
- How can a design of an urban park be performed so that it serves the surrounding area, and is culturally and socially anchored?

What are the benefits of urban parks?

In search of information, and a drive to justify our project we investigated several benefits with urban parks, namely: Health effects, Social cohesion, Economic values, Educational functions, Biodiversity, Air quality, Water management and Equalizing of temperature. The categories were gathered from the research performed by Konijnendijk et al. (2013) and served as a basis for the chapter with supporting literature. This theoretical basis has followed us through the project from our analysis to the design proposal.

The information derived from the benefits of urban parks made the multifaceted aspect of nature stand out. It has become evident for us that designing with natural features is essential in order to enhance the quality of life (for all living beings).

Benefits in Magomeni Garden

In the case study, the information on 'benefits of urban parks' were applied on Magomeni Garden, in order to see which benefits that existed and which benefits that could be improved. Magomeni Garden does hold parts of the benefits even in the degraded state that it is today. Our task became instead to extract the core qualities and emphasise those. With this in mind, and as part of the deign process, the benefits together with social aspects that we experienced in Dar es Salaam, constituted a base for the functions a park can hold.

Invest in urban greenery

In this project, we have step by step seen the relation between attractive and resilient cities. Like Colding et al., states, we also believe that investing, working, and living in communities that gain the positive outcomes of ecosystem services are more attractive (2013, p. 7) and, therefore, more resilient .It is our hope that the benefits of urban parks highlighted in this text can increase the willingness to invest in green spaces for decision makers in Dar es Salaam. We also wish to inspire students and professionals in the field of architecture and planning to argue more for green public spaces.

Why are public parks important in developing countries?

The arguments for urban parks become even more important in the context of Tanzania, as research and personal experience show harsh living conditions for the main part of the citizens, that can be eased by the existence of urban greenery. Living in a dense city structure makes many people exposed to their surrounding with little possibility of restoration. Considering The Attention Restoration Theory by Kaplan & Kaplan places offering restoration, such as parks, are essential in these societies. We believe that healthier citizens have better possibilities to thrive, which will benefit the overall society in the long run.

Socioeconomic differences

Our site visits showed that Dar es Salaam lack public green spaces, and is a city where many areas are fenced and many things hides behind walls. Wealthy people are privileged and have access to areas behind the walls and may, for example, enjoy lush gardens. This leaves the large numbers without the opportunity to recreate through natural settings. Recreation should instead be existing within the daily environment and be a part of the urban fabric, and not depend on socioeconomic status. Implementation of public green space can in the next stage lead to interaction over the socioeconomic boundaries, which may increase the citizen's ability for compassion and understanding for one another; young, old, poor, rich, man, female. Urban public parks can also stand for a democratic place in the city for anyone to use.

Knowledge about Dar es Salaam that we found through literature and by living there for a longer period, created a picture of how the daily life looks for many people. Magomeni Garden is in one way unique for its context, as being a green space open to the pubic and located with easy access for many people.

How can a design of an urban park be performed so that it serves the surrounding area, and is culturally and socially anchored?

This question evolves around the design proposal for Magomeni Garden. The continued discussion is, therefore, based on the design and how it responds to the design guidelines. The seven guidelines are PEOPLE FIRST!, EASY ACCESS & MOVEMENT!, SPATIAL PLEASURE!, DESIGN in CONTEXT!, COPE with NATURE!, MANAGE MANAGEMENT and TODAY but BETTER! PEOPLE FIRST!

PEOPLE FIRST!

Through our site visits we found a lack of urban green space accessible for the public, it came naturally for this project to put the users in centre and continue from there.

People are the centre of attention, throughout the design for a new structures and elements of the garden. The conversations with the users indicated a great interest from the public to upgrade Magomeni Garden. Many suggestions, thoughts, and ideas were received and implemented in the new plan, such as, space for vendors, more seating, and the importance of shade. Analysis of the surrounding area showed that there was no place like Magomeni Garden in proximity, which makes this site unique.

It has been important to approach the people we are designing for in a thoughtful way. By using a bottom up approach we got to know the garden and the users very well. Overall, this has been positive but to some degree we became emotionally attached to the garden and the users. This affected our objectivity as we might have overvalued some wishes from users or stakeholder. On the other hand, it also filled us with encouragement to carry on with the project.

Keep the garden open for all
During our encounters with various stakeholders, a dilemma arose; lack of funding to improve public parks and yet a willingness

to create and improve the quality of life for the citizens exists. Suggestion by the stakeholders was to impose a fee for entering the garden or a fee on certain attractions offered within the garden. This was for us unfamiliar and contradicting as we think that the basic idea of a public place does not include fees. As we see it, an entrance fee does not only exclude people from the garden, but it also creates extensive efforts when it comes to organisation. The fee has to be collected and controlled, which may escalate the overall fees and little would end up in the actual maintenance budget. The risk is that the garden becomes fenced in order to control the visitors. Now the garden acts as a platform for spontaneous and planned meetings, job-seekers, vendors and more. With a fee, the flow of people and use of the garden would change, since it is not possible that someone that use the garden as a shortcut would pay a fee.

Vendors can ease maintenance
Initial discussions evolved around creating a platform for small scale businesses, which the municipality may collect rent from. We believed that this may threaten current function of the garden and its existence of the garden and invite land grabbing. Hence, another approach was taken. Many places in Dar es Salaam show that vendors keep their spaces neat and attractive for potential customers. With this in mind we provided the garden with a passage that may be used for both vendors and visitors, the idea is that vendors would lower the need for maintenance and bring more activity to the site.

The theory of that "activity creates activity" was also taken into consideration when designing opportunities for vendors. With more visitors, an attractive and, therefore, important place is created.

Local engagement
Engaging with the users of the garden has also been made in order to recognize their ideas and plant a seed for developing ownership, a place

that people are proud of they tend to take care of. This may benefit the upkeep and maintenance of the garden. By initially having a dialogue with the users of the garden, we also hope that a spark for continued public engagement in Dar es Salaam, or at least for Kinondoni Municipality have been made.

The issue of funding
The issue of funding can not be fully addressed or solved within this master's thesis, since the problem it is connected to political structures, corruption and other current conditions on a city scale. The government, on the other hand, has opportunities to affect the budget that today only covers construction costs to an unknown degree. Connecting Magomeni Garden with NGO's (Non Governmental Organisations) may be a way to let the project develop and sustain. Our intention and hope are that we can raise awareness of the situation and the need for this garden and thereby maintain and upgrade a public zone.

The issue of funding has influenced our design to consider low maintenance standards and local and affordable materials and techniques. A possibility that we did not explore was cooperation with NGO's. Any future progress with this project should explore possibilities with NGO's.

When the public is someone's home
We did not want to exclude any of the users in the garden today, as well as we saw some problems with the young men living and 'claiming' one corner in the garden. Dealing with a public place that people call home was for us as landscape architects a new situation. We choose to deal with the fact and the everyday chores by making a design that focuses on upgrading some areas more and keep some areas more simple and less programmed. The middle part of the garden that holds the main swath and activities is given the largest transformation while the outskirts of the garden are not planned in the same extent. The paths and vegetation are

upgraded through the whole garden. The ability to cook, sleep, and wash will not be excluded, since those informal activities is strongly rooted in the culture and daily life of Dar es Salaam. The concentration of trees in the southeast corner, which might block visibility, is in the new design limited. Increased overview is intended to increase a safer feeling. The open space will also function well for football and other activities that need some space. The plan is to create a flexible park that can be further developed by users or the municipality at a later stage.

Gender aspects

In a patriarchal society like Dar es Salaam, it is mostly the women that carry out these household chores. To invite women to the garden may require certain facilities, partly due to patriarchal structures. We added more seating possibilities in different parts of the garden, so that women can find a place for them to hang out at. Opportunities for commercial activities, and preserving the ability to collect water from the garden may also invite more women to use and visit the park as they can feel there is room for them. The playground area for the kids is another element that would allow more women to visit the garden, since the women is the ones that most likely taking care of the kids. .

EASY ACCESS & MOVEMENT!

The paths in the proposed design come from the original movement pattern that emerged as well functioning through analysis and dialogues. The central axis, where most people walk today connects with the surrounding neighbourhoods. There is a constant flow of people, why enforcing this space is central in the design. In addition, the remaining paths that still hold a high usage are paved. Other paths that run in the outskirts of the garden is only improved through compaction. The paved paths and main swath provide a smooth groundcover and gentle slopes for easy access with bicycle, trolleys or wheelchair

The long entrance zone along Kawawa Road invites visitors through the paved swaths and a

variety of functions and expressions. The east entrance point is determined by the wall and has been expanded by the creation of the paved swath.

Safe crossings

During the analysis it became clear that Kawawa Road function as a barrier, since it lacked safe crossing, and the traffic is intense. By designing elevated zebra crossing the pedestrians visibility and overview is enhanced and the vehicles are forced to slow down.

Dar es Salaam's Rapid Transit

With the construction of Dar es Salaam's Rapid Transit, the access between Magomeni Garden and the city centre will increase. The Lynch analysis said that the garden function as a landmark and a hub within its surrounding. The gardens position as a hub might be stronger due to this connection to downtown, also an eased access between the garden and other places within the city can increase its reputation and spread the word of parks. The gardens popularity can also affect the status of the surrounding neighbourhood.

SPATIAL PLEASURE!

The existing topography has remained during the design. The gentle slope or bowl shape turns the garden away from Kawawa Road and creates a more tranquil and quiet space in the inner parts of the garden. The existing stair has been enlarged while a second has been added to increase access from the highpoint by the mother tree and the bustling market. The stairs are designed with deep steps that also functions as seating.

Division of calm, active, and semi active is also made within the garden. The savannah stands for a calm place while the passage is active and inbetween the semi active place give room for relaxation and interaction.

The in between space that the old concrete structures created are removed and the area is replaced with plant beds and the stairs.

DESIGN in CONTEXT!

During this project, we have emphasized the need for a design that is rooted in its context. This includes awareness of local indifference, where learning about social life, culture, history, climate, and vegetation is necessary. Our approach to this question has been to familiarise with the site through dialogues, engaging with the local stakeholders, and to live an everyday life in Dar es Salaam, if only for a while.

As new in Dar es Salaam, we can see the site and context with fresh eyes, but we may still miss or not understand certain cultural features. Difference in how greenery is used and what the perception of a park or garden should be was discovered.

Cultural aesthetics

Sweden is known for its minimalist design, second hand has become modern and looking back to old traditions is popular. In Tanzania, as a developing country that slowly becomes wealthier, there might be a need to show that they gain new ground. Hence, more ornamental designs are often seen. As a country with many cultural influences from around the world and tribes it has been rather hard to crystallise a typical look that represents Dar es Salaam. It is rather a mix of tradition, multiculturalism and marks from colonialism that make out Dar es Salaam. Designing a public place in this context that should serve the greater masses, considering the multiculturalism, is complex.

When approaching this multicultural city it was helpful to find collective characteristics. From the conversations and workshop we were able to extract basic wishes and needs when it comes to natural settings, namely; seating opportunities, water features, trees, shade, fresh air and breeze, and a clean area. The requests are of simple and obvious features, which nevertheless gave us a foundation for the design.

Observing the architecture and everyday elements, such as, fabric in Dar es Salaam provided inspiration to colours and patterns, material and techniques.

COPE with NATURE!

Infiltration

With the existing groundcover mainly intact and plant beds with infiltration capacity, the garden will still be permeable. Permeability is important due to the city's problem with low groundwater levels and saline water permeating the groundwater. Although, Magomeni Garden only contributes with a portion to the groundwater of Dar es Salam the garden sets a standard. "Kidogo kidogo", which means "Little by little" in Swahili may resemble the situation.

The excess water from the paved main swath is lead through stormwater channels to the stormwater retention pond. The pond is built to provide the vegetation in the garden with water to increase self-sufficiency. This design solution is developed with future climate change in mind, would rain increase it holds water, will Dar es Salaam face drought it still functions as a decorative feature connected to the playground. This change between dry and wet will be present with the current climate as well due to the fluctuating rain seasons.

Vegetation

Due to supporting literature, which stated that native species (p. 38) are rare within Dar es Salaam, we suggest that only native species is incorporated in the new design.

Through literature, dialogues, observations and analysis trees and their benefits like; shade, cooling effect, and to prevent erosion, has shown to be necessary, hence, planting new trees is an obvious design solution.

The new plant beds function as infiltration areas.   Edging with infiltration possibility on the higher side makes the slightly lowered plant bed to function as infiltration areas without soil littering the paved surface.

The overall upgrade of vegetation will make the garden more attractive for people passing-by.

MANAGE MANAGEMENT!

We believe that the informal activities, (such as sleeping, selling things, cooking, doing laundry etc), that takes place in the garden today need to be a part of the new garden, since it is such a strong culture of Dar es Salaam today. Maybe not because of that is what the government and people want, but because that is how it functions. It would be complicated just to ignore these activities and not consider them in the design at all, and that is why some parts of the garden have been less programmed and designed.

The garden is in need of a big clean up from the garbage that has been deposited over the years, to prevent future issues a plan to handle garbage is needed. Without funding, it will be hard to maintain the park and provide basic functions such as waste management. By engaging the users in the garden, such as the vendors a local engagement can happen and contribute to a caring and clean site.

TODAY but BETTER!

Within this guideline we state that the garden's current function as a hub and a landmark in the community, but its character may be enhanced. This has been addressed in the previous guidelines, through the use of vegetation and a design that resembles the context. This address a couple of spatial characteristics that are brought forward and their upgrade is discussed.

The wall

The walls that frames three of four sides of Magomeni Garden is experienced as positive by some stakeholders, as it is thought to protect the garden from its surrounding and vice versa. Through our stay in Dar es Salaam we found that walls are a common feature in, which lies in contrast to Swedish standards. Nevertheless, our focus became to give the wall new meaning through murals, climbing plants and seating structures.

The bar

The bar early became a symbol for corruption in the garden through the dialogues. We had to decide if we would include it in our design or not. In the end, we came to recognize its existence and the design keeps the visibility between the garden and the bar.

Public facilities

The toilets are located adjacent to Kawawa road to increase access and overview. The maintenance of the toilets and also water supply could be an issue. The garden could benefit from properly lit pathways and their adjacent area to extend the hours of use and in some extent security. In this context, we suggest self sufficient lighting fixtures, since power outages are common. This asset in the garden could be a provoking element to some since many people live without electricity. Hopefully, this will not be the case, rather the positive fact that it is publicly accessible will overcome.

Conclusion

Throughout the project, and the methods we have used provided us with a large amount of information. From the user's needs and wishes, which sometimes differ, to the green structure of Dar es Salaam and the urbanisation in the world.

We believe that we have gained knowledge on how to address and approach a new situation and working in it. Being open to people's ideas and advise and being in contact with several has helped us in the search for information. Observing a new site and reading new cultural and social codes is another gain. This has lead to the completion of a design that responds to a number of strengths and weaknesses related to the site. The main issues may have been degradation and waste management and lack of management in total, while the positives comes from the sites frequent use and uniqueness in Dar es Salaam.

If this project proceeds, there are many steps before the new design of Magomeni Garden can be initialised. To continue the close relationship with stakeholder that has followed the design development, feedback from them must be considered, which may revise the design presented in this thesis. Funding must be further explored and budget estimations must be made accordingly. Strategies for how to carry out the design in phases are also potential tasks.

We hope this document has been to use for stakeholder, students and who else is interested in urban parks and developing countries.

Personal reflections

Throughout this project, new knowledge has been savoured and changed our frame of reference. Five years of academia was used and implemented, even though the situation was new we were able to use the same tools in combination with a high measure of sensitivity.

It has been crucial to be on site in order to perform this project, since it has given depth to the project as a real case scenario with specific needs.

Grasping a new culture from scratch is a great practice and experience that we wish more people to get the opportunity. It comes with challenges such as language barriers, different perception of time and not finding what you need when you need it. Therefore, having a flexible mind is useful.

Within a new setting, it is easy to catch yourself with preconceived apprehensions that you previously were not aware of.

Nevertheless, we managed to follow our original idea and interacted as much as possible with the community of Dar es Salaam. The people of Dar es Salaam made it easy for us to integrate through their warm, welcoming and outgoing manner. They took their time to help us throughout our stay. Without this support and original attitude, we believe that it would have been difficult if not impossible to carry out this project.

Working with this project, over a six month period, made it difficult to foresee every potential situation. During this long time frame, opportunities to reconsider information and standpoints are possible, which may be both positive and negative. One subjects that we debated back and forth on, was if the garden should exclude current user groups by not providing their need for space and certain activities. Ability to reevaluate knowledge is important to bring to future project.

This very hands-on way of working, which included many dialogues with the users, is something that we want to take with us and will try to implement in our profession and future projects. Another thing that we felt was successful in this project was that we tried to be a part of the context and to feel every nuance of it. Whether active in Dar es Salaam or not, we will try to approach new situations with the same curiosity and perceptiveness, as done in this project. However, this approach may not work in every context, for example, in Sweden, people tend to be more reserved and less outgoing.

Future research

•   Influences from around the world affects local design but what elements does the local landscape architecture consist of and how can they become more obvious base point in Tanzanian Architecture?

•   Relation to park development in Tanzania.

•   Urban Parks future role in Tanzania.

•   During our site visits we encountered many green spaces of Dar es Salaam, that can serve as interesting topics for future masters thesis's. See appendix one (1) for potential sites.

Thank you for reading this masters thesis.
Kajsa and Charlotte during a weekend excursion to Kigamboni, Dar es Salaam.

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Appendix 1
- Site visits

Getting to know the green side of Dar es Salaam
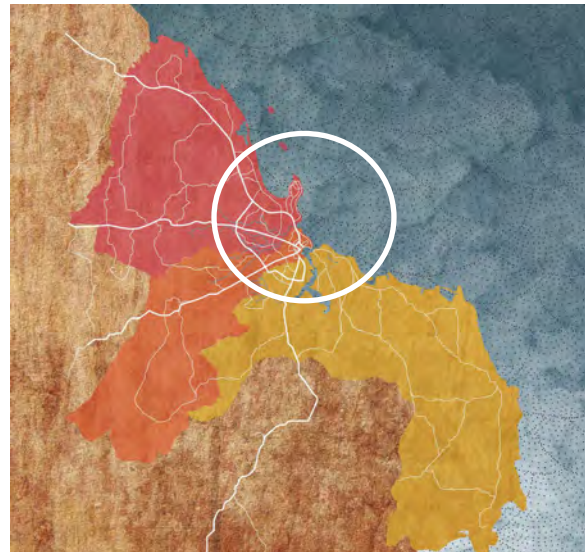
Site observations

To create references for public space in Dar es Salaam we conducted seven site observations around the city. Common denominators for choosing these sites are their experience as green or typical social public places in Dar es Salaam. Together, these observations create an understanding about usage, activity and needs, how and where people meet and relax. This forms a background and a context to Magomeni garden and the project.

Visual greenery

Dar es Salaam experiences as green but through observing these sites, the everyday life, now and during previous visits to Dar es Salaam, we found a lack of public green spaces in the city. The few parks that could serve the city are rundown or fenced off and thereby not open for the public. Other public sites can be deterring or non-welcoming due to lack of safety and maintenance, hence, most time spent outside of home takes place in the streets. The bustling street life of Dar es Salaam creates platforms for meetings among neighbors and friends and commercial activities. However, the recreational values of a park are harder to fit into a street; and considering Kaplan & Kaplans 'Attention restoration theory' (p.X) there might be an under pressed need of parks as an everyday environment in a dense urban setting as Dar es Salaam.

Shade, shade, shade

What summons public life in Tanzania is that socializing and relaxing among other everyday and leisure activities, in the most cases, occurs in the shadow of a tree. It is clear that shade is an important feature in the public realm. Trees often have well used seating furniture underneath its shading canopy.

Map highlighting the inner city of Dar es Salaam where the site observations were performed (see map on next page).

Dar es Salaam looks lush and green but this is only true in a certain extent, since greenery open for the public is rare and lack in quality.
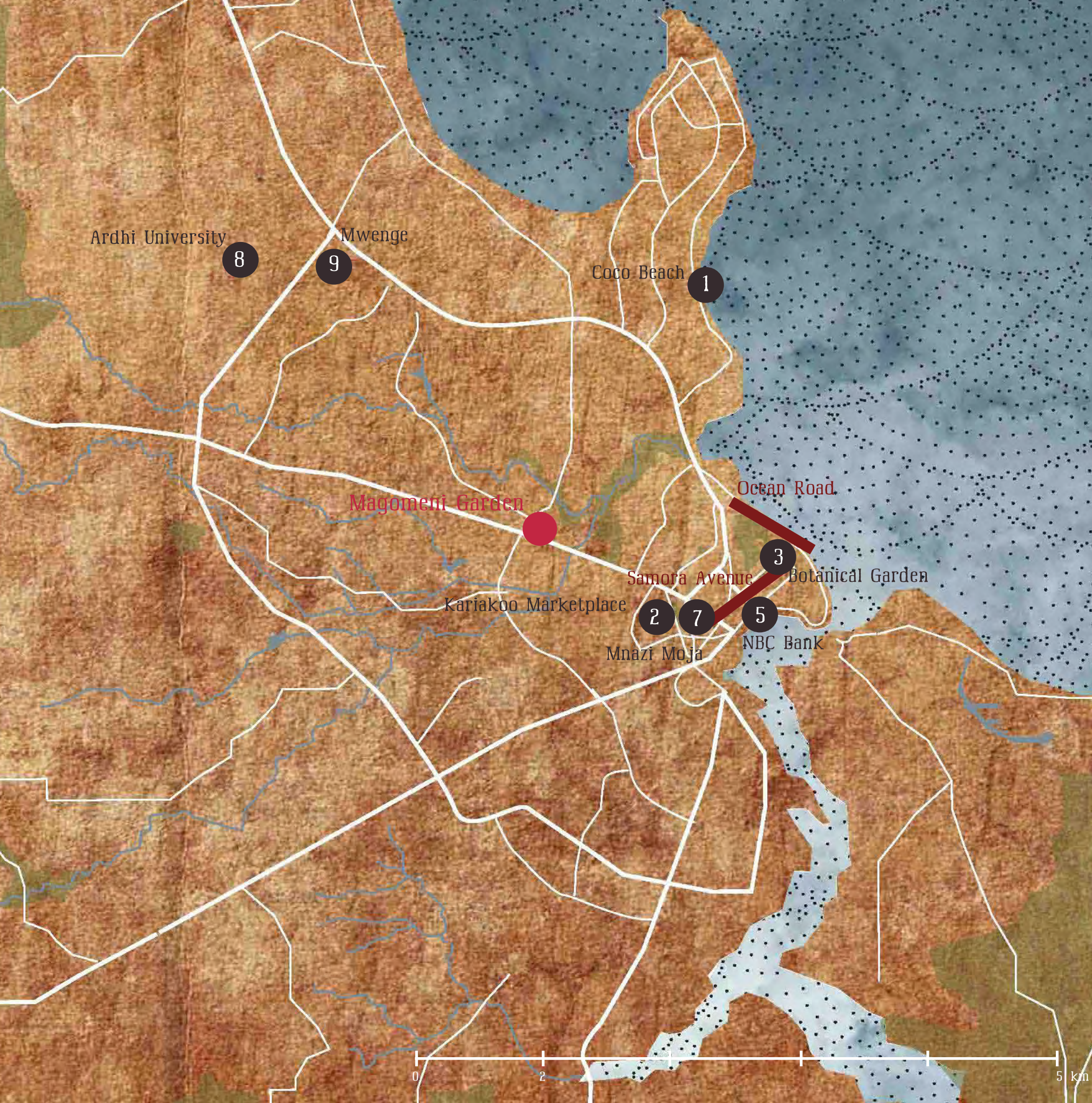
Ardhi University

8

Mwenge

9

Coco Beach

1

Magomeni Garden

Ocean Road

3

Samora Avenue

Botanical Garden

Kariakoo Marketplace

2 7 5

Mnazi Moja

NBC Bank

0 2 5 km

Cocco Beach

Date: Sunday 18/8-2013
Time: 14:00-15:00.
Weather: Sunny, strong wind, 29C°

People density

Since it is a Sunday many people are of work and some has chosen to visit Cocco Beach. There is a mixture of families, couples, kids, friends of all ages. We see few elderly people and a bit more men than women. Women are more covered up than men.

Activities

Sitting in the shadow of palm trees (which is skilled since the little shade provided) and below the sandbank. Observing activities and people were popular. Many were walking along the beach, which creates a linear movement patterns. People were swimming and playing in the water, and no one was sunbathing. Commercial activities such as renting out swimwear and tubes, food, craftsmanship and photographers take and sell pictures. Restaurants are located in the north corner of the beach and simpler street food in the south. There is no traffic on the beach by motorized vehicles.

Landscape and vegetation

A long beach with white sand, parallel to the beach, but higher up is a larger paved road, inbetween these two elements palm trees and bushy grasses grow and a smaller unpaved road with parking space and even closer to the beach grows a line of cactuses vegetation. The water is visually clean, but we were told otherwise, collections of seaweed at the water fringe.

Impression

A popular destination that is active and bustling of life and still nice and tidy with little garbage on the ground.

Learning

+ Trees for shade! A sheltered place to sit and watch the activity!

– Few women!

Kariakoo Marketplace

Date: Saturday 17/8-2013
Time: 15:00-17:30
Weather: Sunny, some clouds, around 26C°

People density

This site is very crowded, especially on Saturdays. The majority is walking through the bustling streets.

Activity

Commercial activity is the main focus since this is one of the largest market places in Dar es Salaam. "Everything" is sold here, on blankets on the ground or in smaller shops along the streets. This is not a mixed area, few people live here and it is even hard to find something cooked to eat or to sit down. Most shops had stairs leading up to them where people occasionally sat down. All kinds of traffic, mopeds, cars bikes, trolleys, walkers, bajaj (small moped taxis) and larger trucks for delivery compete about the streets. The noise level is high due to vendors yelling out their products and prices combined with traffic.

Landscape:

The material of the roads vary between paved or gravel/sand. Vegetation is very sparse with only a few, randomly spotted, street trees and pots with plants that marked some entrances. The blocks are based on a simple grid system with linear streets and square or rectangle blocks of buildings. The buildings range from three to five stories high. There is a mix of building style from older ones with ornaments, to concrete blocks to new glass facades, "Swahili style" is fairly common. Unfortunately the buildings are a worn down due to lack of upkeep and maintenance. There is one large building with a steel roof that worked as a landmark for us, next to it was the end daladalas stand (bus stand).

Impression:

Visiting Kariakoo means that you are there to buy something, this is not a place for relaxing or hanging out.

Botanical Garden

Date: Tuesday 20/8-2013
Time: 15:50
Weather: Light breeze and partly cloudy

People density
This is an empty space, only a few garden workers and one person selling art. The gardens location is in a part of the city where there is few residential buildings but more offices and embassy's.

Activities
Care of the garden is taken and a plant school lies here. There are occasionally people passing by.

Landscape:
There are two entry points to the garden, the main one is accessible by vehicle and has a "roundabout". There are several pathways within the park that allows you to stroll around; unfortunately the lack of life makes the site lonely and less welcoming.

Many different plants are scattered behind low and strict hedges, for example, one area had a gathering of palm trees.

There is a waist-high wall surrounding the park that also works as informal seating furniture. In the park there are areas of lower walls suitable as seating furniture and works as spatial dividers.

Impression:
There is no natural flow of people through the park or gatherings. It is not welcoming more of an institution. Some areas has quite a bad smell, which deters you from strolling around. The reason for this impression might be, as we were told by from the gardener and art supplier, that the garden had been closed for visitors since people had used the area as a public toilet.

Samora Avenue

Date: Tuesday 20/8-2013
Time: 14:50
Weather: Light breeze, sunny and partly cloudy.

People density:
People are walking along the street while some are waiting. People drive by in their cars, bikes and other vehicles. There are a few street vendors out, mainly located in the corners.

Activities
Commercial activities mainly occurs in offices, banks and governmental buildings. On the streets there are vendors selling, mostly, second hand books. The streets are wide and there are many parked cars.

Landscape
Trees make out a dominat feauture along these streets as they are large and many, standing in rows on both side of the street. Together with the with arcades they provide pleasant shade.

Traffic island makes crossing the road easier for pedestrians. but there are few zebra crossings.

New high buildings with glass facades take room where further old more 'human scale buildings' used to stand.

Impression
This is a linear space, accented by the allé. Noise is generated by the traffic and the city life is present with a slightly European touch of mixed use, including restaurants, commercial activity, offices and to some extent also housing. The pedestrian speed was perceived as higher than in other areas of Dar es Salaam.

Learning
+ Commercial activities creates life! Traffic islands make the crossing safer. The trees create a beautiful channel.

– Traffic noise. New buildings that miss context to the place start to pop up.

Green square in front of NBC bank -along Kivukoni road.

Date: 20/8-2013
Time: 14:10
Weather: Partly cloudy and warm, 27C°, light breeze

People density:
The movement on the site was low and few crossed the square. Most people were sitting in the shade on benches or low walls. The street musicians helped to draw visitors to this site.

Activities:
The Street musicians are playing their music, the dancers follow and they have an audience. Other people are sitting in the park, perhaps waiting for a meeting or on the Zanzibar ferry that departs close by. Walls are also used for seating but no one uses any seating ocated in the sun. A few street vendors selling snacks are passing by. A PhD student and his professor was collecting information about the weather on the site and how people perceived it. This was only one of their research sites.

Landscape
Paved open square surrounded by grass and hedges (parterre). The concentration of trees in the end of the park provides a larger area with shade. The location is central in downtown, close to daladalas, the sea and surrounded by roads.

Impression
A clean and tidy place. Some of the walls and benches could use some maintenance. The square is sunny and therefore too hot to be at during most of the day.

Ocean road – Waterfront

Date: Tuesday 20/8- 2013

Time: 16:50

Weather: Partly cloudy and rain clouds over the ocean, a strong wind from the ocean.

People density

This place is neither crowded or deserted, walkers, joggers and other people enjoy the ocean view. A large number of cars are stuck in a traffic jam that is going northwest.

Activities

The adjacent Gymkhana Club, parted from the beach by Ocean road, holds a large golf area and other sport activities. It is likely that these facilities generates the sport and recreative activities occur along the beach.

Viewing the ocean is popular. Some people also drive to the beach and gaze over the ocean from their cars or lying on the bonnet. A few street vendors walks along the road. By some of the trees there was a few vendors selling coconuts.

Many people where sitting in their cars in the daily traffic yam along Ocean drive. Three people commuting or exercising on their mountain bike passed us.

Landscape:

The paved road along the beach has two lanes that occasionally only run in one direction depending on the traffic. The tide is limiting the use of the beach to certain hours. Between the road and the beach there are walls to prevent erosion of the bank. We saw remains of mangrove forest through scattered old and large mangrove trees in the gymkhana area.

Impression:

The area is fairly clean but with some garbage on land and in the ocean. The ocean gives off an unpleasant smell. This is one of the few areas where we have seen many people exercise; again there are mostly men.

Mnazi Moja Park

Date: Sunday 25/8 2013

Time: 14.00

Weather: Sunny, very light breeze, 29 C°

People density

There are no people inside the park, only a few guards. Outside the high walls around the park there was street vendors, people passing by and waiting for the daladalas.

Activities:

There was no activity in the park but we have been told that larger events occur here such as weddings. Being a Sunday the number of people outside the park was few; most of the people don't work Sundays and spend their time elsewhere.

Landscape:

The park is large, linear and has an open centre that is framed by trees and other vegetation. The wall around the park keeps people out. There are streets on all sides and even a two-lane road crossing through the middle of the park. The park itself is well maintained and tidy and the lack of users of course minimizes the need for maintenance. Chastised hedges, cut grass, flowering shrubs and some perennial grasses decorate the park.

Impression:

The park is relatively lush and green, although the absence of people makes the place dead and stiff. The park has big potential if it would be open to the public.

Learning

+ Good location. Big and open green space.

- Much maintenance because of the well cut shrubs and grass. –The wall keeps people out.

Ardhi University

Date: Several visits between early August and mid October

Time: Several visits

Weather: Several visits

People density

Due to the summer break the university and campus area was emptier than normal during our 10 weeks in Dar es Salaam. Normally there was guards and gardeners apart from a few students and teachers. The number of students increased towards the end.

Activities

People are walking across the campus area, reading or socializing on the concrete benches and tables that are placed on several locations. The football field had practicing teams every evening with a minor audience. 100 meters away a group of girls used to play netball. There are 3-4 places were food is being sold. Occasionally a herd of goats move in the northern parts and groups of monkeys move around the area.

Landscape

The area is well kept and holds many large trees. The storm water channels runs along every road, paved or unpaved, and they are deep, 1-2 meters and approximately one meter wide.
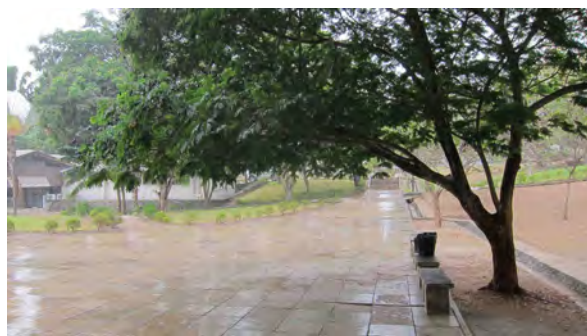
Impression

The area is calm and secure with many shading trees and opportunities for recreation and socializing.

Green area in Mwenge

Date: - Several visits

Time: - Several visits

Weather: - Several visits

People density: Medium density, that accumulates to the edges. Many people move around this area and almost everyday there are kids and younger people playing football on the open grass. Several fruit and vegetable vendors among other sell their produce on the

Activities: Street vendors, football, walking by and passing through and bajaj drivers. Closer to the residential houses laundry is often hanging to dry outside.

Landscape: Grassy smaller field with trees in the edges and some smaller elevations. Surrounded by residential buildings, unpaved roads, smaller shops and an office building. Most of the houses are one – two stories high apart from the residential and office building.

Impression: Vivid place with many different activities and a scale that doesn't feel too big or too small.