CHANGE BY DESIGN

Dworzark Community Action Area Plan

2018

SIERRA LEONE URBAN RESEARCH CENTRE

dpu Development Planning Unit The Bartlett UCL

KNOWLEDGE AND SERVICE

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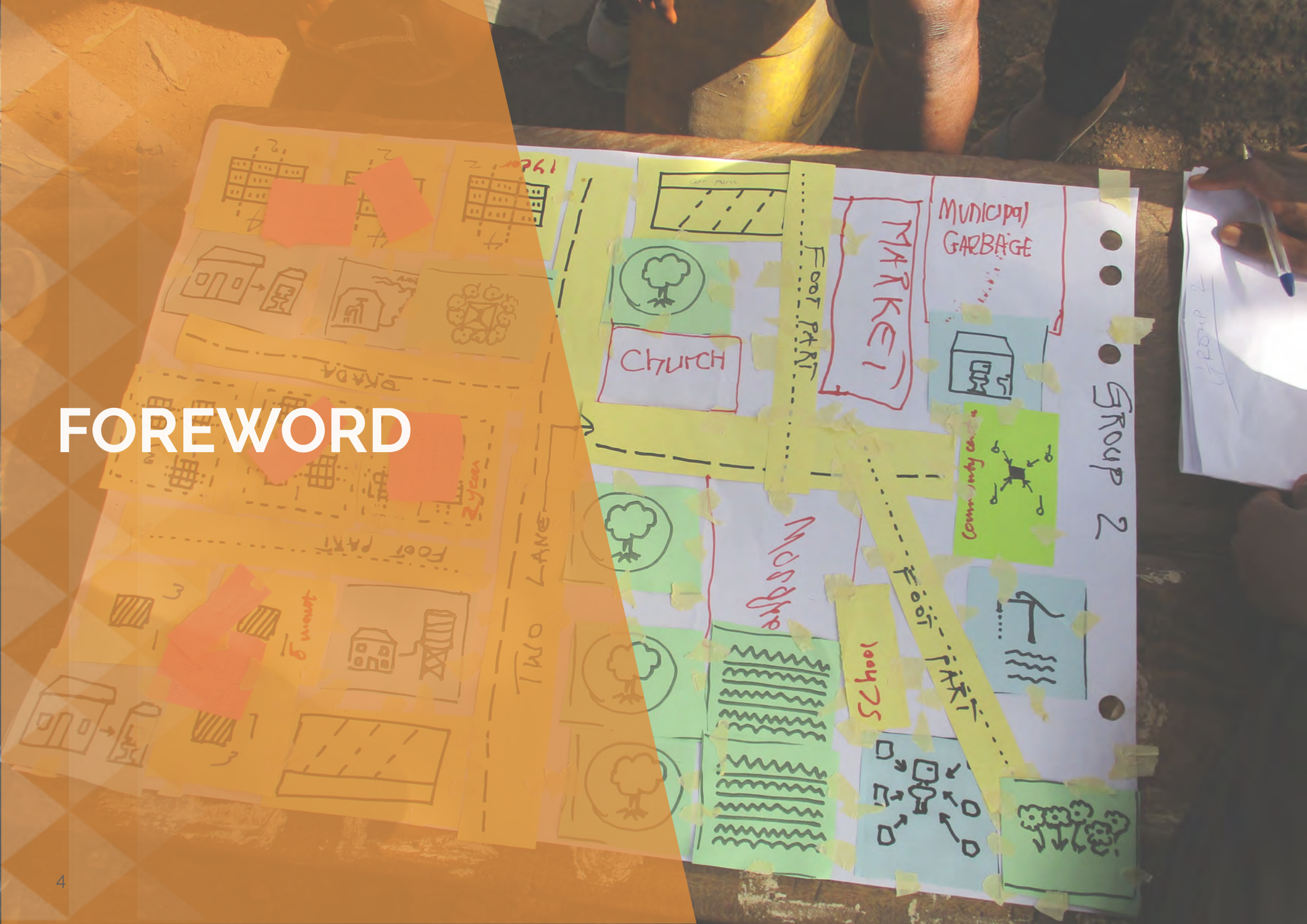
MARKET
MUNICIPAL GARBAGE
CHURCH
FOOT PART
GROUP 2
TWO LANE
SCHOOL

FOREWORD

Freetown, like many other Sub-Sahara African cities is characterised by urban sprawl and the proliferation of informal settlements mostly in the form of slums. The slums are generally characterised by sporadic development; are prone to disaster risks, and; are poorly serviced with the worst connections to piped water and electricity. How to contain and manage this undesirable growth still remain a major challenge to the government and other urban actors. Most researchers agree that the way human settlements are organised have implications on how people live, their social interactions and how well they are provided with utilities and services. However, dealing with unplanned growth at the local community level requires that we work with the local residents to proffer answers to the following three questions: what is the nature of the problem? Where do we want to be? And how do we get there? It is also about increasing the participatory spaces for the residents because when local communities are empowered, they are more likely to exert mutual pressure on the city authorities and to hold them accountable for their actions.

This report is based on a study funded by Comic Relief (UK) and carried out jointly by the Sierra Leone Urban Research Centre (SLURC) and Architecture Sans Frontieres-UK (ASF) in two informal settlements (Dwarzack and Cockle Bay) in Freetown. The study uses the Change by Design methodology to show case the practicability of working with local residents to develop Community Action Area Plan (CAAP). In each community, the CAAP process involved holding consultations on some specific attributes about the community and analysing the ideas to generate discussions about a common and desired future and to prioritise actions to achieve that future for the community. The report draws on the perspective and experience of different stakeholders at different scales involving community residents and their groups, civil society and representatives from the local and central government. The approaches are both flexible and generic and so, can be adjusted to fit any local planning situation.

Even though the CAAP can be applied in any community at the local level, this study focuses on informal settlements to describe how rapidly growing communities on insecure land and with limited services can be organised to explore practical and durable solutions to some of the development challenges faced. The study recognises that while conventional forms of planning are the norm in most cities, such approaches do not always meet the needs of the majority of the urban poor who mostly live in informal settlements. As such, the CAAP process has been designed such that the very people who will be affected by the plan are actively involved in the plan preparation process. The report emphasises that local residents are creative agents and are therefore, central to their own development. Therefore, any meaningful solution to problems in their communities should require their active involvement. The report is intended to help government and other city authorities to support local communities by working creatively with the residents to improve and formalise the places where they live. Apart from showing how to involve and work with a wide range of stakeholders, the report shows how to prepare the CAAP and to successfully outline the development priorities and aspirations of the different localities. It also shows how such a plan can help city authorities to promote social and economic transformation in the communities and thereby, reduce poverty and inequality. It support the existing guidelines for preparing Action Area Plans by proposing a series of steps to initiate and sustain a more detailed and inclusive CAAP process that reflects the current and future development priorities and aspirations of the people.

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LIST OF IMAGES/ILLUSTRATIONS

LIST OF ABBREVIATIONS

CAAP	Community Action Area Plan
SLURC	Community Action Area Plan
ASF-UK	Architecture Sans Frontières
FCC	Freetown City Council
MLCPE	Ministry of Lands, Country Planning and the Environment
FEDURP	The Federation of Urban and Rural Poor
CODOHSAPA	Centre of Dialogue on Human Settlement and Poverty Alleviation
NLPSL	National Land Policy of Sierra Leone
TCPA	Town and Country Planning Act
FIA	Freetown Improvement Act

1 INTRODUCTION

1.1 About the project

This document presents the process and findings from an eight-month project that has utilised participatory planning and design to produce a Community Action Area Plan (CAAP) with residents of two settlements in Freetown. This work is part of a wider initiative to explore approaches to inclusive city making in Freetown by including a broad range of stakeholders from government, city officials, civil society and NGOs, as well as residents, particularly those in living in informal settlements.

This project builds on a previous workshop held in Freetown organised by non-profit organisation Architecture Sans Frontières–UK (ASF-UK), with The Bartlett Development Planning Unit of UCL and SLURC; which tested ASF-UK's Change by Design (CbD) methodology for participatory planning and design in Cockle Bay. Workshop participants included community representatives from informal neighbourhoods across Freetown, local built environment professionals, staff from the Ministry of Lands and Freetown City Council, as well as researchers and lecturers from Njala University. The outcome of the workshop was a collective manifesto for participatory neighbourhood planning for a more inclusive Freetown, which has informed this process.

'This project also draws on the relationships and knowledge developed by previous SLURC action research and learning initiatives in Freetown, such as researches on urban livelihoods and health, as well as on urban risk

Team

The participatory planning activities and production of the CAAP were carried out as a partnership between University College London – The Bartlett Development Planning Unit (DPU), ASF-UK, the Sierra Leone Urban Research Centre (SLURC) as well as the Federation of Urban and Rural Poor of Sierra Leone (FEDURP-SL).

During the eight-month engagement the team worked closely with a variety of stakeholders, supporting the creation of a community steering group and wider advisory group to review the outcomes at every stage of the process. Over 25 workshops were facilitated with community members involving over 300 residents.

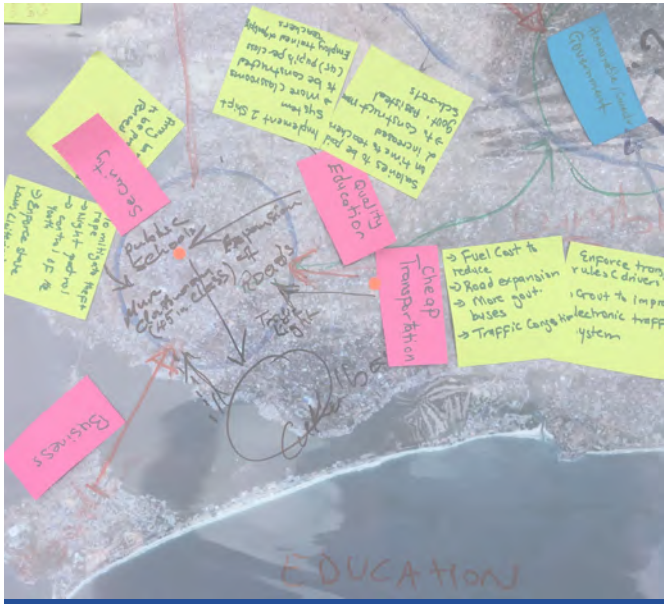
1.2 What is Community Action Area Planning?

Community Action Area Planning brings together area planning methods focused on spatial design with community action planning methodology which aims to provide groups with a framework in which decisions can be made locally. It puts communities at the centre of the development process. In Freetown there is an opportunity to create a community-level action plan that considers the needs and aspirations of people living in informal settlements, so they can be included in city-wide visions and advocate their rights to a more just and inclusive city.

The CAAP is an instrument that aims to:

- Support communities to advocate their rights to a more just and inclusive city.
- Provide a decision-making tool to help communities plan for future interventions.
- Provide a framework for testing different scenarios for settlement upgrading.
- Provide a framework to explore and assess different organisational structures and funding mechanisms that will support change.
- Support local and central government to further understand the needs and aspirations of residents living in informal settlements, helping to plan realistic and equitable interventions.

The intention of the CAAP is not to provide a fixed plan to follow. Rather, the focus is on



CHANGE BY DESIGN

Participatory Design and Planning

How can neighbourhood planning bring about inclusive city-making in Freetown?

Workshop Report January 2018

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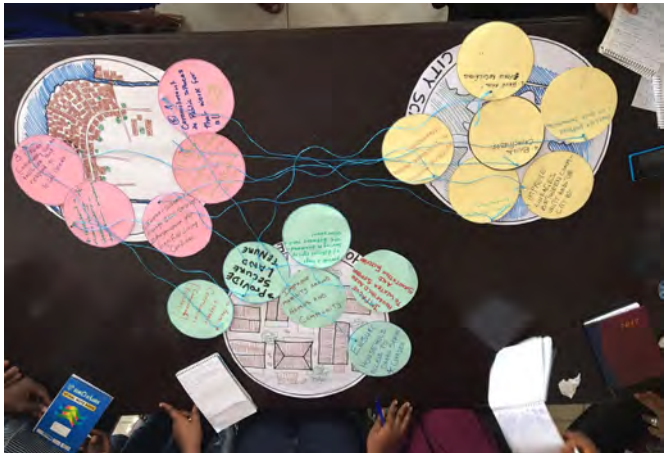

building the capacity of communities to use design and planning tools to explore different options for the future in a holistic way. This process considers the regulatory frameworks that exist in the city, but also identifies the need to adapt these to better reflect the conditions on the ground.

The key elements of this document are a series of planning principles and options for change. These have been captured in an accessible design guide that the community can use moving forward.

1.3 Structure

The structure of this document follows the different stages and scales of ASF-UK's Change by Design (CbD) approach. The CbD methodology is described in more detail in Section 2, including the details of who was involved in the process. A profile of the settlement describing the current conditions and location in the city is included in section 3. Section 4 provides an overview of the planning and policy conditions in Freetown and proposes how the CAAP could be incorporated into this structure.

A description of activities and outcomes of each scale follow in Sections 5 to 7 and are accompanied by key reflections from residents. Options and principles that have been generated at each scale are integrated in Section 8 to provide the framework for the 'portfolio of options' activities in section 9. The final Section captures the key findings from the process in the form of a design guide.

Alongside this document, a large-scale plan has been provided for the community, exploring how the design guide could be applied based on the collective visions generated during the process.

1.4 Limitations

Throughout the process the group has recognised that there is a distinct lack of information about informal settlements in Freetown. Informal Settlement Profiles completed by FEDURP and SLURC, although valuable, are limited. Moving forward, more detailed data is required to enable better-informed decisions about future changes that incorporate social and economic factors as well as environmental and health risks associated to the conditions of the built environment.

A wide range of people were consulted in the process of producing this CAAP. However, it was felt that moving forward more effort should be made to include hard to reach and vulnerable groups.

2

HOW THE CAAP WAS PRODUCED

2.1. Methodology

The development of this Community Action Area Plan was based on the ASF-UK Change by Design methodology for participatory design and planning. The methodology was applied in parallel in two distinct informal settlements, Cockle Bay and Dwozarck, where the Sierra Leone Urban Research Centre has strong community networks and has developed in-depth knowledge of the social and physical makeup of the area.

The ASF-UK Change by Design methodology is structured into four stages: diagnosis, dreaming, developing and defining. The 'diagnosis' stage analyses local realities and urban trends. The 'dreaming' phase uncovers the needs, aspirations and imaginaries of residents. The 'developing' phase aims to outline possible pathways to change. The 'defining' stage is concerned with the definition of concrete plans for action and urban design and planning guidelines. These stages are used to facilitate co-design activities at three different scales (home, community and city) and to conduct research around relevant urban planning policies and procedures—both formal and informal.

The process summarised in this document was carried out over a period of one year, including nine months of field-based research and three months of off-site data processing. In each settlement, fieldwork was divided into four phases. The first phase focused on the Policy and Planning aspects of informal settlement upgrading in Freetown—the outcomes of which are outlined in Section 4 of this report. This phase aimed to examine the context of upgrading processes in Freetown and define how the CAAP would fit within the local urban policy environment. The following three phases each focused on one scale of design: Home, Community and City. Within each scale, activities followed the usual Change by Design cycle, from 'diagnosis' through to 'developing'. The Home phase sought to understand the current housing conditions in Cockle Bay, and to imagine with residents what upgraded housing could be like (Section 5). The Community phase focused on social dynamics surrounding collective spaces—such as streets and community facilities—and infrastructures—including transport, water, sanitation, energy and information (Section 6). The City scale focused on citywide processes, conditions and experiences, with the aim to explore spaces in the city that are relevant to the lives of local residents, and identify residents' values and aspirations for the city as a whole (Section 7). Findings from these four phases were distilled in a distinctive set of design principles and options for informal settlement upgrading (Section 8). The fifth and last phase of fieldwork consisted of a Portfolio of Options exercise, which brought together the four streams of work and began to explore the kind of negotiation required between various interests in order to achieve a cohesive upgrading plan for the settlement. By the end of the session, participants created a community action plan consisting of a modelled and a drawn layout of the upgraded settlement and a set of organisational strategies (Section 9). Throughout the phases, all activities had a strong focus on social diversity with the aim to reveal and recognise the diverse range of experiences, needs and aspirations present within each settlement.

Figure 2.1: Dreaming Exercise

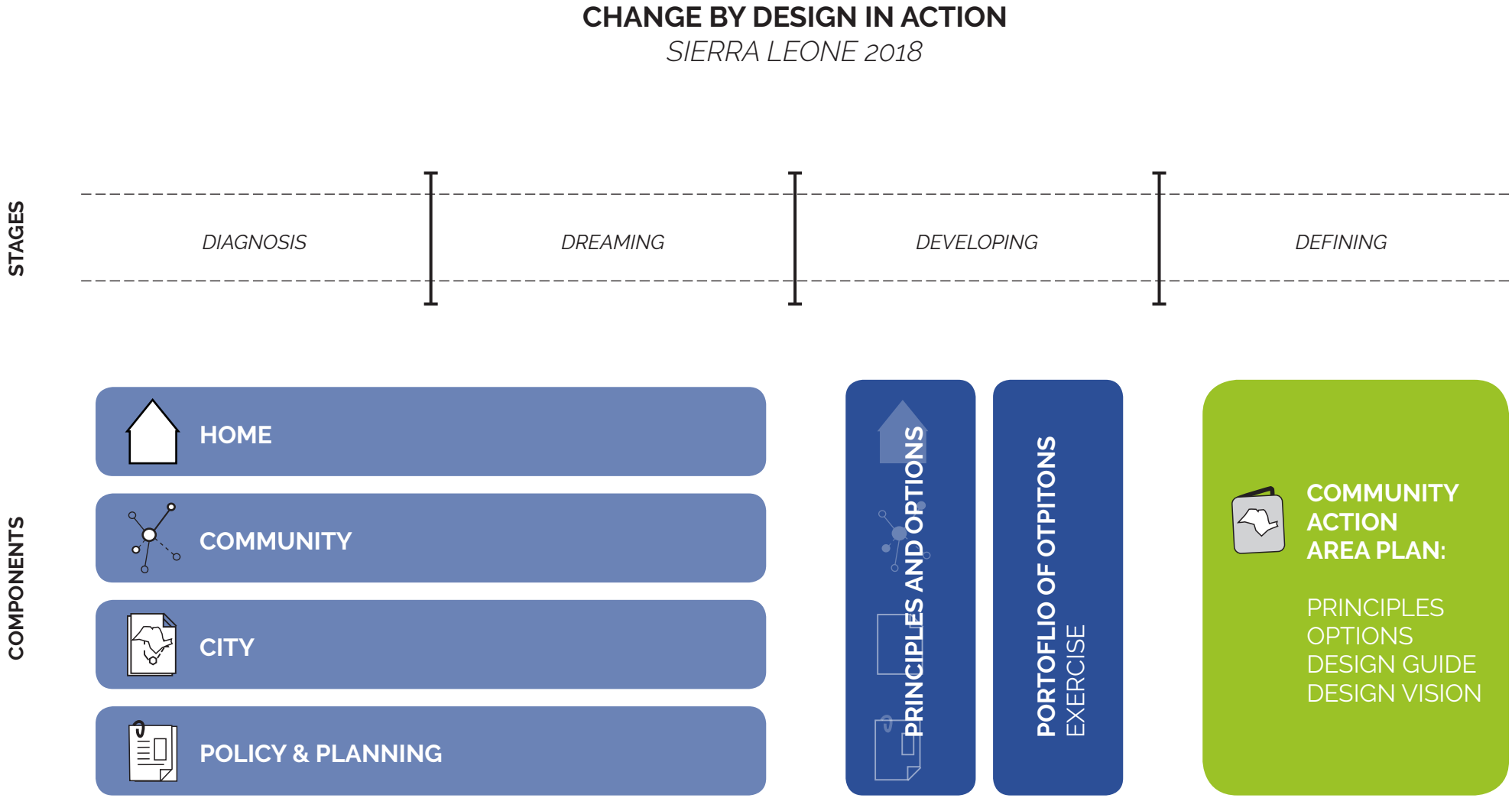

Figure 2.2: Methodology diagram

2.2. Who was involved

The development of the CAAP in both Cockle Bay and Dwozarck was led by Architecture Sans Frontières –UK in collaboration with the Sierra Leone Urban Research Centre. All co-design activities were coordinated by an ASF-UK field volunteer who was based in Freetown during the duration of the project. Day-to-day data collection and analysis were aided locally by researchers at SLURC and assisted remotely by the ASF-UK project team. In each of the settlements where this process developed, each co-design activity included approximately thirty residents.

In addition to this team, two stakeholder networks provided crucial support and guidance to the CAAP process. Firstly, an Advisory Committee was set up to provide strategic advice and link the CAAPs to other urban process relevant to informal settlement upgrading. The Advisory Committee comprised of representatives from local and national governments: Freetown City Council, Sierra Leone Ministry of Lands, Sierra Leone Ministry of Housing and Office of National Security; from non-governmental organisations involved in supporting residents in informal settlements: the Young Men's Christian Association–Sierra Leone (YMCA-SL) and the Centre of Dialogue on Human Settlement and Poverty Alleviation (CODOHSAPA); from city-wide grassroots groups: Federation of the Urban and Rural Poor (FEDURP); and from each of the two settlements involved in the planning process. The Advisory Committee met the ASF-UK/SLURC team at the beginning of the planning process to discuss the strategic value and audience of the initiative; during the process, to monitor direction; and at the end of it, to provide feedback on what had been done and help identify future steps.

Secondly, a local Steering Committee was set up in each of the two settlements, with two primary aims: (i) to inform the development and application of the CAAP methodology step-by-step and (ii) to help ensure that all planning activities would involve a representative sample of the settlement's residents, which included supporting the process of community mobilisation. The Steering Committee met the ASF-UK/SLURC team at the end of each phase of fieldwork, to provide feedback on the process thus far and give advice as to the best ways forward. The Steering Committee also met the team at the end of the whole process, to provide feedback on the CAAP process and on the full draft of this document—as reported in Section 11.

Figure 2.3: Group photo after developing a portolio of options

3 SETTLEMENT PROFILE

1

3.1 Dworzark in Context

The Dworzark Context section explores the site and situation of the settlement, where it is in Freetown, the topography and focal points nearby.

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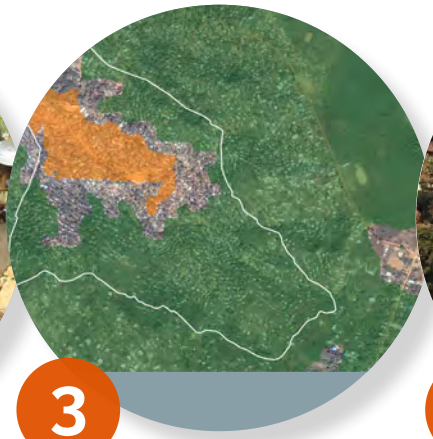
3.2 Landscape and Topography of Dworzark



3

3.2 How has Dworzark developed

This section reveals how the settlement has grown over time,

4

3.4 Urban character of Dworzark

This section looks at the elements of the settlement which make it distinguished and authentic. Buildings, materials, and housing layouts are explored

5

3.5 Character Areas

This section looks at the elements of the settlement which make it distinguished and authentic. Buildings, materials, and housing layouts are explored

6

3.6Access and Mobility

This section explores transport infrastructure also the conditions of roads and paths within the settlement

7

3.7 Settlement Demographics

This section looks at the key statistics in the settlement including density and service provision

8

3.8 Economy and Livelihoods

This section looks at the key industries that exist in the settlement

9

3.9 Public and Environmental Health

This section explores literature surrounding the primary health and environmental concerns related to the settlement

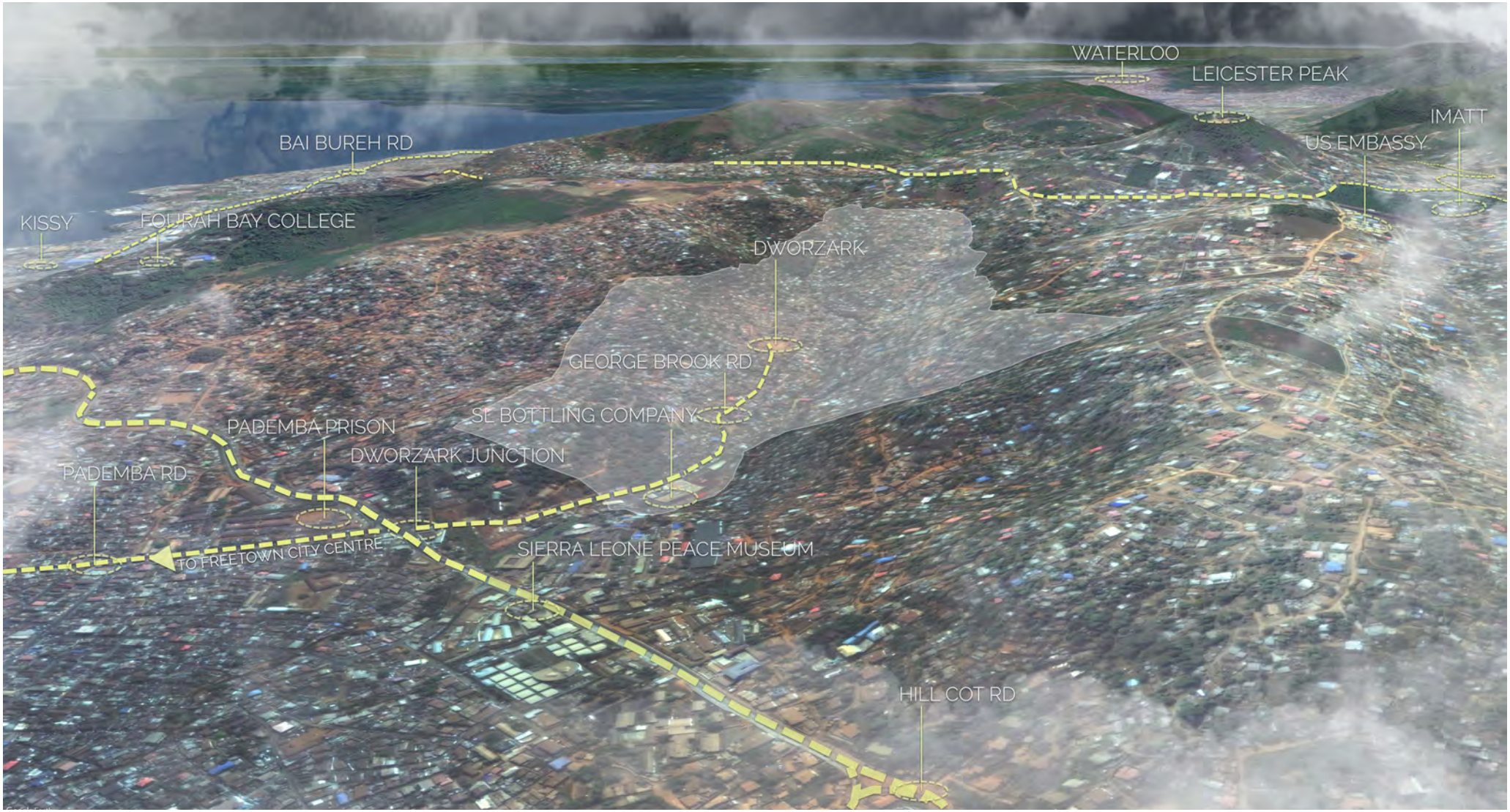


Figure 3.1 : Aerial View of Dworzark

3.1 Dworzark in Context

Defined by the steep and rugged valley in which it is situated, Dworzark is one of Freetown's largest informal settlements. Also known as Dwozark or Dwazarck the settlement covers an area of approximately 126 hectares with an estimated population of over 16,500 in over 5000 households (SDI, 2017) however current projections suggest this is much higher. The community is fairly well provisioned with a variety of facilities including twelve schools, a playground, general shops, informal markets, food shops, police stations, religious buildings, a formal market, furniture shops, communications, and mechanics (SDI, 2017). In spite of having services nearby and being close to Freetown's city centre, residents living higher up the valley have extremely poor access to goods and services.

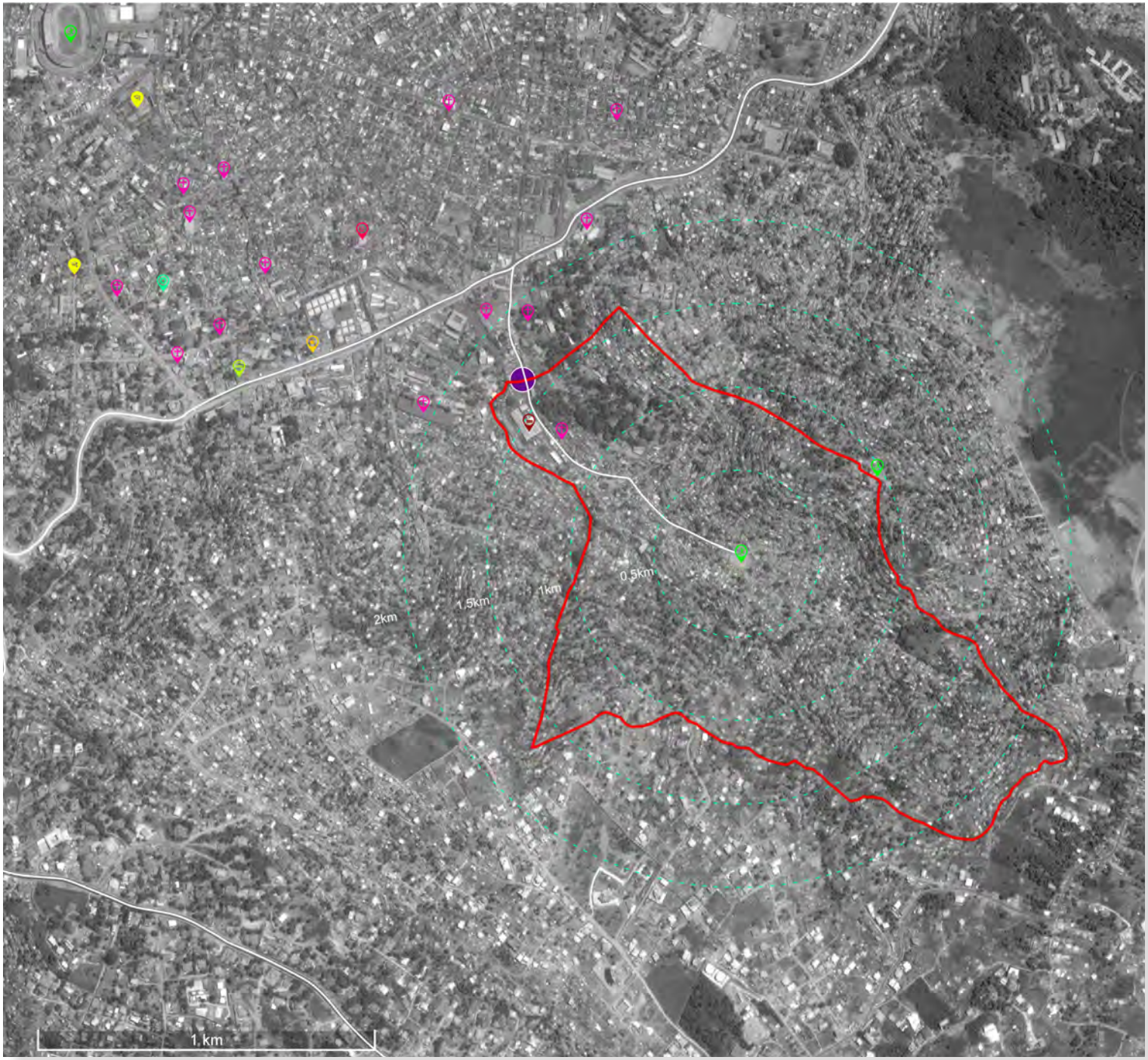


Figure 3.2: Dworzark boundary and local amenities

- Supermarket
- Health centre or Hospital
- Bank
- School
- Petrol Station
- Recreational Facilities
- Access to Community
- Public Transport Stop
- Market
- Hotel or B&B
- Cafe, Bar or Restaurant
- Church
- Mosque

3.2 Landscape and Topography of Dworzark

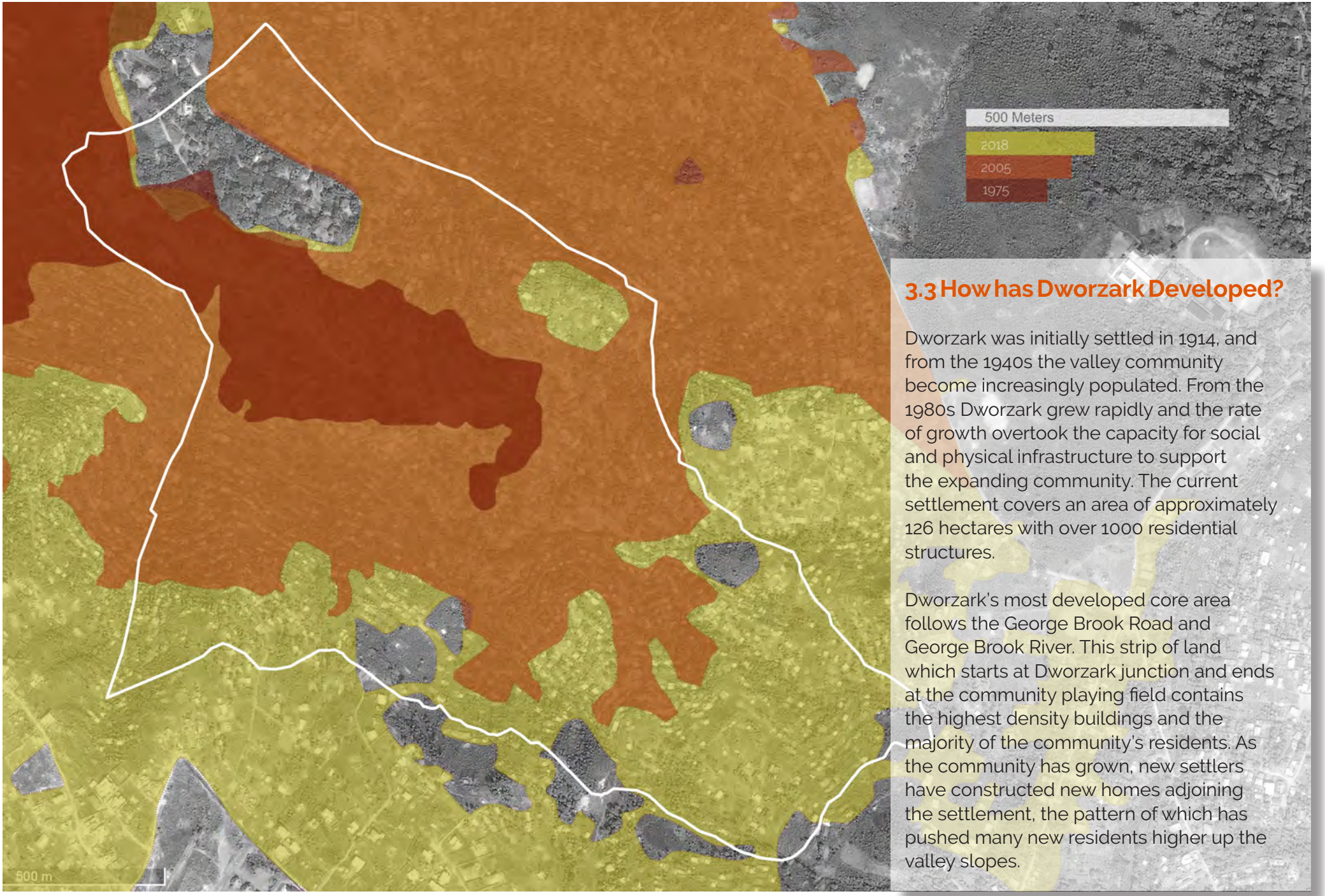
The settlement is precariously located on the northernmost fringe of the Peninsula Mountains and is five kilometers away from Freetown city centre (Cumming & Harrison, 2012:15). With a topography ranging between about 57m at the lowest point and 316m at the highest,, the incline of some of Dworzark's steepest slopes can be as high as 7.1%. The settlement is characterised by large boulders which have been freed over time by deforestation and soil erosion, processes which when combined with unplanned construction and extreme weather events can create the conditions for devastating mudslides, rockfalls and floods (IBID, 2012:15).

Due to periodic heavy rains in the wet season, a number of severe ravines form annually along the George Brook river course, and many of the dirt paths wash away, resulting in a landscape that can change significantly from one year to the next.

Terracing in Dworzark

The images opposite illustrate how the residents of Dworzark have expanded the settlement up the George Brook River valley.

Figure 3.3-3.4: Photographs of Dworzark topography



3.3 How has Dworzark Developed?

Dworzark was initially settled in 1914, and from the 1940s the valley community become increasingly populated. From the 1980s Dworzark grew rapidly and the rate of growth overtook the capacity for social and physical infrastructure to support the expanding community. The current settlement covers an area of approximately 126 hectares with over 1000 residential structures.

Dworzark's most developed core area follows the George Brook Road and George Brook River. This strip of land which starts at Dworzark junction and ends at the community playing field contains the highest density buildings and the majority of the community's residents. As the community has grown, new settlers have constructed new homes adjoining the settlement, the pattern of which has pushed many new residents higher up the valley slopes.

Figure 3.5: Dworzark's historical development

Cross Section of Dworzark

Several market spaces exist across the settlement

Power lines in the settlement

Streams cut through the settlement these can cause flooding in the rainy season

Larger homes have been built on hilltops above the settlement

Example of a terrace stone wall with vegetation

Figure 3.5: Topographical cross section of Dworzark

Pathways for access between dwellings

Steps for access cut through the hillside

Small shops exist in most areas of the settlement

Homes are terraced on the steep slopes

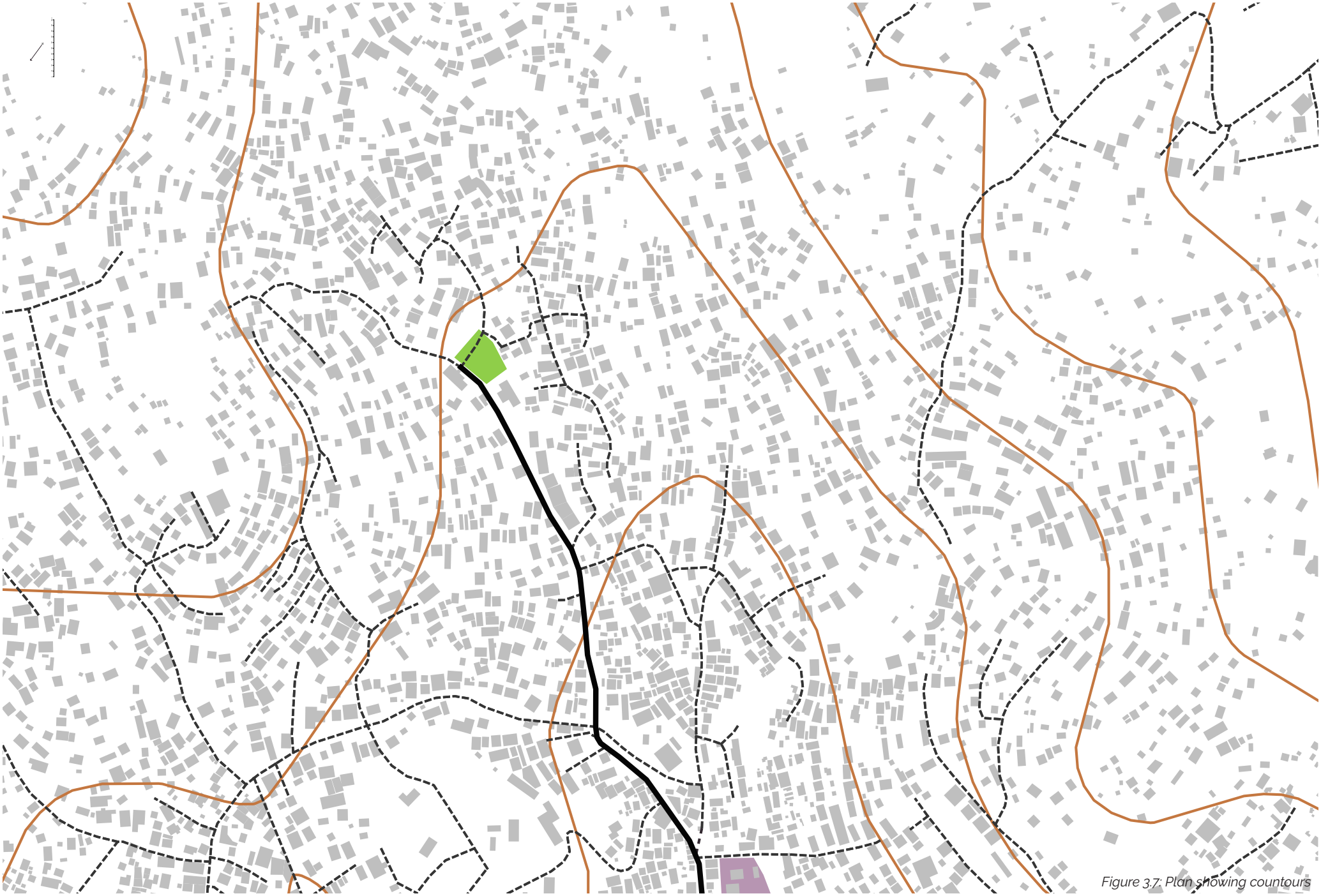


Figure 3.7: Plan showing countours

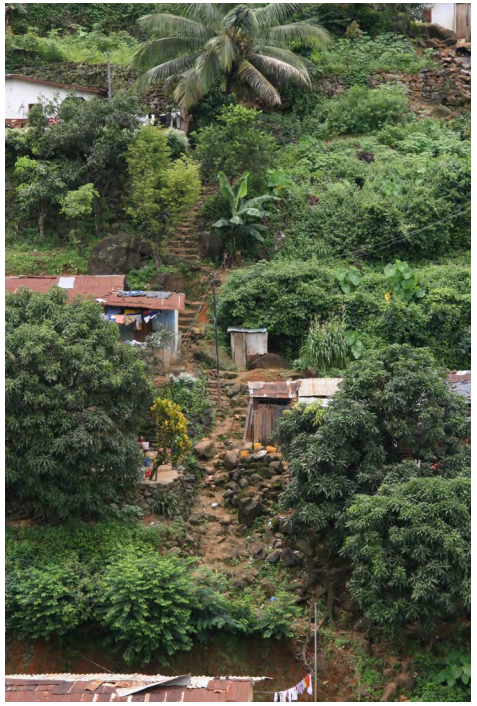


Figure 3.8: Photographs of Dworzark's urban character.

3.4 Urban Character of Dworzark

The urban form of the settlement is characterised by buildings, laid out in an unplanned organic style with dirt or grit footpaths separating homes. Buildings are often tightly packed together and have irregular evolving layouts as many inhabitants modify their properties to fully utilise allocated space as the need arises. There is also an almost constant need for residents to maintain a network of drains and ditches outside their houses to avoid localised and larger scale flooding.

The settlement is very highly populated with buildings which are low in height and massing (mostly houses with one storey and in some cases two or three). The steep topography has enhanced the legibility within the site, however there are very few local landmarks. Dworzark's building materials are predominantly characterised by panbody (corrugated iron sheet), mud bricks, mud cement blocks, tarpaulin, concrete/cement, local stone, car tyres and local timber. The materials themselves can make homes extremely hot in the summer months and can leak in the rainy season.

Residents in Dworzark are actively engaged in construction of recreational facilities, such as cinemas, bars, and football fields. There have also been community-led initiatives to install street lighting, and to cut steps in certain necessary areas of the settlement.

Dworzark has a system of household savings groups. Residents explained that 'Osusu' savings groups are intended for upgrading household structures and improving the local surroundings. The process of upgrading structures in Dworzark is inclusive and requires inter-family consultation about plans before construction or modification. In order to add a new room to a property the family in question discusses several factors including where it should be located, the size, the cost and who will occupy it.

3.5 Character Areas

Dworzark has unofficially been subdivided into neighbourhood units which the communities have named after nations, including Spain, France, Nigeria, USA, Brazil and Italy. The 'nations' maintain strong inter-community relationships, where they collaborate on certain projects and play football matches between one another. The most distinctive neighbourhood zones are Nigeria, USA, Cameroon and Spain, which are all predominantly located in the higher reaches of the settlement. France, Brazil, England, Germany and Italy characterise the urban core of the settlement where the topography is flattest and the oldest homes were constructed. These neighbourhoods are also the most affluent and established but frequently suffer most from drainage issues and flooding.

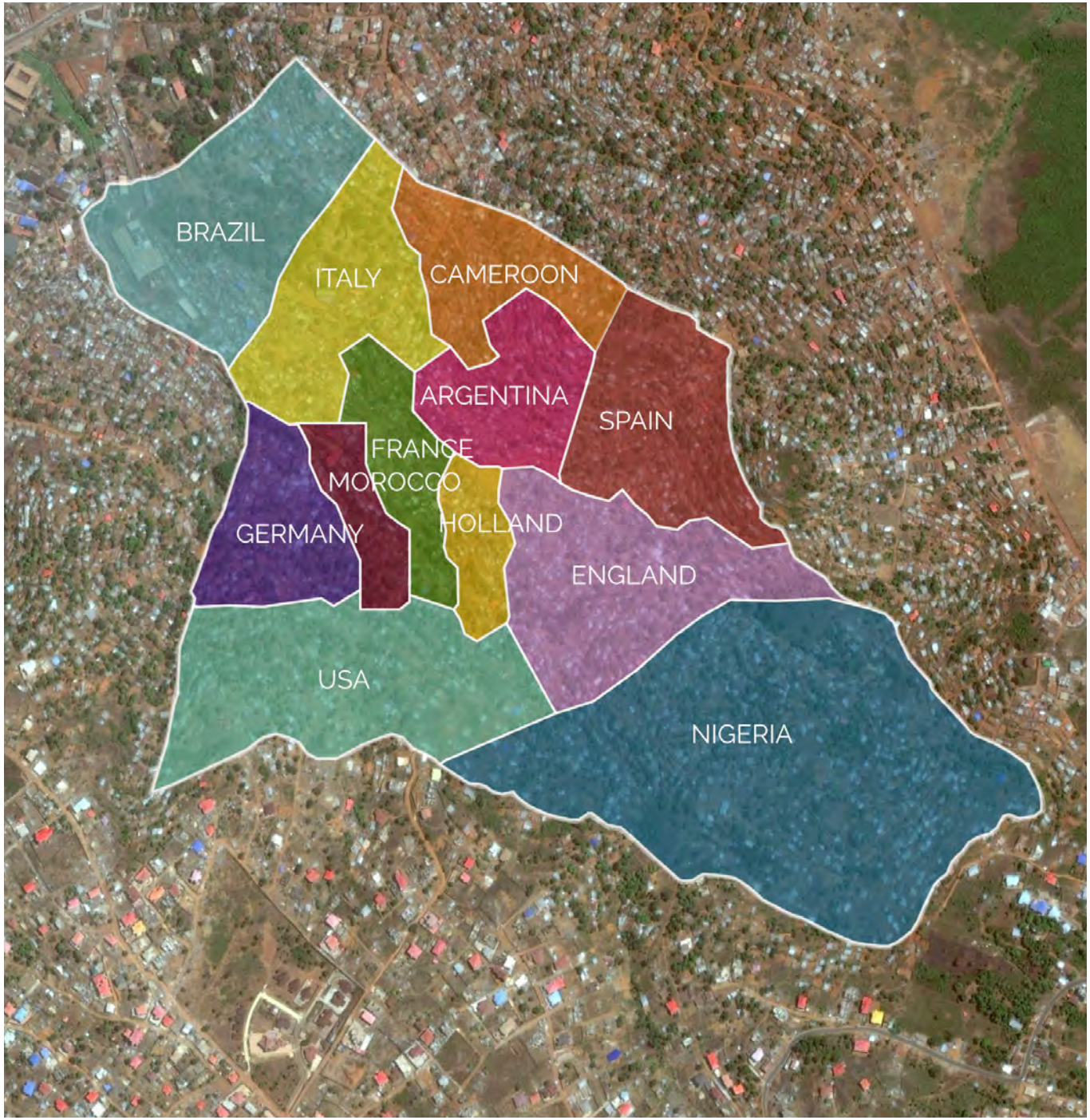


Figure 3.9: Character areas

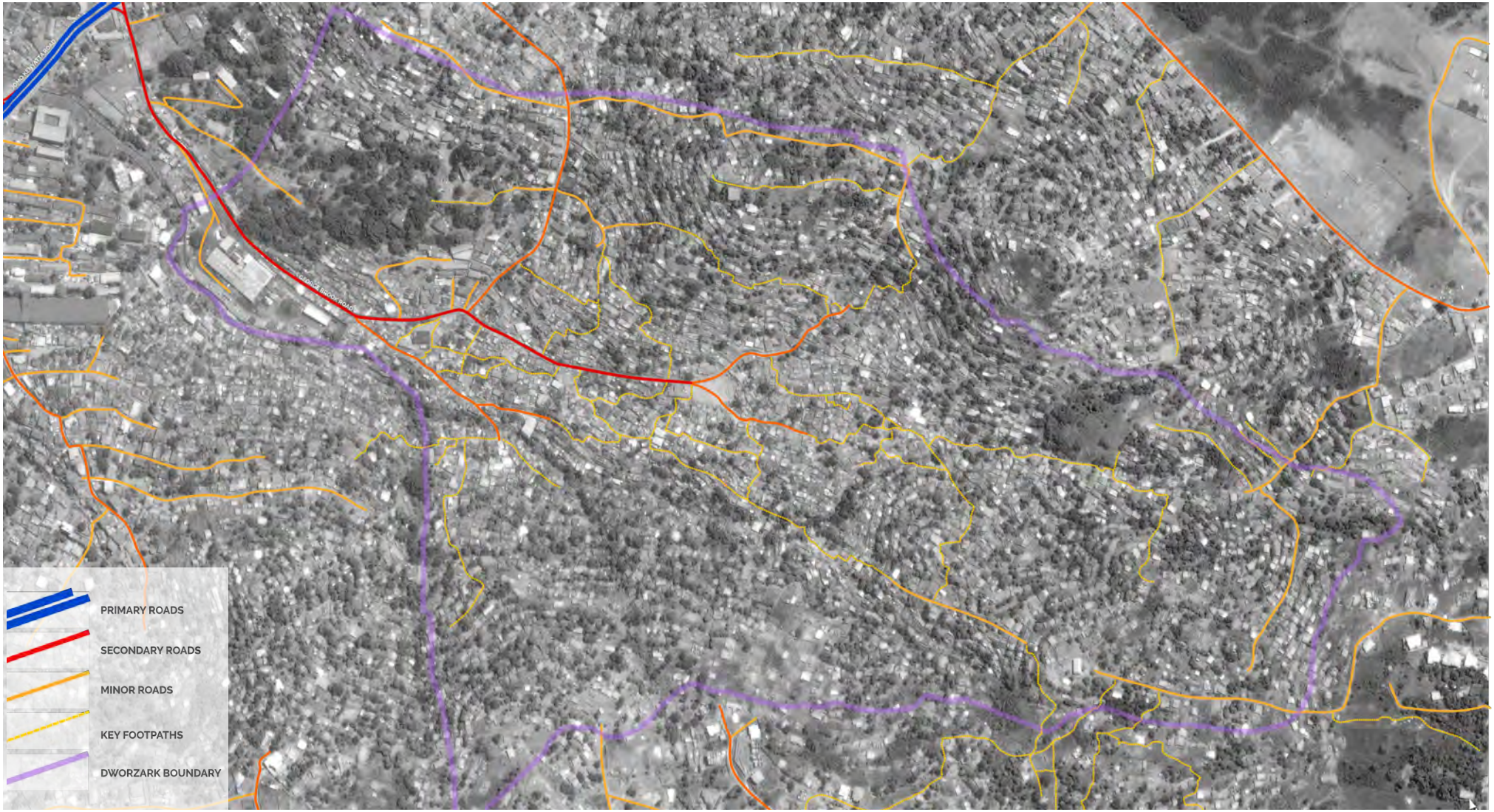


Figure 3.10: Access and mobility diagram

3.6 Dworzarks access and mobility

The settlement is accessed via George Brook Road which is a formal road and ends at the bottom of the valley where Dworzark is located. There are a variety of personal and public transport choices operating from George Brook Road including okadas (motorbikes), poda-podas (mini bus), and taxis. It is possible for these forms of transport to access the site, however vehicular mobility within the settlement is severely restricted by the lack of formal roads (SDI, 2017). Residents have designated special areas for transport hubs where taxis, poda-podas and okadas can service the community. These are mostly located along George Brook Road and are extremely popular as individual car ownership is not very common. In spite of this lack of formal roads, Dwarzark is fairly walkable and walking is the main way of getting around

3.7 Settlement Demographics, tenure and ownership

Dworzark is home to approximately 16,500 residents, with 1034 residential buildings and 5236 households which makes the average household size roughly 7 persons per house (SDI, 2017 & Koroma, 2018: 10). In 2012 the population of the New England area in which Dworzark constitutes a large part, had a population of 49,000 but the Freetown City Council has projected this to fall to 30,540 persons' by 2028 (FCC, 2014: 146). Currently 65% of Dworzark's population is under 30 years if age.

Unlike some of the informal settlements based in Freetown's coastal areas, Dworzark is recognised by Freetown City Council and many residents are able to legally own land through title and permission. The SDI reveal that 50% of the settlement is privately owned, while 25% is owned by the municipality, and 25% is customary land (SDI, 2017). In spite of land ownership in the community being quite high, there are a number of ownership disputes where land is contested. These disputes often hinder investments in improved housing and public infrastructural development (Koroma, 2018: 10).

50% Privately Owned

25% Customary Land

25% Municipality Land

Figure 3.11: Dworzark demographics, tenure and ownership

Figure 3.12: Photographs of economy and emplyment

3.8 Economy and Employment

Dworzark has a number of informal and formal economic pursuits. Due to its proximity to the city centre, many residents travel into the inner city for work or to sell their goods. There are 51 formal businesses operating from Dworzark (SDI, 2017), however unemployment is still high, especially among the youth population. The most common form of employment in Dworzark is stone quarrying. Quarrying is practised in the area due to the easy access to a large supply of stone and is worked mostly by men. According to Koroma and Rigon, more than '500 residents of Dworzark are currently involved in different stone quarrying' (Koroma & Rigon et al, 2018:24). Stone is mostly broken up and used for aggregate in buildings and infrastructure. There have been moves to curtail the production of 'street stone' by banning stone quarried in public spaces. As a result of his ban, stone is often sought from other areas within the city and as a result the Dworzark stone workers increasingly compete for stones from residents of neighbouring hillside communities, including IMATT, Moyiba and Regent. (Koroma & Rigon et al, 2018:25).

Another key economic activity within the settlement is small commerce. Koroma and Rigon reveal that many women resident to Dworzark work locally as 'petty traders engaged in "table top businesses". There is one formal market within Dworzark and approximately 152 buildings which are residential homes as well as businesses. These home-based enterprises are usually conducted by women, however, very few women are in formal employment'. In many cases, women who don't work in commercial activities, grow crops along the banks of the George-Brook Stream, which flows through the settlement (Koroma & Rigon et al, 2018:24). Roughly 3.5% of the land area in Dworzark is owned by the Sierra Leone Bottling Company which is another major employer within the community.



Figure 3.13: Health challenges

3.9 Health

Dworzark has 12 public toilets used everyday by more than 2,500 people (Koroma & Rigon et al, 2018:24). The community is not supplied with municipal water infrastructure, instead they rely on twenty public water points, of which nine are water taps and the rest are wells and springs, as well as the George-Brook River. Between them, these water points serve more than 4,000 residents every day, The cost of fresh water to the average household is approximately 50,000SLL or $6.50 per month (SDI, 2017). Like many communities in Sierra Leone, Dworzark was affected by the Ebola outbreak in 2014, and has had outbreaks of cholera in the area with a small number of fatalities (Y Care International, 2012: 2).

Dworzark has one community health centre which is roughly thirty minutes walk from the centre of the settlement and is accessible to most residents. There have been two major fire outbreaks between 2010 and 2016, which were attributed to domestic fuel use and faulty electricals (Koroma, 2018: 10). Many households often rely on solid fuel stove burners to cook with. Domestic solid fuel stoves have also been shown to cause increases in 'acute lower respiratory infections (including pneumonia) in young children, and chronic obstructive pulmonary disease and lung cancer in women' across many developing countries (Desai et al, 2004: vii). The nearest hospital to the people of Dworzark is over an hour walking distance from the settlement, and the nearest clinic for Aids is between thirty minutes to one hour walk from the settlement (SDI, 2017).

The natural environment within Dworzark is poorly maintained, with residents often dumping domestic waste into the George Brook River. There are no official garbage collections from the settlement, however, there is a common dumping area inside the settlement (SDI, 2017). Domestic dumping poses an environmental risk to residents living at the bottom of the George Brook River valley in both Dworzark and Kru Bay. Waste can contaminate the watercourse which people rely on for drinking water, and also cause localised flooding.

Another danger for the community is rock falls which happen more frequently in the rainy season when larger boulders can be washed free from the soft ground they have been held in. these rock falls are exacerbated by erosion and construction on the steep hillsides (Koroma & Rigon et al, 2018:24). Deforestation is another major issue contributing to rock falls, mudslides and floods in the George Brook River Valley. There used to be thick forest across the region,

Figure 3.14: Sanitation and risk

however 60% of woodland south of Freetown, which was critical to holding soil together, has been deforested over the last 40 years (Brar, 2018).

There are a number of NGOs and charities who engage with residents in Dworzark on issues ranging from education to health. GOAL and CONCERN, among others, have provided water tanks, bridges, and public toilets for the community, as well as recreational facilities including the Dworzark community centre. Many residents in Dworzark are heavily involved in health and sanitation campaigns where they are trained and learn how to build capacity. These programs have in many cases assisted with construction of drains and retaining walls to protect the community from major environmental events.

The settlement has also recently established a Community Disaster Management Committee (CDMC) and a system of Community Health Workers (CHWs) which were created in light of recent natural disasters across the city and within the community. Dworzark also has an active set of YMCA Youth groups, which undertake activities that focus on alleviating specific physical risks within their communities. These include disaster prevention such as breaking and removing large boulders and clearing the existing drainage channels of waste, as well as raising awareness and advocating the local authorities to support these efforts through waste collection services (Y Care International, 2012: 2).

4

PLANNING & ENVIRONMENTAL POLICY

This chapter explores current planning policy as well as emerging planning policy. It also explores policies which relate to the environment. Chapter four also features a stakeholder analysis and discusses where a Community Action Area Plan could fit into the current policy framework for Freetown.

4.1 Introduction to urban planning policy

Planning policies are the set of rules agreed by the government, council or intergovernmental organisation which dictate what can and can't be done within geographical area. Some planning policies are mandatory, while some are more advisory. It is often the case that as planning documents look at increasingly smaller geographic areas, they become more specific and detailed to the place they cover. Policy documents usually become more generalised as they cover larger geographic areas.

Planning in Sierra Leone is based on the British discretionary planning system, which means that there is a general set of policies which have been agreed, but these policies have some flexibility or ability to be negotiated to allow decision makers to make decisions which might improve the local area regardless of whether the final decision reflects absolutely what's what policies are written.

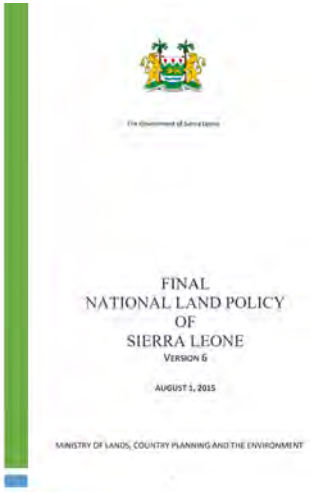
4.2 Review of Planning Policy Documents

Freetown currently has two officially recognised planning documents which dictate planning control for the city. The Town and Country Planning Act of 1960 (TCPA) is still the primary legislation that provides for town and country planning in Sierra Leone. The TCPA however, is not widely used as a planning document..

The Freetown Improvement Act, (FIA) is used more commonly. Written in 1960, it functions as the basic 'development control' tool for land use and building construction in Freetown. The FIA has had limited success in more affluent and historic neighbourhoods within Freetown with regard to materials, built form and road layouts.

Unfortunately the FIA has proved inadequate at providing regulations and instructions for less affluent communities, especially with regard to the growth of informal settlements. This is due mostly to the fact that most informal settlements in the city were extremely small or didn't exist prior to the publishing of the FIA. In recent years there has been a strong push internationally for decentralisation of planning, This means that a lot of the planning powers shared from central governmental institutions and ministries to local, regional, municipal and city governmental institutions. Decentralisation also includes increased participation from the general public in some areas of local governance, Sierra Leone has embraced the push to decentralise the functions of many ministries as part of the Local Government Act 2004.

The creation of the 2015 National Land Policy of Sierra Leone (NLPSL) was intended to function in a similar way to the UK's National Planning Policy Framework as set of national policy priorities and conditions which are intended to guide local or municipal plans and policies as part of this decentralisation process. The NLPSL has not



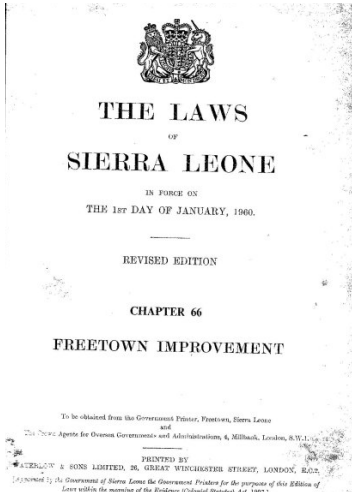


Figure 4..1: Policy documents

been officially adopted yet by the government so it is non-binding and its policies are not mandatory, however, there is still a strong chance the document will be adopted as it is the most up to date planning document of its type produced in Freetown in over 30 years.

Published at the same time as the Local Governance Act of 2014, the Freetown Structural Plan (FSP) is the planning document which was intended to provide planning direction for the municipality of Freetown. Unfortunately it shares a similar status to the NLPSL and is yet to be officially finalised and adopted into the wider planning policy framework. With support from the office of Freetown's Mayor, the Sierra Leone Urban Research Centre and Freetown City Council, there have been recent initiatives to help formalise the FSP as it is the most advanced planning document of its kind in Sierra Leone and has policies which address the complex set of issues which relate to informal settlements in Freetown.

In 2015 more than 150 world leaders signed the 2030 Agenda for Sustainable Development, which contained the Sustainable Development Goals (SDG's), a set of 17 ambitious global goals which include reducing global poverty, inequality and hunger, by forming a comprehensive list of development targets. SDG 11 focuses on inclusivity of cities, public safety, resilience and sustainability. Sierra Leone is a signatory of the 2030 Agenda for Sustainable Development and is accountable to them.

The New Urban Agenda was also produced by the UN and was adopted as part of the 'Quito Declaration on Sustainable Cities and Human Settlements for All' during the Habitat III conference in Quito, Ecuador. The new urban agenda functions as more of a framework document focusing on sustainable, equitable cities for all and builds on the SDG's

As the FSP and NLPSL are the most comprehensive plans available and considering their emerging status, this Community Action Area Plan is working towards fulfilling the policy conditions set in those two documents while recognising international policy obligations from the UN.

4.3 Key Policies which relate to Informal Settlements

Local Governance Act of 2014
Part XV–Transparency, Accountability and Participation, Section 108 (p.54):

*The Ministry shall promote **participatory processes** in local councils and encourage citizen's **inclusion and involvement in governance***

National Land Policy of Sierra Leone 2015
Section 9.4 improving and relocated. Informal settlements (pp.108-109):

9.4.A) take an inventory of squatters and people who live in informal settlements;
9.4.B) determine whether land occupied by squatters is suitable for human settlement;
*9.4.C) where informal tenure to land exists, the Government should acknowledge it in a manner that respects existing formal rights under national law and in ways that **recognize the reality of the situation and promote social, economic and environmental well-being;***
*9.4.D) promote policies and laws to provide **recognition to such informal tenure.***
9.4.E) The Government should take all appropriate measures to limit the informal tenure that results from overly complex legal and administrative requirements
*9.4.G) Where it is not possible to provide legal recognition to informal tenure, the Government should **prevent forced evictions that violate existing obligations under national and international law,** and consistent with relevant provisions made with regard to expropriation and compensation in this policy'*

Freetown Structural Plan 2014
Housing Policy and Programme
Section 9.7. (p..87):

*9.7.1) long-term strategic slum-upgrading **'must involve the Freetown population at all levels and aim at the active participation and co-ordination in the implementation phases of owners, tenants, NGOs, developers and other private sector housing initiatives, as well as government-supported affordable housing schemes.***

housing policies which aim to mitigate the effects of natural disasters (83):
Slum settlements established in risk-prone areas exposed to flooding or landslides will, when funds are available, be transferred to

resettlement areas within the municipality, following the principles in the FCC Resettlement Manual.

Building and development control will be strengthened and, after the 1st of January 2015, construction of new houses or extensions of existing dwellings in risk-prone areas exposed to flooding or landslides will immediately be demolished.

Houses and residential settlements established after 1st of January 2015 in areas prohibited by the provisions of the National Environmental Protection Act – such as along the coast, in creeks, rivers, and close to water bodies – will be demolished.

FCC will, in cooperation with other local governments, prepare affordable sites and service schemes in metropolitan development areas for voluntary resettlement from natural disaster risk areas in Freetown.

Freetown Structural Plan 2014 Environmental Policies 4.1.3 Creeks (pp.20-22):

•Local Plans for the Freetown planning areas will have to identify the sensitive creek area to be protected.
•Communities living in the creeks on flooding-prone land must, within the short term, be resettled and the creeks protected from further degradation.
•Communities living close to the creeks on flooding-safe land must be involved in the restoration of the creeks.
•Urban renewal projects ***shall promote drinking-water supply, sanitary facilities and solid-waste collections systems.***
•Awareness-raising, vocational training and introduction of alternative income-generating micro projects shall be introduced to community members in order to stop over exploitation and mismanagement of the resources of the creeks.

UN-Habitat, 2030 Agenda for Sustainable Development 2016: 2-3):

Target 11.1: By 2030, ensure ***access for all to adequate, safe and affordable housing and basic services and upgrade slums.***

Target 11.2; provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention vulnerable individuals in society

Target 11.3: enhance ***inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning***

Target 11.5: significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying ***special attention to air quality and municipal and other waste management.***

Target 11.B: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards ***inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters****, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.*

UN Habitat III, New Urban Agenda 2017 (Our Vision, pp.5-7)

11. ***cities for all,*** *referring to the equal use and enjoyment of cities and human settlements, seeking to promote inclusivity.*

12. human settlements where all persons are able to enjoy ***equal rights and opportunities.***

13. (a) Fulfil their social function, including the social and ecological function of land, with a view to progressively achieving the full realization of the ***right to adequate housing.*** *(b) Are p****articipatory, promote civic engagement, engender a sense of belonging and ownership*** *among all their inhabitants. (c) Achieve* ***gender equality*** *and empower all women and girls by ensuring women's full and effective participation.*

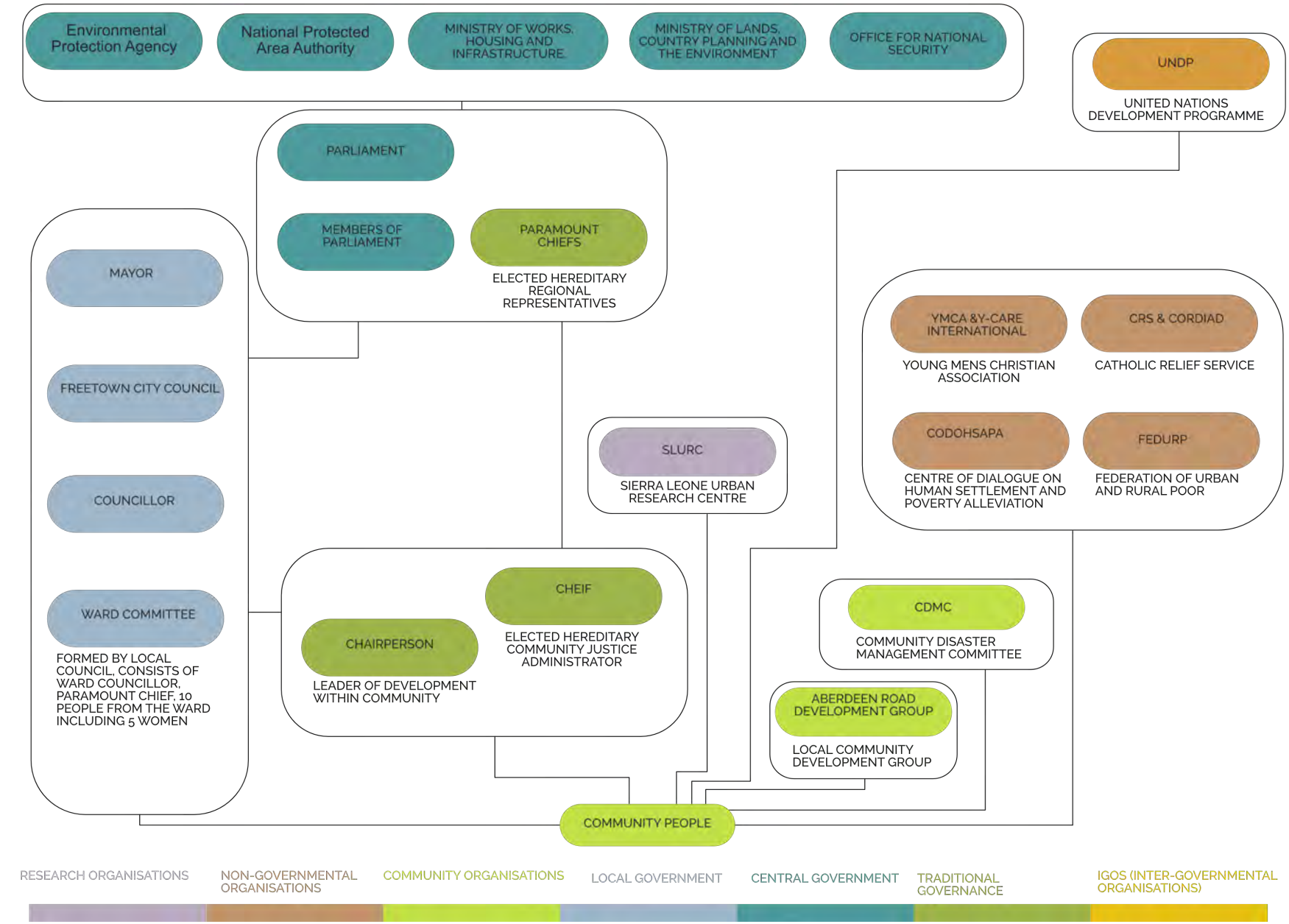


Figure 4..2: Stakeholder diagram

4.4 Stakeholder Analysis

The stakeholder analysis diagram shown above illustrates the general hierarchy of urban development organisations, their role in urban planning and how the stakeholders relate to one another.

Organisational Influence and Presence

The Organisation Influence and Presence diagram charts the perceived influence that organisations have and their presence in the community relating to urban development issues within Cockle Bay, based on discussions with the advisory committee.

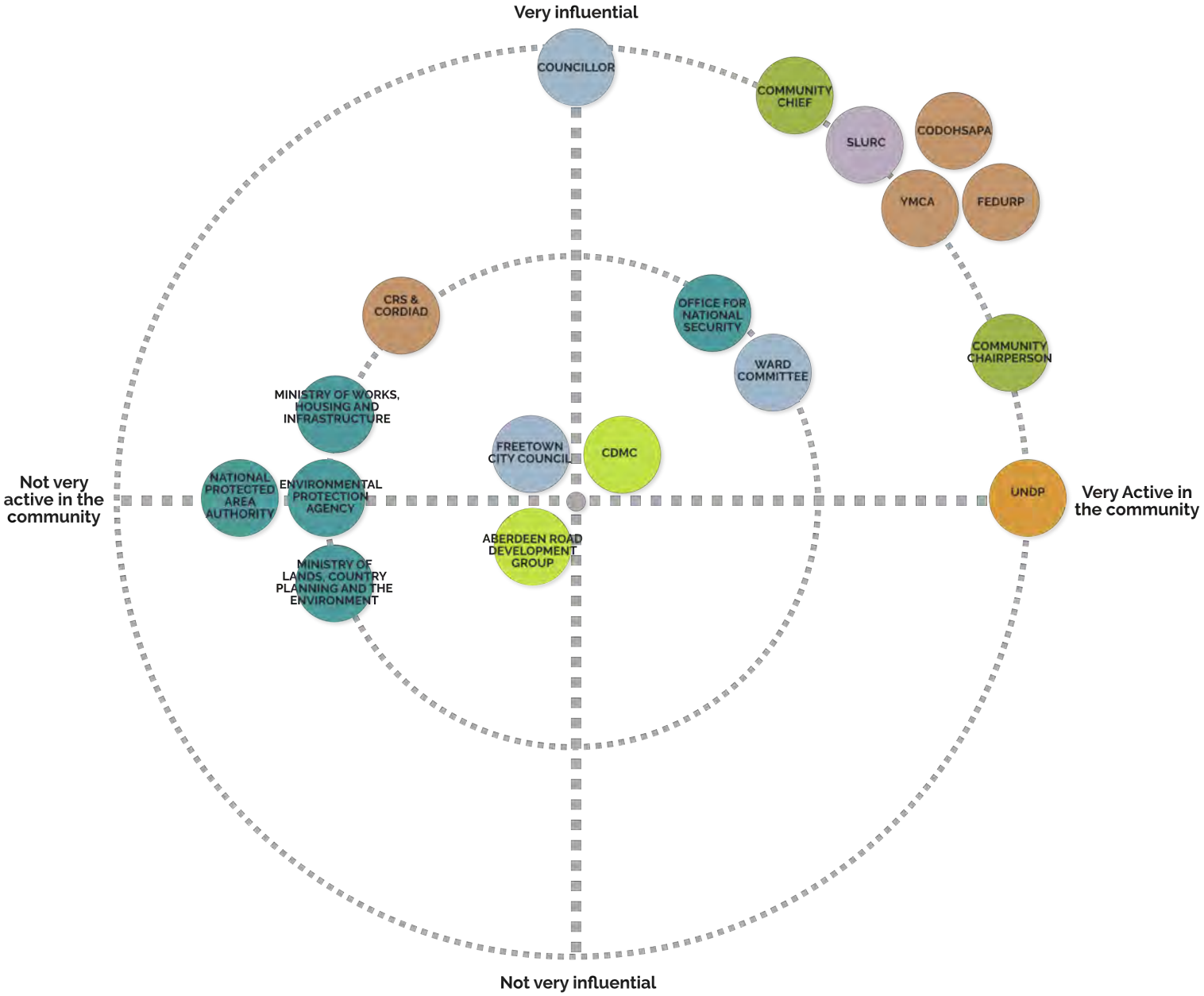


Figure 4..3: Stakeholder analysis

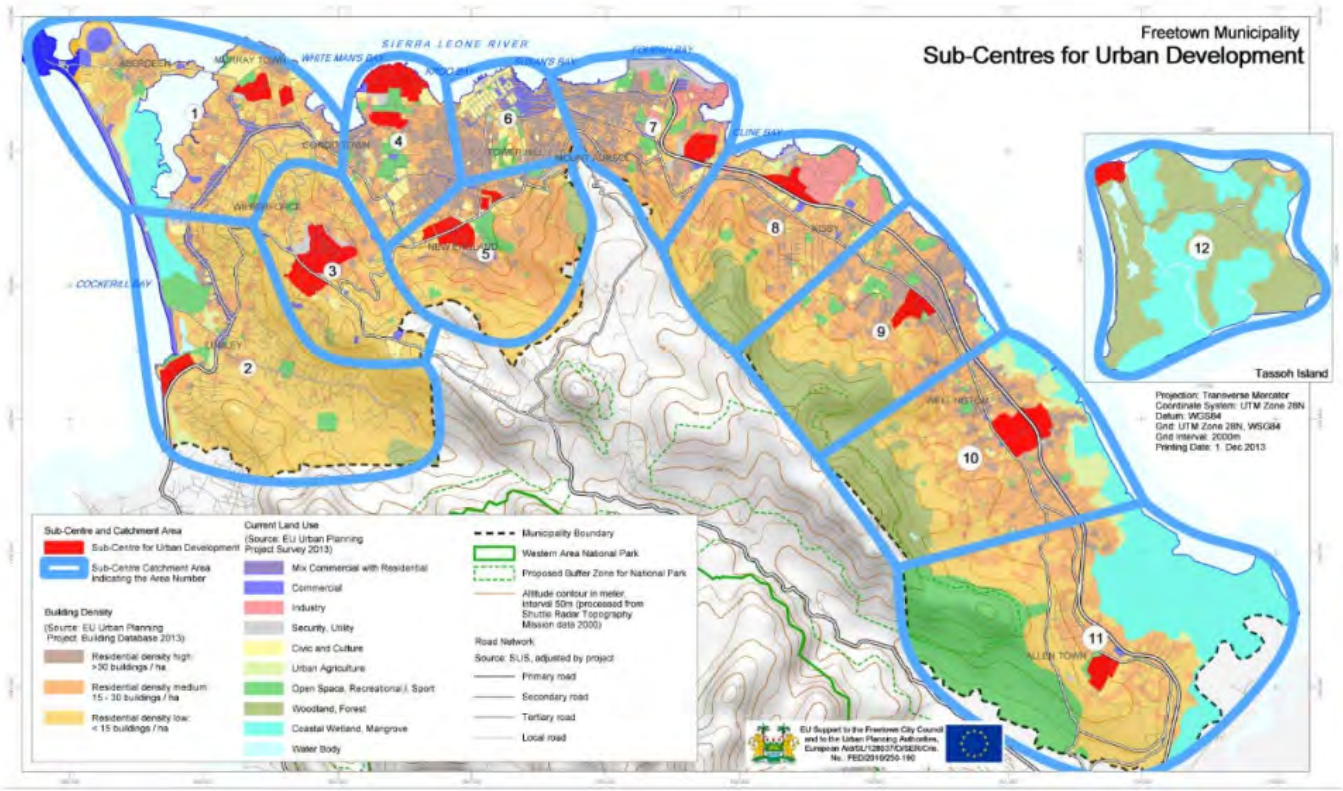
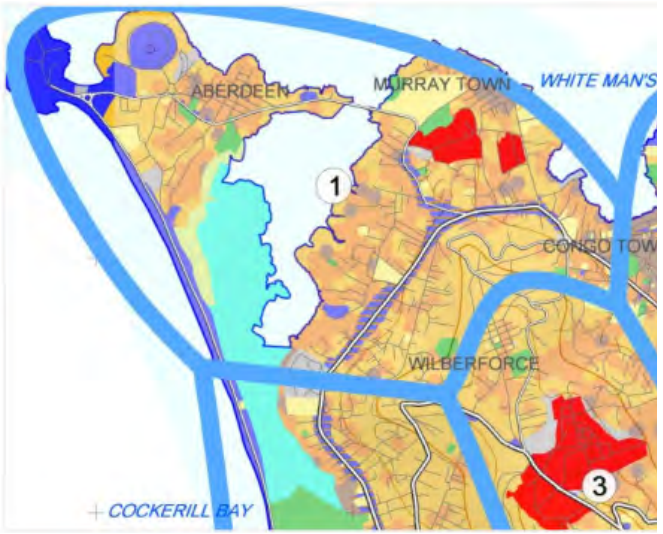


Figure 4.4: Exrtract from Freetown FSP



4.5 Entry Point for the CAAP

Currently the Freetown Structural Plan has stated that within each area highlighted blue in the plan shown above that there should be a corresponding Action Area Plan.

These Action Area Plans are the most detailed land-use plan type proposed for the land-use plan system in Freetown's FSP. The FSP explains that 'this detailed plan type must follow the planning goals and requirements made in the local plan and the structure plan for the area', furthermore, the it states that 'the area action plan will indicate the precise private and public use of all land and parcels within the 'action planning area' and indicate areas reserved for utility services, roads and transport systems, recreation, protection, etc.

The area action Plan will indicate street names, parcel numbers, eventual reservation or protection lines, as well as development and building regulations to be followed when using the parcels included in the plan. Development permits as well as building permits will be granted where they do not contradict the information and regulations in the area action plan'.

Each of the Action Areas neatly parcels geographic areas based on a number of criteria including population density and existing areas of the city' (FCC, 2014: 15-16).
The concept of a Community Action Area Plan is proposed here as a component part of a wider Action Area plan and is more heavily focussed on community participation in the planning process. Looking at smaller community areas whose boundaries are identified by the communities themselves.

A CAAP is a tool that can allow communities to advance their own spatial vision, highlight the areas of the community they which to preserve, and to show their priorities for development. A CAAP could fundamentally advise the section of an Action Area Plan which looks at indicating 'areas reserved for utility services, roads and transport systems, recreation, protection'.
CAAP's could also be an extremely important tool for dialogue between local council and community, allowing communities to participate, improve capacity and take ownership in their own development in an officially recognised framework.

This reflects the views put forward by delegates from the Ministry of Lands, Country Planning and the Environment, Freetown City Council, The Ministry for Works Housing and Infrastructure, the Office of National Security, the YMCA, FEDURP and CODOHSAPA during an advisory panel hosted by SLURC before this plan was created.

Key Quotes from Advisory Group;

'It will be good for community to lead their own development and to know how their capacity can be improved. It would also be good to for communities to learn how they can go about advocating the upgrading the settlements and how they can build up a local labour force which can bring about the change they need'.
-Jalikatu Cotey, CODOHSAPA:

'It will be useful to provide feedback on how to address issues of access routes and roads to the sites. We would also like the process to help communities upgrade their own legal land and planning documents'.
-Abu Bakarr Jallol, MLCPE

'We can use report as evidence of conditions to inform policy decisions. The Council want to know exactly what development challenges there are and what people really want'.
-Abdul K. Marah, FCC

'This study can explore existing structures within the communities to use as a baseline data to deliver plans. There is also potential for different agencies to work together. It could be a Educational experience for residents where they can learn about trade-offs relating to re-blocking and access. There's also the potential to engage communities on implications of residents and communities actions especially with relation to environmental issues which lead to natural disaster events'.
-Abdul K. Marah,FCC

'We would like to see the government working with communities in delivering needs and desires'.
-Francis A. Reffel, YMCA

'We would like the communities and other parties to lobby, formally and informally for these approaches to be adopted by all. There is good potential for policy makers to deliver and people to comply with the law'.
-Frank S. Williams, ONS

4.6 Principles and Options

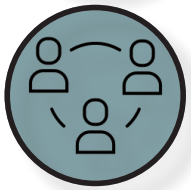
The policy principles were developed through a continuing dialogue with the Cockle Bay Community Action Area Plan advisory committee. This set of principles explore the important link between current planning and environment policy and how the community can achieve their own accountable, fair and transparent Community Action Area Plan.

'We can use report as evidence of conditions to inform policy decisions. The Council want to know exactly what development challenges there are and what people really want.'
Abdul K. Marah, FCC

'We would like to see the government working with communities in delivering needs and desires.'
Francis A. Reffel, YMCA

Community leadership on urban development projects
Communities take active leadership in all urban development issues in the settlement

Proactive community financing options
Communities seek and apply for financing for community development projects.



Improved community organisation
Build capacity within community to organise and lead development within the settlement

Community accountability to upkeep and maintenance
Communities should be accountable and held responsibly for the up-keep and maintenance of their assets

Well managed collaboration with government and private stake-holders
Community to develop mutual collaborative relationships with key stakeholders outside the community

Stronger democratic involvement of community in urban development
The community should have a stronger say and involvement in the urban development projects and issues which affect them

Organisation Options

Central Government:
- Ministry of Lands
- Ministry of Housing
- Environmental Protection

Local Government
- Mayor
- Freetown City Council

Traditional Governance
- Chiefs
- Committees

Non Governmental Orgs (NGO's)
- YMCA
- CRS
- CODESAPA
- FEDURP

International NGO's (INGO's)
- United Nations (UNDP)

Research Institutions
- SLURC

Community Organisations
- Community Committee
- Community Development panel

Private Sector
- Developers
- Large Business

5
HOME

The Home scale sought to understand the current housing conditions in Cockle Bay, and to imagine with residents what upgraded housing could be like. The aim was to explore a definition of 'home' and to capture residents' diverse values and aspirations for this important component of the settlement. To this end, the team engaged residents through a variety of participatory tools aimed at developing a set of principles and options that could guide future housing interventions.

The exploration into the home scale was organised into four phases.

6.1 Diagnosis

This phase sought to investigate current living conditions in Dworzark. Activities consisted in mapping existing housing typologies and infrastructure systems and identifying the main challenges that the residents of Cockle Bay face in relation to housing.

6.2 Dreaming

This phase aimed to uncover residents' aspirations for improving their living standards. This included exploring possible changes to the physical conditions of space, as well as discussing different types of housing tenure and housing delivery.

6.3 Developing

This phase aimed to elicit conversations about a range of housing options developed by the team, based on the outcomes of the previous dreaming exercises.

6.4 Options & Principles

The final phase engaged Dworzark residents in planning their ideal housing improvements, using the set of housing principles and concrete options emerged from the previous phases.

5.1 Diagnosis

Activity Description

The diagnosis phase consisted of three activities. The first exercise asked participants what their home meant to them. The second activity consisted of visits to various households in the community to gain an understanding of household structures: the key matters discussed in the interviews included layouts and spatial arrangements, patterns of use, and current pressing needs. The final activity encouraged community members to draw their current home environment. The conversation held while drawing attempted to understand further participants' needs and aspirations in relation to their living space.

Findings

The diagnosis phase demonstrated that the most common house typology for Dworzark is a single storey building made from dirtyblock (mud blocks) and panbody (corrugated iron), and shared by extended families. Each home in Dworzark has on average between 6-8 individuals sharing 2-4 rooms. Almost every house has a master bedroom, a parlour (living room) which functions as the principle social room as well as a room for residents to sleep, and a veranda for storage, cooking and relaxing. More affluent homes also have a guest room, a corridor, a store room, and rooms for the children.

Figure 5.1: Diagnosis activities

Very few homes have self-contained interior bathrooms. Instead, the majority of Dworzark's residents have external toilet facilities which in most cases are shared with one or more other houses and are located five to ten meters away between the houses. Toilet facilities are most commonly pit toilets about 2-3 metres deep, and residents believe them to be unsanitary and unsafe especially at night when they feel vulnerable from violent attacks. Toilets and washing facilities are also in many cases controlled by either landlords or the owner of the property, who apply strict rules and times of use. Interior furniture and appliances featured highly in participants collective responses, as these things are often the only luxury items available. Freezers in particular are considered high value items as they provide a secondary source of income in the form of soft drink selling.

The physical condition of homes and proximity to neighbouring homes can make everyday life difficult for residents of Dworzark. A common complaint is that homes with panbody materials are often too hot in the summer and leak in the winter. Many people have also experienced localised flooding within their homes or nearby during the rainy season, and fear flooding, rock falls and mudslides depending on which neighbourhood they live in. Space to expand is another issue that many residents struggle with. They state that there is not enough room in the central area of the community, which means that homes are very small and densely packed, housing is more expensive, and new residents have to seek properties in the higher areas with more dangerous terrain.

Security is one concern shared by many in the community. Participants state that most properties do not have fences or walls setting them apart from other properties and that they feel more secure with steel doors and window bars. Security around water points is a major concern for residents who worry that young people who collect water from wells and water points are not safe. The problem is compounded by the fact that most people do not have immediate access to safe drinking water and send their children or other members of the community to collect water via jerry can where they often have to walk over tough terrain for half an hour or longer. The individuals living in higher gradients of the settlement felt as though they have the greatest problem with access to amenities and services, due to little or no direct vehicular access and very poor footpaths.

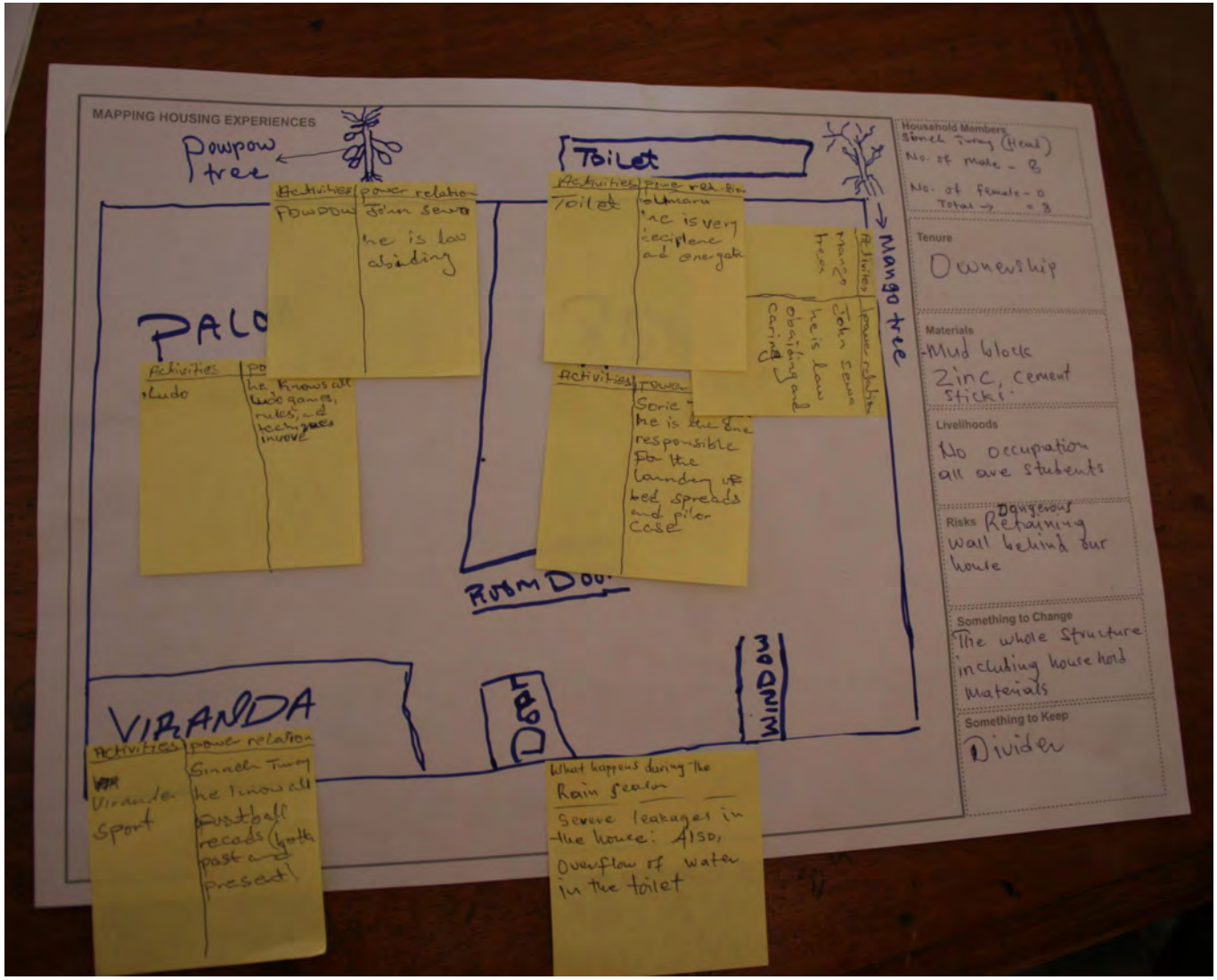


Figure 5.2: Security challenges

5.2 Dreaming

The group took part in three dreaming activities. The first one identified shared housing aspirations. The second and third activities explored the deeper housing needs and desires of residents through drawing and modelling. The final activity sought to link personal aspirations to form wider collective ones.

Findings

When exploring what their aspirational home would be like, most participants in Dworzark focussed on the idea of having a detached two-story house within a compound, made from high quality concrete blocks and zinc roofing. In most cases, participants aspired to having their homes facing a street with easy access to amenities and services and the wider community. The layout of most participants' aspirational homes, centred on a parlour (living room) from which the other rooms could be accessed, including separate bedrooms for parents, boys and girls, a self contained toilet and a small kitchen. Participants shared the vision that their aspirational homes should also have piped water.

Outside the house, participants aspired to have somewhere to park cars outside their homes, verandas (balcony) for relaxing and socialising, and gardens for economic and subsistence growing rather than recreation or relaxation. Manyarticipants also desired to have strong steel doors and high compound walls which would not only provide security but also convey status. When posed questions regarding the lack of space, participants were often willing to sacrifice some outdoor private space and compromise with multi-storey apartment blocks of no more than five storeys, as long as they could gain improved homes.

Figure 5.3: Dreaming activities at home scale

Some of the key perceived barriers to participants housing needs were identified as a poor household income, lack of affordable land in the community, natural and man-made disasters, lack of urban planning, difficult steep terrain, and overpopulation of land.

Figure 5.4: Dreaming through drawing at home scale

5.3 Developing

Activity Description

The developing phase included three activities aimed at generating a set of housing principles and options. The first activity evaluated previous phases to create a portfolio of housing options. Participants were then asked to imagine upgraded housing in the settlement using paper stencils. The third activity aimed to agree a final set of housing principles and options for Dworzark.

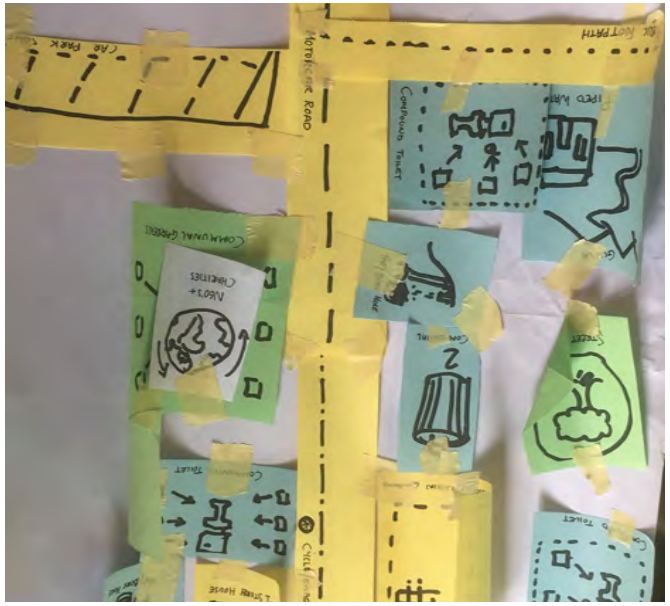


Figure 5.5: Developing activiities at home scale

Findings

The main findings from the developing phase are summarised in 5.4 Home Principles and Options. In addition, a number of priorities emerged from the conversations.

Housing: Participants agreed that there should be a variety of housing typologies that respond to diverse needs in the community. Options put forward were individual dwelling one- and two-storey compounds, as well as individual one and two-storey units and apportionment blocks. Participants suggested that homes be privately owned, constructed, and maintained. Apartment blocks were the most popular housing variety, as it was perceived that they could serve the greatest number of people, provide improved access to transport and be less expensive than individual houses. The community argued that apartment blocks would need to be constructed by either NGOs or the government due to the high upfront costs of such buildings.

Water Provision: Viewed as a key priority, water provision options were primarily discussed based on cost. Although piped water to individual houses was preferable, the second most popular option was community water tanks which were suggested as a cheaper option to supplement water to the neighbourhood, and could be provided by NGOs or the government. One of the most interesting suggestions made by participants was that water access should never be more than 300m away from any home.

Sanitation and waste management: Another priority area for community participants was sanitation. Self-contained (interior) toilets for private properties were the most popular option for sanitation to avoid disease outbreaks and to improve safety. Waste management was an issue that people felt strongly about in the lower areas of Dworzark Valley. Participants maintained that it was the responsibility of the government to collect waste.

Access and Mobility: The participants identified this as a key issue, and suggested a variety of access options to suit Dworzark's difficult topographic profile. One idea was that central areas of the settlement could have main roads which would be easily accessible to all members of the community and well connected to the city centre. Participants argued that these roads should be constructed by the government with strong consultation with the community

on locations, and that they be created from materials that could support heavier vehicles and which would not wash away in the rainy season.

Roads which could support light vehicles such as motorbikes and Kekeh's (Tuk Tuk's) were suggested because in some cases preferable to larger roads because of the topography within Dworzark in the higher slopes.

When discussing Footpaths, participants agreed that these should link up with the existing road network and that they could be constructed and maintained by the community. It was also suggested that footpaths should be made from stone and cement for longevity and affordability.

Participants also agreed that there is need for car parks in the settlement and suggested that these could be constructed, maintained and run by the private sector.

Green Spaces: The most popular green infrastructure variety was street trees which residents believe alleviate soil erosion and act as a natural windbreak. Participants also liked the option of communal leisure garden spaces.

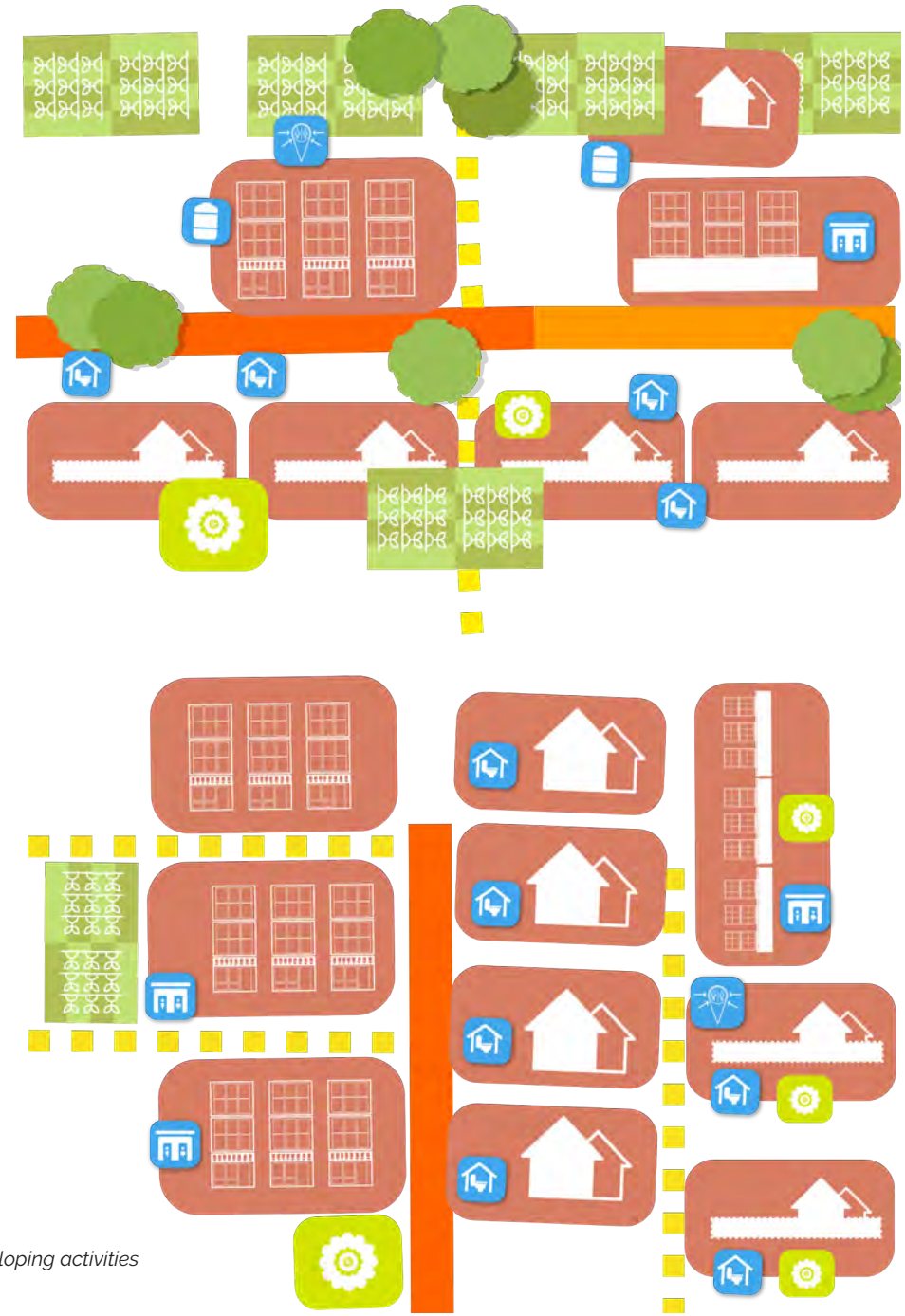


Figure 5.6: Outputs from home scale developing activities

5.4 Principles and Options

Home Principles

1. **Safe and Secure Housing**
- Housing which is secured from crime
- Housing which is safe from natural threats
- Housing which is safe from man-made threats

2. **Housing made from durable long-lasting materials**
- Materials which don't need replaced every year
- Materials provide good protection from the weather all year round.
- Materials which do not cause health problems or fire risks.

3. **Affordable formal housing in the community**
- Secure Tenure
- Good housing which can accommodate all family types
- Housing which is cheap enough for all residents in Dworzark

4. **Maximising developable space and diversity of uses**
- Creation of variety of mixed-use buildings for income generation within the community
- Providing subsistence opportunities in aspiring green spaces
- Fully utilising all available land in the community

5. **Access to good infrastructure for all**
- **Access to motor car roads**
- Quality footpaths and steps across the community
- Infrastructure which considers vulnerable citizens

6. **Evenly distributed sanitary waste and water facilities**
- Clean drinking water for every household
- Equal/Even Distribution of Sanitation facilities
- Equal provision of waste collection points services.

The principles and options conclude the developing stage of the home scale. These represent the residents aspirations for improving individual housing conditions in the settlement while recognising the importance of shared resources to the experience of home in Cockle Bay.

The principles generated will be reviewed by the residents as part of the portfolio of options exercise which considers these in relation to the other scales.

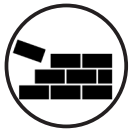
The options generated capture different aspects home from physical materials to tenure and delivery. Infrastructure and services are also important considerations in relation to living conditions. These options will be collated and refined then used by residents to design different scenarios for future development during the portfolio of options stage.

Home Options

Housing Options

Typology:
- Two storey house
- One storey house with compound
- Two storey house with compound
- Apartment blocks
- Multiple apartment blocks within compounds

Construction materials:
- Concrete Block
- Zinc roofing
- Concrete paving
- Local government maintenance
- Stone paving
- Wood panelling
- Stone blocks



Tenure:
- Private ownership
- Community ownership
- Government ownership
- NGO's ownership

Infrastucture Options

Sanitation:
- Self-contained toilets
- Private outside toilets
- Drainage systems
- Public toilets
- Community shared toilets

Waste management:
- Waste collection centre
- Private waste management
- Government waste management
- Community waste management

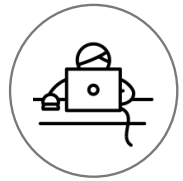
Water Provision:
- Piped fresh water
- Tap (bore hole)
- Private water tanks
- Shared water tanks

Green spaces:
- Communal gardens
- Backyard gardens
- Flower gardens
- Green strip

Organisation Options

Housing Delivery:
- Self build
- Community led
- Local chiefs and traditional leaders led
- Government led
- NGOs and charities

Construction Professionals:
- Building contractors
- Engineers
- Consultants
- Architects
- Surveyors



6

COMMUNITY

The Community scale focused on community dynamics in relation to community spaces (streets, community amenity spaces and surrounding areas) and infrastructures (transport, water, sanitation, energy, information).

The exploration into the community scale was organised into four phases.

6.1 Diagnosis

This phase sought to understand the current conditions of shared spaces and infrastructure in Dworzark The focus was on identifying neighbourhood resources and opportunities, as well as current challenges. This phase also explored social and spatial diversity, asking how different groups of people experience the settlement (e.g. women, men, young, old, people with disabilities).

6.2 Dreaming

This phase aimed to articulate residents' values and aspirations for the settlement. Looking at whether services, facilities, infrastructure and public spaces should be created or improved, this phase identified common aspirations and challenges to improvements.

6.3 Developing

This stage aimed to consolidate findings from the previous steps and create options for the improvement of shared spaces and infrastructure in Dworzark. Options referred to both concrete interventions and ways of building partnerships and alliances to support change.

6.4 Options & Principles

The final phase engaged Dworzark residents in planning their ideal community improvements, using the set of housing principles and concrete options which emerged from the previous phases.

6.1 Diagnosis

Activity Description

The diagnosis activities included a series of mapping exercises asking participants to share their experiences of Dworzark, and to highlight focal points as well as positive and negative issues associated with specific places in the settlement.

Findings

Physical condition: Activities at the community scale revealed that many of the indoor and outdoor public spaces in Dworzark are considered too small and often overcrowded. Participants also highlighted that over half the public spaces discussed in neighbourhoods like France, Nigeria, Spain, Brazil, England, Germany and Cameroon had experienced drainage issues in varying degrees, from minor localised flooding to flooding which in some cases destroyed buildings as well as access roads and footpaths, blocking residents' access to important public spaces such as churches and mosques. With regard to maintenance and quality of community use buildings, participants suggested that although the quality was generally poor, most buildings functioned adequately. However, community spaces and publicly accessible spaces were described as dusty, dirty, dangerous and prone to flooding.

Sanitation: Participants revealed that one of the issues affecting Dworzark was the lack of

Figure 6.1: Diagnosis activities at community scale

sanitation facilities for neighbourhoods and areas of community importance. It was further shown that many of the existing community sanitation facilities were not hygienic or in good condition. Another issue which participants pointed out was solid waste dumping in public spaces and in rivers. This was cited as a key reason for drains and ditches becoming blocked and overflowing. Water is a fundamental issue in Dworzark. Water points are some of the most frequently used spaces in Dworzark, however they are not convenient to access and they attract cases of violence and sexual harassment. The safety of individuals using water points is a major concern in the community, which participants were keen to resolve.

Safety and Security: Discussions around security and safety in public buildings and spaces revealed that many spaces are relatively secure due to a good amount of public surveillance. Situations where individuals felt less safe were mostly those in which popular spaces became overcrowded during large events such as football matches, where residents might fight one another. Although most of Dworzark was considered to be safe from natural hazards, a number of participants had experienced flooding and rock falls especially in the neighbourhoods of Nigeria and Spain.

Ownership and governance: The two most highly valued spaces in Dworzark were the football field and the Dance Hall/Cinema, followed by other buildings and spaces serving a social or cultural purpose, such as churches and mosques. The community own and manage most publicly accessible spaces in Dworzark, however, in some cases these spaces are managed by community elders or the tribal chiefs.

Social make up of public buildings and spaces: In most cases participants were positive about the inclusiveness of spaces within Dworzark. Cinemas, religious buildings and outdoor areas were thought to be particularly inclusive. Some spaces however were regarded as not suitable for children to use due to poor maintenance and safety. When discussing who used certain spaces it was found that young men most frequently used the cinemas, bars, and restaurants. Women and children used health facilities most frequently, and young adults and children used water points most regularly. Another important aspect of many of the community shared spaces was that there was often multiple activities taking place in the same space and that there were different use values at different times. One example was the football field, which during the night is used as a car park and in the dry season is used for the Dworzark festival.

The most popular spaces focussed in clusters predominantly around George Brook Road and the football field area. The football field area was identified by participants as the centre of Dworzark, with smaller activity clusters in St Augustine, Jumma Hall, Junction One and Grace Elementary.

Community green space: Green spaces were not found to be common in Dworzark. The Belia Compound was the only recognised green space referred to by participants. However, the participants did not feel that Dworzark was lacking in trees and greenery.

Economic spaces: Economic spaces in Dworzark were understood to be places where participants expected to pay to access or pay for services and goods. Schools and other municipal buildings were included in this category. One very interesting finding was that many services available in the settlement, such as shops, kiosks, mechanics and drivers were not necessarily utilised by community members who work outside the settlement. This suggests that many commercial opportunities might be missed within the community.

Access to spaces: Participants explained that the community is not well serviced with formal roads, footpaths and transport links. The neighbourhoods higher up the steep valley sides were the most deprived and struggle to access core services and amenities.

Figure 6.2: Accessibility issues diagnosed by community at community scale

6.2 Dreaming

Activity Description

The dreaming activities featured aspirational community area mapping combined with focal studies aimed at addressing key issues in the settlement. Participants were encouraged to draw interventions over photos and existing plans, and describe what changes they had made.

Findings

The findings from the dreaming activities highlighted the participants' strong diversity of visions of how Dworzark could develop over time. These visions included improvements in the provision of effective drainage infrastructure, access to good roads, access to clean drinking water and sanitation, and access to key services such as health and educational facilities.

Drainage: Community members stated that public spaces were too small, often overcrowded, had drainage issues which could lead to flooding and were often dusty, dirty, and dangerous places. The visions offered to resolve these issues were to construct clean and sanitary public buildings and spaces, to build sustainable and extensive drainage infrastructure which could mitigate flooding during the rain season, and to create more opportunities for improved economic spaces in the community to avoid overcrowding of existing facilities.

Figure 6.3: Dreaming activities at community scale

Water points: A fundamental issue brought up in the diagnosis phase was access to water points which were described as the most frequently used spaces in Dworzark, but not convenient to access and not safe for younger and vulnerable residents. Solutions offered by participants were to create more water facilities across the settlement to reduce the distance from home to water point, as well as to create a variety of water point types to ensure water provision throughout the year.

Access and transport: Participants recognised that the lack of access to roads, footpaths and transport was an issue which affected the whole community but especially for residents living higher up the valley. Some of the suggestions offered by participants were to expand the road network from George Brook Road with a variety of mobility options including roads for cars, tricycles and footpaths, as well as ensuring that transport options were evenly distributed throughout the settlement.

Services: Participants felt that many people in the community struggled to reach core services like healthcare and emergency services in times of need. A range of visions to remedy this issue were suggested, including improved and increased municipal spaces and buildings such as community centres; construction of affordable and easily accessed educational facilities; improved access routes to core services; and the creation of a health centre to reduce transport costs and high death rates.

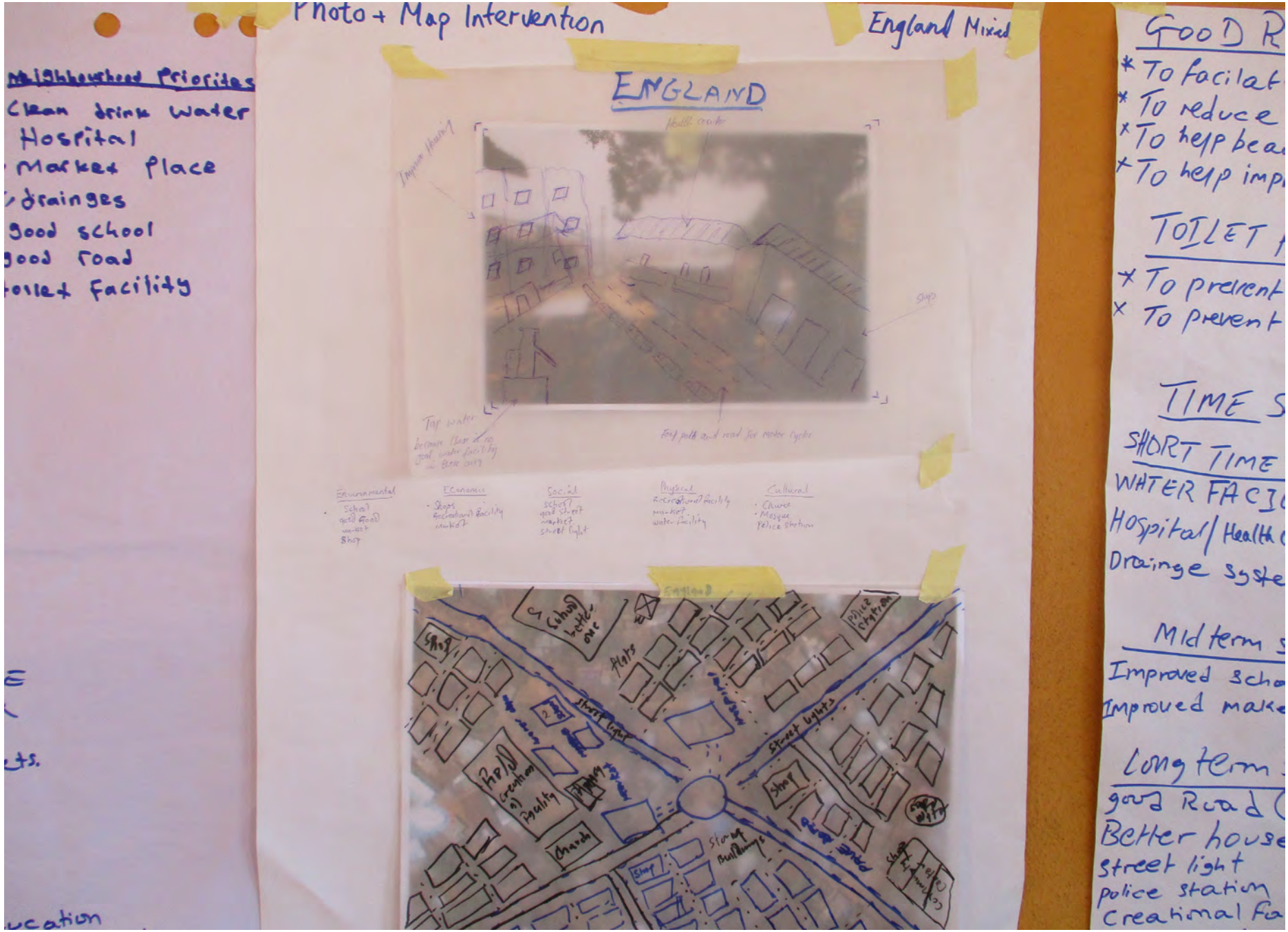


Figure 6.4: Posters created by the community

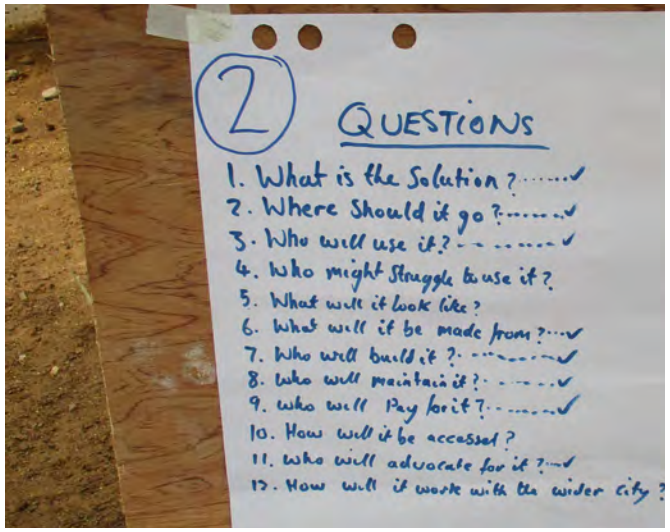
6.3 Developing

Activity Description

The developing phase activities sought to consolidate findings from the dreaming phase and provide greater detail on how the proposed interventions might work. Participants then combined their ideas into a set of principles and options to be taken forward to the next level.

Findings

The principle findings from the developing phase are summarised in 6.4 principles and options, however, a number of priorities emerged from the conversations which should be discussed in greater detail. Access to clean drinking water emerged in both the diagnosis and dreaming stages and was one of the most developed areas of conversation when creating options and principles. Participants insisted that there should be a wealth of water options across the community including water wells, shared rainwater tanks, spring water boxes, piped water, improved river water and improved access roads to water points which could service all residents easily. Participants suggested that each neighbourhood zone should have a centralised water well and that all homes in Dworzark should be within 300m of a safe and reliable water point. The residents also proposed that the community part-finance water amenities to ensure their own sustainability, and to seek government and NGO investment for the rest. Water solutions were discussed in



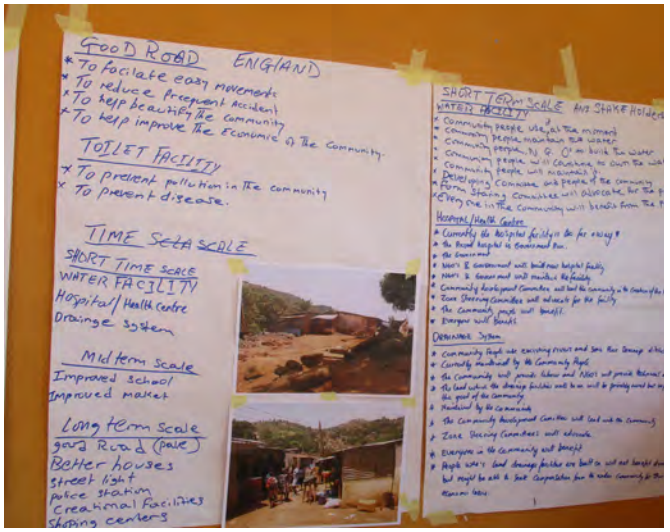


Figure 6.5: Developing activities at community scale

relation to the varying topographies of Dworzark. In central areas with roads it was suggested that piped water could be brought in. In areas which were much more isolated due to their steep topography it was thought that there could be more individual and shared options such as rainwater tanks and delivered water tanks.

Access to health facilities was another highly developed area of discussion which also featured heavily in the diagnosis and dreaming stages. There were two principle suggestions offered by participants: one was the creation of a health centre in the heart of the community near the football field, and the other was to significantly improve transport links within the community connecting to the wider city and healthcare facilities. The health centre proposal was described as a place which could provide first aid treatment before referral to a larger and better equipped hospital. However, locating a space for this facility posed some difficult questions regarding lack of space and land ownership, as well as how such a facility could be afforded. The participants suggested that there could be dialogues between land owners, community leaders and the ministry of health on where the health centre could be located. One very pragmatic idea offered by participants was to set up a health centre community group to plan and advocate for the proposed facility.

Access roads, footpaths and transport links were also an area of rich discussion among participants. It was argued that the construction of main roads and footpaths could help improve free movement of people within the settlement and prodite equitable development throughout the community. One solutions offered was to create a network of small roads and footpaths coming off a small number of primary roads. It was also strongly implied that the government should deliver their proposed road connecting from the Dworzark junction to Leicester peak and the American Embassy. Once built, participants proposed that the community

maintain the infrastructure. Participants also suggested that roads and footpaths could be made from strong materials such as concrete and tar to avoid being washed away by storm water, but that the size of particular roads should be decided by the topography of the land. In higher, steeper areas of the settlement, it was suggested that there could be a large network of small roads wide enough for a single car or two motorbikes, and lower down the valley there could be larger roads connecting to existing vehicle transport within and outside the community.

Figure 6.6: Presentations at community scale

6.4 Principles and Options

Community Principles

1. Safe and Secure public buildings and Spaces

- spaces and buildings which are secure from overcrowding
- spaces and buildings which are secure from crime
- spaces and buildings which are safe from natural and man-made hazards

2. Larger range of natural and public spaces in the community

- Creation of more natural spaces within the community
- Creation of more public spaces for leisure and recreation in the community

3. Fresh water security

- Fresh water points which can be easily serviced, secure and easily accessed by all
- A variety of fresh water points which provide water throughout seasons

4. Fair access to Services

- Equally distributed health, emergency and education services
- Good transport links to critical and non-critical services
- Service access provision for vulnerable citizens

5. Community resilience from natural hazards

- Safety from floods, rock falls, mud slides and localised flooding in the community

The principles and options conclude the developing stage of the community scale. These represent the residents aspirations for improving public and communal infrastructure in the settlement with a focus on accessibility, waste and water management and sustainable livelihoods..

The principles generated will be reviewed by the residents as part of the portfolio of options exercise which considers these in relation to the other scales.

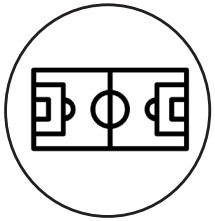
The options generated capture different aspects of the community from physical materials to tenure and delivery. Infrastructure and services are also important considerations in relation to living conditions. These options will be collated and refined then used by residents to design different scenarios for future development during the portfolio of options stage.

Community Options

Public Service/Space Options

Services
- Health centres
- Community centres
- Police stations
- Schools
- Fire force
- day care centres

Recreation/leisure.
- Hotel
- Cinema
- Bars/restaurants
- Football Field
- Beach
- Wetlands



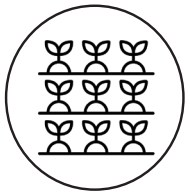
Cultural Spaces
- Mosques
- Churches
- Chief barray
- Shrines

Economy Livelihoods
- Markets
- Shops
- Fishing Jetty
- Home businesses
- Banks

Infrastructure Options

Transport and Roads:
- Main roads (tar)
- Paved footpaths
- Bike and trike roads
- Emergency access roads
- Pedestrian bridges
- Vehicle Bridges
- Road signs
- Street Lighting

Environmental/Green Space:
- Mangroves (conservation and replanting)
- Street trees for shade and to protect from erosion
- Community Gardens
- Lagoon



Water Provision:
- Shared taps
- Public water tanks
- Public jack pumps/boreholes
- Rainwater collection

Drainage:
- Large water gutter
- Sloop gutter (small open street drainage channels)

Sanitation:
- Sewage piped to a Bomeh sewage facility
- Removable septic tank
- Biomass facility
- Septic tank emptied into the wharf at high tide (toilet water)
- Grey water (underground pipe)

Waste Management:
- Waste processing site
- Waste collection

Security:
- CCTV

Organisation Options

Ownership:
- Government
- Community
- Individuals
- Family
- Shared ownership
- Lease
- private sector owned

Committees:
- Harbour/Jetty Committee
- Community Committee

7
CITY

The city scale focused on citywide processes, conditions and experiences. Activities included the exploration of spaces in the city that are relevant to the lives of Cockle Bay's residents, and the identification of residents' values and aspirations for the city as a whole. Participants were then asked to develop city-level interventions that could have a positive impact on Cockle Bay—spanning issues of transport, public services and livelihood opportunities.

The exploration into the city scale was organised into four phases.

7.1 Diagnosis

This phase aimed to unpack how the residents of Cockle Bay experience the city. The phase started by identifying key places in Freetown that are important for local residents, and then focussed on revealing some of the challenges and opportunities that Cockle bay residents face in relation to the city.

7.2 Dreaming

This phase aimed to articulate residents' values and aspirations for the city as a whole. Participants suggested a range of interventions for specific spaces in the city, which could have a positive impact on life in the settlement.

7.3 Developing

This stage aimed to consolidate findings from the previous steps and create principles and options for the improvement of residents' experience of Freetown.

7.4 Principles & Options

The options and principles section showcases the options which participants created for improving Freetown as well as principles which highlight the development priorities of the community.

7.1 Diagnosis

During the diagnosis, participants were asked to discuss their positive and negative experiences of the city, and the challenges and opportunities that the city presents to the community.

Findings

A few key themes emerged from these conversations. Firstly, participants identified the quality of urban infrastructure as a priority. The issue mentioned the most was the quality of the drainage system. It was reported that water often overflows during the rainy season, which can harm business as well as facilitate the spread of disease. Participants ascribed this problem to the frequent misuse of the water drainage system for solid waste disposal. Participants also referred to the poor conditions of the road and transportation networks. Key problems identified by Cockle Bay residents included automobile traffic congestion as well as crowding in public transportation, which hinders access to city services. Air pollution also emerged as a key preoccupation for many participants, who voiced concerns about the effects that poor air quality can have on health, particularly in informal areas.

Some of the residents indicated that unemployment is a problem for many in the city. Several participants claimed that youth unemployment t is a key factor leading to violence—both criminality and youth participation in armed groups. This is most acute in the city centre and in areas where police forces are less present. Residents mainly linked unemployment to the lack of adequate education and training for young adults. Participants discussed disputes over the use of open space. It was mentioned that there are often conflicts between street vendors and municipal authorities, as well as between street vendors and other road users who complain about the traders' encroachment on the public realm.

Figure 7.1: City scale diagnosis activity

Finally, a key challenge in the relation with the city is access to rental housing. Participants expressed the view that rent costs in Freetown are high and at the same time, people who identify as Krios tend to have strict rules about who can live in their properties. It was also mentioned that single women struggle to rent properties, and in some cases, women who live by themselves can be victims of violence.

Figure 7.2: Diagnosis at city scale

7.2 Dreaming

The dreaming phase aimed to articulate residents' values and aspirations for the city as a whole. Participants first discussed hotspots or urban areas that are important to different groups across the city. Based on this exploration, they identified a range of interventions for specific localities, which could have a positive impact on life in Cockle Bay.

Findings

Participants first identified critical improvements for the city. They prioritised improving security through street lighting and increased surveillance. The group also believed that spaces for economic activities require significant ameliorations with better trading and storage facilities. Waste management and sanitation also featured highly in the collective aspirations of participants, alongside the overall urban environmental quality, which could be enhanced through planting schemes in public spaces and the improvement of existing buildings. Finally, a renewed traffic management system was promoted.

The community also identified a series of secondary improvements, which they felt would make the city a better place to live in but are not of critical importance. It was discussed that commercial areas such as PZ and Dovecot should make space for street traders through the creation of formal markets or trading areas.

Figure 7.3: Dreaming activities at city scale

The transport system was perceived to have on-going issues, specifically with regards to car parking and the public transport system. Participants suggested that public transport should be improved and made cheaper, and car parks should be created in the city centre. Finally, residents mentioned tourist areas such as beaches. It was discussed that these public spaces should be equipped with garbage cans and public bathrooms, and that leisure facilities need improvements.

Residents mentioned that the western part of the city is not well provisioned with services such as health care and education. They focused specifically on vocational educational centres for those who are not able to attend formal school. It was suggested that a medical centre should be created near the Lumley roundabout, and an educational centre in a more central area of the city.

Figure 7.4: Dreaming diagrams at city scale

Figure 7.5: City scale locations

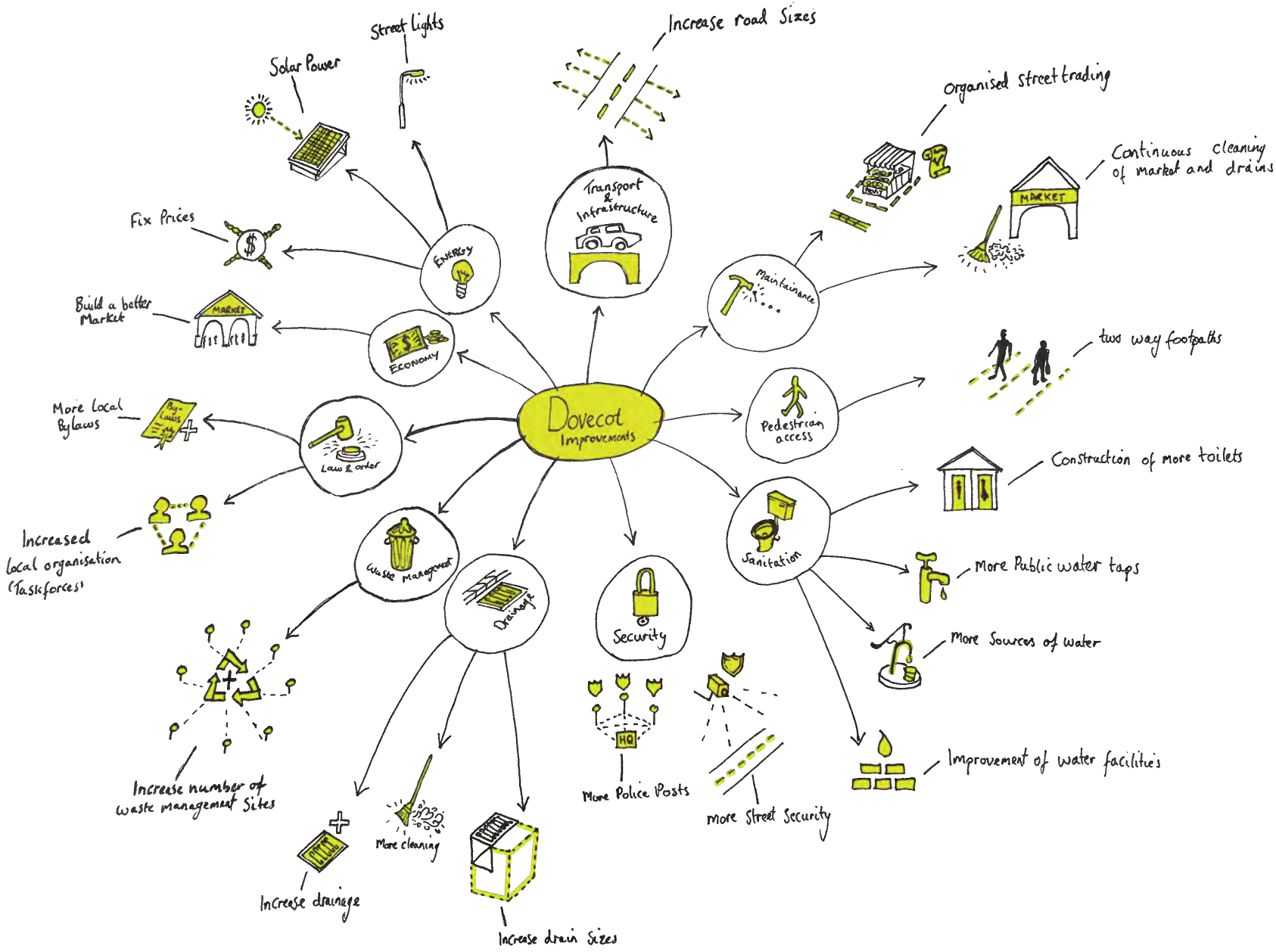


Figure 7.6: Dovecot city scale improvements

7.3 Developing

This phase intended to capture how the community might approach development strategically. Activities featured an analysis of relevant stakeholders and a 'navigating power' exercise that explored which institutions are responsible for different aspects of urban development. The final set of activities aimed to create principles and options for the improvement of residents' experience of Freetown.

Findings

Participants had a variety of ideas about the roles and responsibilities of different stakeholders in the upgrading process. The results suggested that local authorities should lead the upgrading process and provide support throughout the development. The exercise also suggested that finance should mainly come from NGOs. Local and community organisations should be in control of advocacy activities and should be responsible for finalising interventions. Upkeep and maintenance was also decided to be a community responsibility.

When confronted with an analysis of existing power structures around informal settlement upgrading, residents demonstrated that they knew individuals and organisations in the community and local authority who held power to make change. At the same time they struggled to identify development actors who

Figure 7.7: Developing activities at city scale

could facilitate change across the city. There was a real concern among participants that they did not know enough organisations who could help finance improvements to the community, but they agreed that SLURC, FEDURP, the local Councillor, their Ward Committee and the Community Chairperson could help them advocate and source funding.

When discussing what would contribute to making the city of Freetown more inclusive, participants identified a number of factors, including property ownership; using qualified contractors and trained personnel, and constructing housing and buildings with good materials so that they can be higher and accommodate more people.

Participants agreed that in an inclusive city there should be a large number of services, facilities and amenities that benefit all residents—including transportation, health and education facilities, clean drinking water, sanitation and reliable electricity. All residents should also be secure from natural and man-made hazards as well as criminal activities. Infrastructure and access were discussed at length: an inclusive city should have a good road system that connects all areas of the city. Natural areas should be respected and there should be green open spaces outside the city centre. Participants also considered public spaces as a vital component of an inclusive city.

Inclusive development could also be fostered by economic policies that encourage investment. In particular, participants argues argue in favour of a wider variety of secure financing options, including banks, micro credit organisations and NGOs.

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The final area considered by participants was public engagement. They argued that excellent community participation and leadership would greatly improve the sense of inclusion in Freetown.

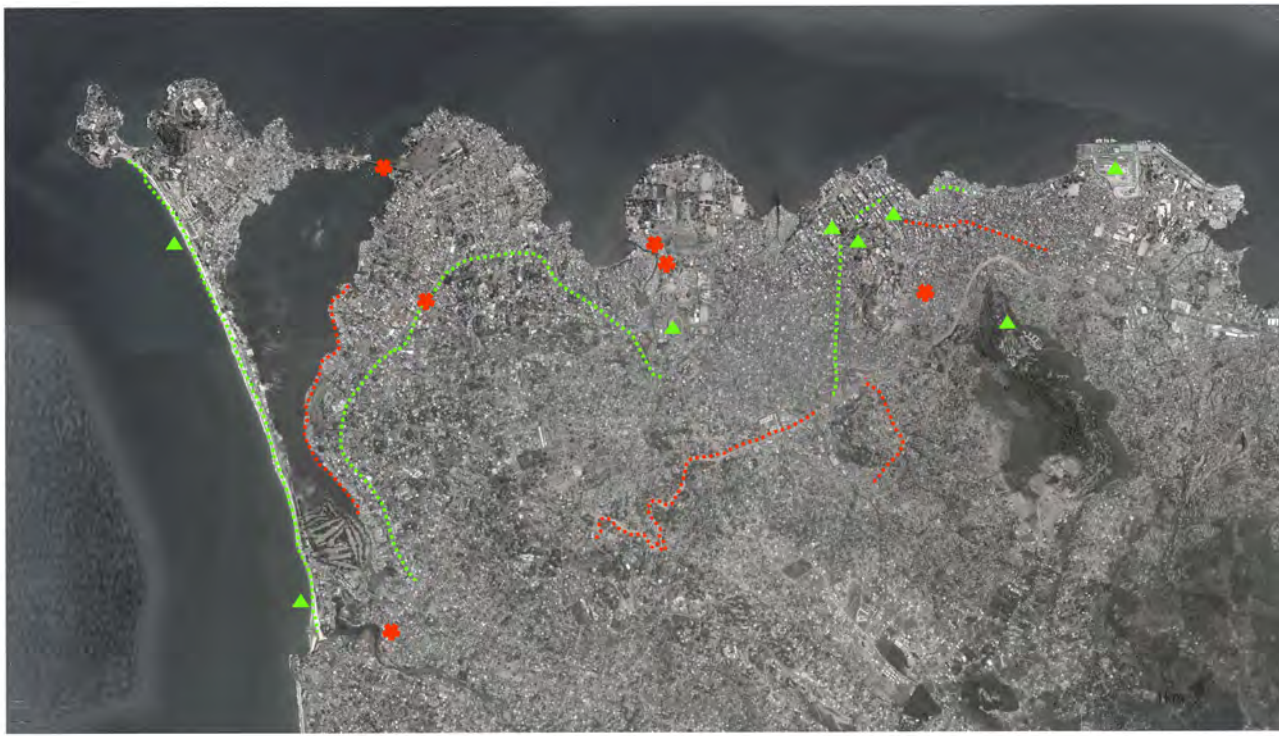


Figure 7.8: City scale dreaming

Dovecot	Supporting intervention	Advocating intervention	Financing intervention	Leading intervention	Finalising intervention	Upkeep and maintenance
Should be Informed	Local business religious leaders	Community chairman	MoTrade Land-owners	MoLands	Area chief	Chairman/ chairlady women leaders
Should be encouraged to take part	Social clubs youth chairman other communities	Ward development committee	CBO's Local businesses	Planning and Design Consultants Youth Chairman	Religious leaders	CBO's
Need to be involved	Area chief community chiefs	Fedurp	Micro Credit organisations	CBO	Chairman/ chairlady women leaders	Local Business People Youth Groups
Very important	MoHousing	Local Councillor	MoFinance	FCC	Local Councillor MP	Community People
Critically important	Major MoLands	MP	NGOs	Mayor	NGO's Mayor	FCC

7.4 Principles and Options

City Principles

1. Affordable formal accommodation (high to medium rise)
2. Affordable range of public transport options
3. Equal distribution of core services
4. Equality of recreation and healthy living spaces
5. Fair distribution of facilities and amenities
6. Preserving the beauty of the city

The principles and options conclude the developing stage of the City scale. These represent the residents aspirations for a more inclusive city with equal access to resources for everyone.

The principles generated will be reviewed by the residents as part of the portfolio of options exercise which considers these in relation to the other scales.

The options generated capture different aspects of the city from physical buildings such as health centres and schools to finance and participation. These options will be collated and refined then used by residents to design different scenarios for future development during the portfolio of options stage.

City Options

Public Service/Space Options

Services

- Hospitals
- Colleges
- Centres
- Police stations
- Schools
- Fire force
- Day care centres

Recreation/leisure.

- Hotel
- Cinema
- Bars/restaurants
- Public swimming pool
- Sport centres
- Football Field
- National stadiums
- Beach
- Park
- Wetlands

Cultural Spaces

- Mosques
- Churches
- Cultural performance spaces
- Arts buildings
- Music venues
- Chief barray
- Shrines

- City hall

Economy Livelihoods
- Markets
- Shops
- Weekly/periodic markets
- Pedestrian street markets (hawkers)
- technical industry
- offices
- factories
- quarry/mines
- banks
- Agriculture

Housing Options

City Typologies
- Compound apartments
- High rise apartments
- 1 unit apartments
- High-rise single use structures
- Low cost housing

Materials/Construction
- Concrete and block
- Enhance heritage structures

Infrastructure Options

Transport and Roads:

- Motorway
- Main roads (tar)
- Paved footpaths
- Bike and trike roads
- Emergency access roads
- Pedestrian bridges
- Vehicle Bridges
- Road signs
- Street Lighting
- Sea Bridge

- Transport hubs
- Bus/train stops
- Boat jetty for ferry
- Airport

Environmental/Green Space:
- Mangroves (conservation and replanting)
- Street trees for shade and to protect from erosion
- Community Gardens
- Lagoon

Water Provision:
- Main water supply
- Water treatment

Drainage:
- Storm drains
- Drainage strategies

Energy:
- Electricity provision

Organisation Options

Community participation

- Social groups
- Chairman/chairlady
- Elective committees
- Appointed community development groups
- Government organisations
- Professional unions (Okada, Taxis and Kekehs)
- Ward Development Committee
- Community popular vote

Finance
- Bank loans
- Asusa (community saving)
- Micro credit
- Shared cash collection box
- Government investment
- NGO grant
- Community savings (Federation)

8

INTEGRATED PRINCIPLES & OPTIONS

The principles and options from every scale have been collated in the following section to inform the activities in the portfolio of options. The principles have been integrated and will act a guide for decision making and to test the proposals that community develop using the refined set of options.

8.1 Scale Principles

Figure 8.1: Cross section sketch incorporating scale principles

Home

1. Safe and Secure Housing
2. Housing made from durable long-lasting materials
3. Affordable formal housing in the community
4. Maximising developable space and diversity of uses
5. Access to good infrastructure for all
6. Evenly distributed sanitary waste and water facilities

Community

1. Safe and Secure public buildings and Spaces
2. Larger range of natural and public spaces in the community
3. Fresh water security
4. Fair access to Services
5. Community resilience from natural hazards

City

1. Affordable formal accommodation (high to medium rise)
2. Affordable range of public transport options
3. Equal distribution of core services
4. Equality of recreation and healthy living spaces
5. Fair distribution of facilities and amenities
6. Preserving the beauty of the city

Community Organisation

1. Community leadership on urban development projects
2. Proactive community financing options
3. Improved community organisation
4. Community accountability in upkeep and maintenance of local assets
5. Well managed collaboration with government and private stakeholders

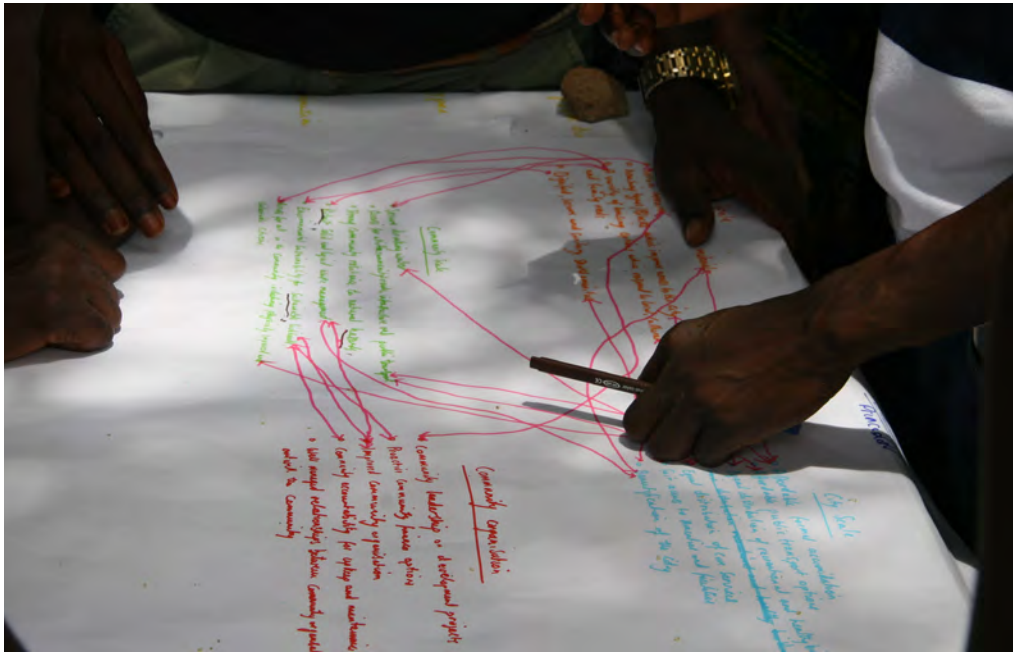


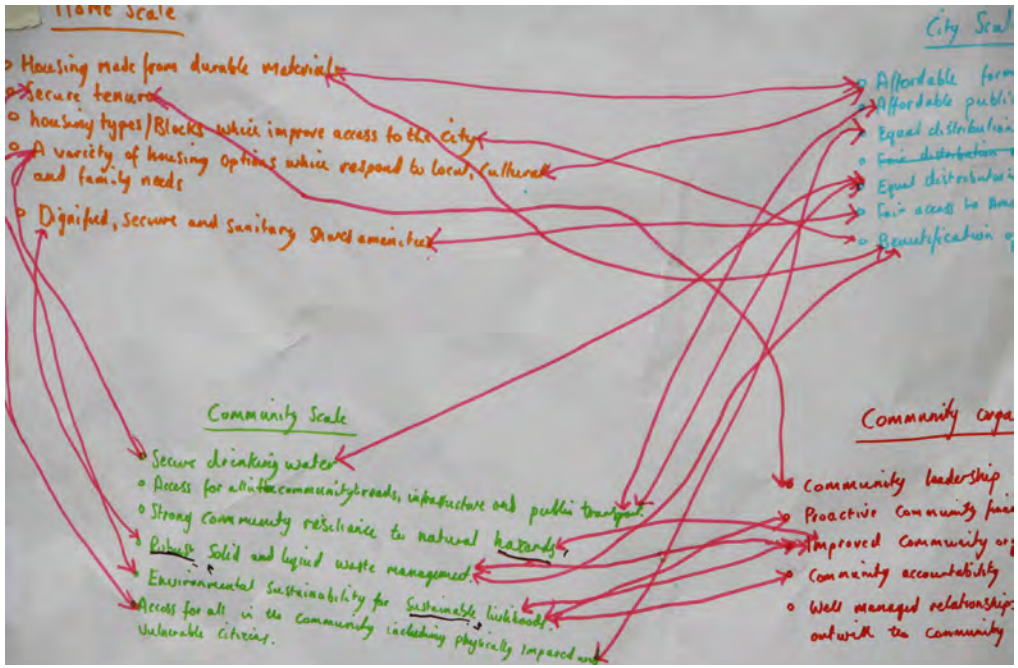
Figure 8.2: Principles and options activities

8.2 Integrated Principles

The principles captured on the previous page represents the outcome from each scale. The next step in the process is to consolidate these principles into an integrated set which reflects the aspirations from the various scales picking up key themes across the set and recognising that meaningful change needs to be considered holistically.

This activity allowed the working groups at this stage to understand the refined findings from the previous workshops. The community members were requested to judge the principles, and show how they were connected through the different scales, then to discuss which principles should be prioritised in the plans.

This final set of principles summarises the outcome of this discussion and the priorities that were identified.



1. Resilience from natural hazards through maintenance and improvements

- *Housing made from durable long-lasting materials*
- *Continual programs of maintenance for housing and community spaces*
- *Community accountability to upkeep and maintenance*

2. Improvements to buildings and spaces for safety and beautification

- *Safe and Secure Housing*
- *Safe and Secure public buildings and Spaces*
- *Visual enhancement of community*

Figure 8.3: Integrated principles sketch

3. Creating space in the settlement for important community buildings and spaces

- *Maximising developable space and diversity of uses*
- *Larger range of natural and public spaces in the community*
- *Dealing with conflicts between land uses and users*
- *Improved Economic spaces across the community*

4. Equal access to services and amenities

- *Fair access to Services*
- *Fair distribution of facilities and amenities*
- *Equality access of recreation and healthy living spaces*
- *Well managed collaboration with government and private stakeholders*

5. Improve roads, streets and pathways for an accessible settlement for all

- *Access to good infrastructure for all*
- *Safe and Secure access to public buildings and Spaces*
- *Access to a range of affordable public transport options*

6. Improving community cohesion and managing effective relationships with city stakeholders

- *Strengthen democratic involvement of community in urban development*
- *Dealing with conflicts between land uses and users*
- *Well managed collaboration with government and private stakeholders*

8.3 Refined Options

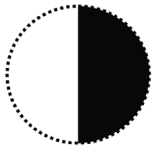
The options generated at each scale have been refined and catagorised in the following pages.

The icons have been developed to help to visualise the different options. These will be used in the next stage of the methodology where the community will use the icons to propose new layouts of the settlement and develop organisational strategies for various interventions and improvements.

Organisation Options

Timescale
These options relate to the timescale in which an intervention might happen


Now


Soon


Later

Stakeholders
These options relate to both community and city wide stakeholders and institutions


Local Council


NGO

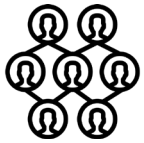

Private Sector


Social Groups


Government

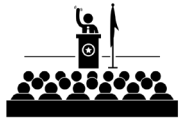

Zone Steering Committee

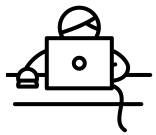

Individual


Family Networks


Traditional leader/ Chairperson


CBO's and Charities


Local Politicians


Consultants


The Community People

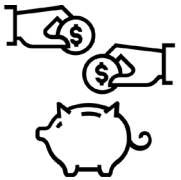

Elected Community Committee

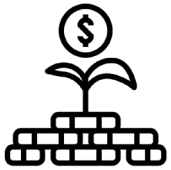

Ward Development Committee

Funding
These options relate to the finance available for proposals


Shared Cash Collection


Bank Loans


Asusa (savings)


Micro Credit


Government Investment


NGO Grant


FEDURP

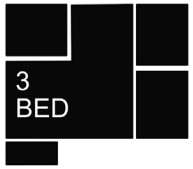
Housing Options

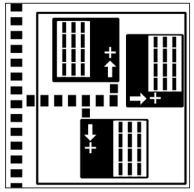
Decision Making

Community Vote

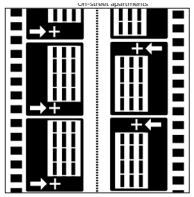
Typology

These options relate to both the size and typology of individual homes

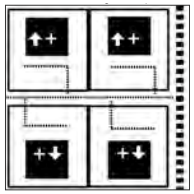




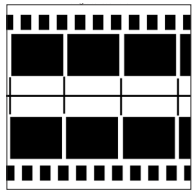
Compound Apartments



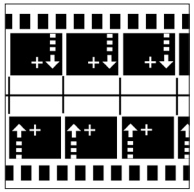
On-Street Apartments

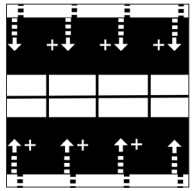


Multi-Level Single Units



Single Level row units





multi level attached row units

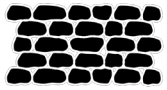
Materials

These options relate to the building materials used for construction

Concrete

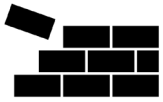
Panbody (corrugated iron)

Innovative Materials



Stone

Dirty Block



Brick

Mud-cement blocks

Tenure

These options relate to the type of housing tenure available

Lease/rent

Shared Ownership

Rent to Buy (Mortgage)

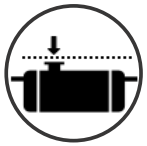
Individual Ownership

Infrastructure Options

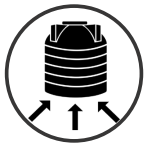
Water
These options relate to access to water for drinking and bathing


Piped Water


Private Water Storage


Shared underground tank (rainwater)


Water from the ground


Shared Water Storage


Recycling of Water


Roof Water Collection


Clean river water for drinking

Sanitation
These options relate to toilet and bathing facilities


Community pit toilet


Self contained private toilet


Compound toilet


Public toilet

Energy
These options relate to strategies for and access to power


Electricity

Drainage
These options relate to waste water and water run off


Waste water underground pipes


Septic tank removal


Drainage Channel

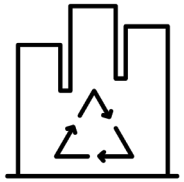

Natural Drainage


Deep Gutter

Waste Management
These options relate to household and municipal waste


Biomass (using waste)

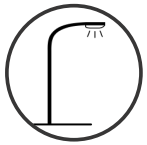

Sewerage treatment (bomeh)


Waste management/ dump site

Community Space/Service Options

Transport
These options relate to mobility, public and private


Roads


Street Lighting

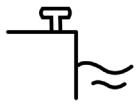

Signs and signals


Pedestrian Footbridge


Transport stop


Pavements


Train Station


Wharf/jetty


Bus Station

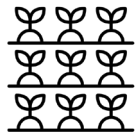

Car parking


Vehicle bridge

Economic Spaces
These options relate to livelihoods and markets

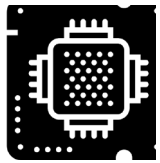

Temporary markets

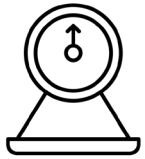

Street Traders


Urban Farms


Banks


Bars/Restaurants


Industry


Formal Markets


Shops

Public Spaces/Buildings
These options relate to public service buildings and spaces

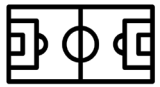

Health Facility


Emergency Services


Education Facility


Childcare Facility


Recreational


Leisure and sport


Cultural


Community


Religious


Offices


Factories


Natural

9

PORTFOLIO OF OPTIONS

The ‘portfolio of options’ exercise brought together the four streams of work (Policy and Planning, Home, Community and City) and began to explore the kind of negotiation required between various interests in order to achieve a cohesive plan for the settlement.

The core part of the exercise engaged Cockle Bay residents in planning their ideal upgraded settlement with a kit of parts on a scaled site model. The aim was to test responses to specific issues within the broader and more complex context of upgrading as a whole. Participants worked in three groups of sixteen. By the end of the session, each of the groups created a community action plan that consisted of a modelled and a drawn layout of the upgraded settlement and a set of organisational strategies.

1

9.1 Modelling a Layout

The modelling a layout exercise was used as a method for the community to approach a difficult array of issues in a controlled scenario focussed way using a 3D model with option cards to plan for the future.

2

9.2 Planning an organisational strategy

This stage was aimed at helping the community come to a consensus on how developments in the community should be managed over time an which organisations should be involved at what stage

3

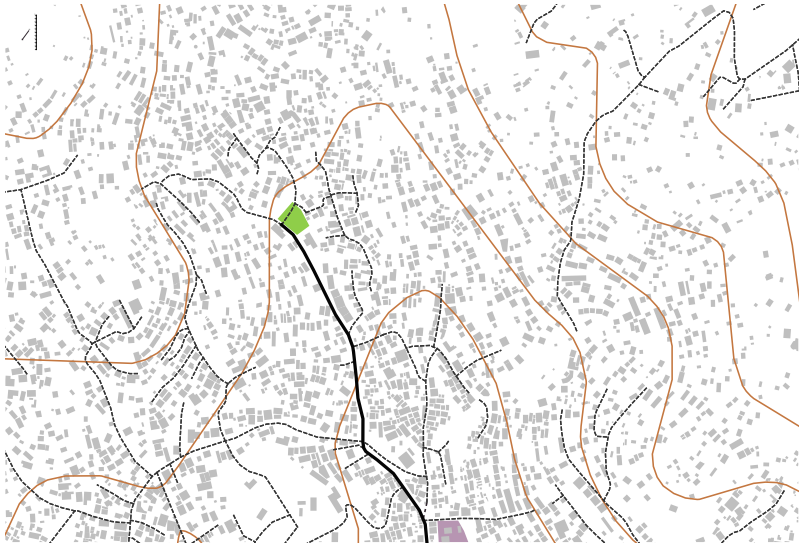
9.3 Drawing a Refined Layout

The refined drawing layout was aimed at distilling some of the key findings from the modelling layout stage into a cohesive basic mobility, access, housing and amenities plan.

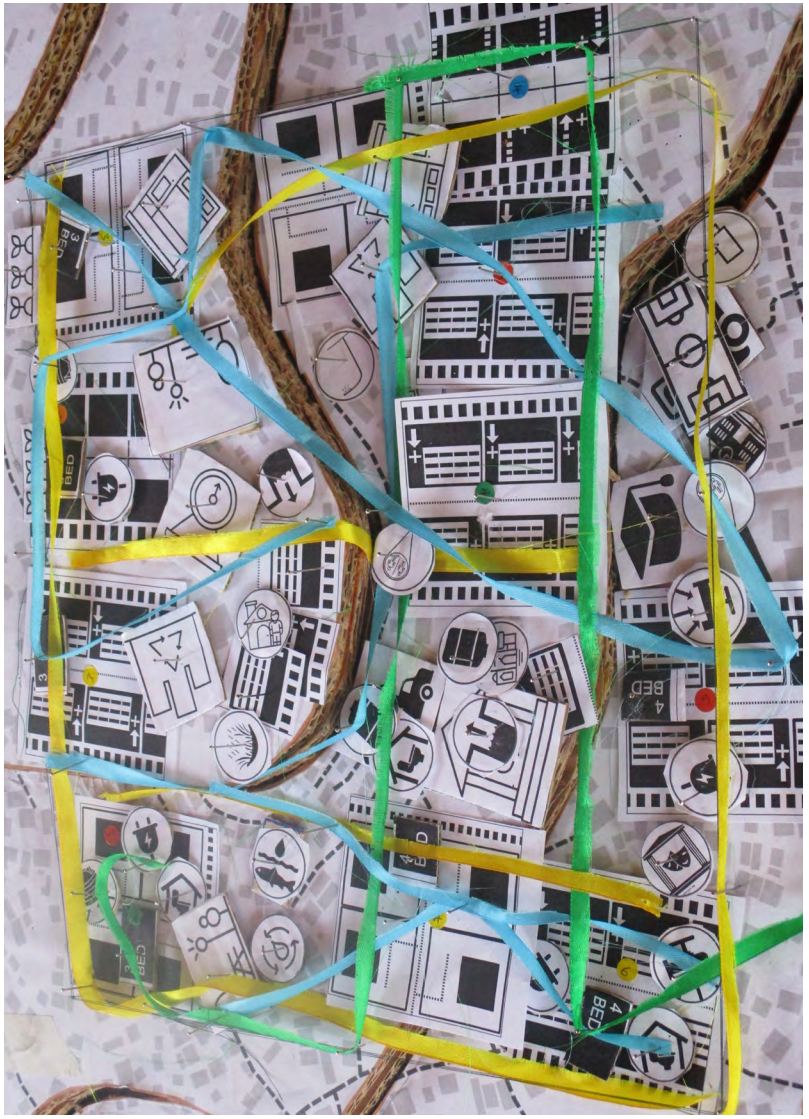
9.1 Modelling Layouts

This section showcases the three model layouts selected by participants then discusses similarities and repeated patterns.

After discussing similarities, the more unique elements are reviewed and then there is a final discussion about the findings.



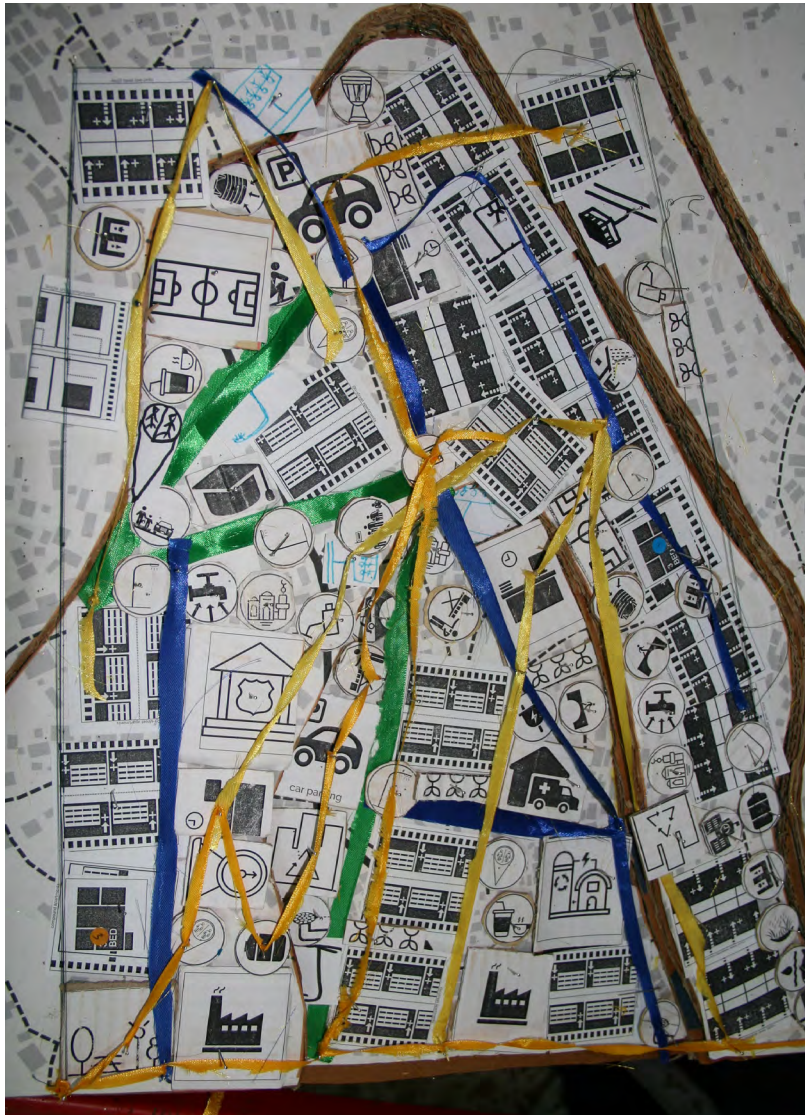
Model Base Section



Group 01

Figure 9.1: Modelling layouts

Group 02



Group 03

Patterns Across all Model Layouts

Amenities and Sanitation:
All the groups shared common ideas about community public toilets, demonstrating that they would like these located in the central area of the community as well as in areas where there are clusters of community buildings and spaces such as markets, sports and recreation areas and places of employment.

Participants also had a somewhat shared idea of how water should be administered in the community. Each group chose to locate a selection of water extraction, collection and delivery modes including shared water tanks and roof water tanks in upper reaches of the community where all modes of access are difficult. The groups also shared a similar pattern of choices which located piped water icons at the bottom of the valley. When asked about their choices, they stated that there is enough existing infrastructure to support piped water and that piped water could service the most populated area of the settlement.

The final choice which was shared across all groups related to drainage infrastructure. Participants chose to locate larger gutter drainage at bottom of the valley to take water away from the settlement centre. It was also suggested that there should be roadside drainage near most houses to divert surface water away from homes.

Roads and Mobility:
The issue of roads and mobility produced some of the most diverse choices from the three groups, however there were three common

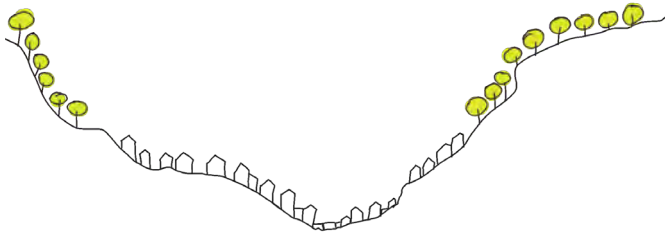


Figure 9.2: Cross section of topographical option

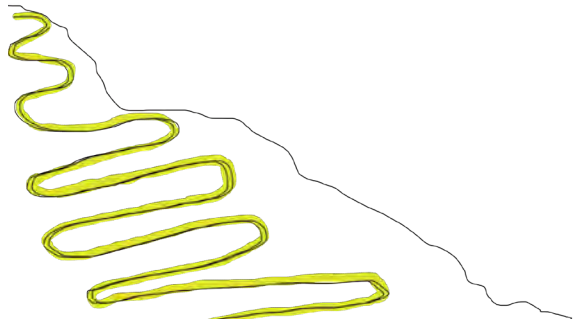


Figure 9.3: Sketch: meandering roads which work with the valley

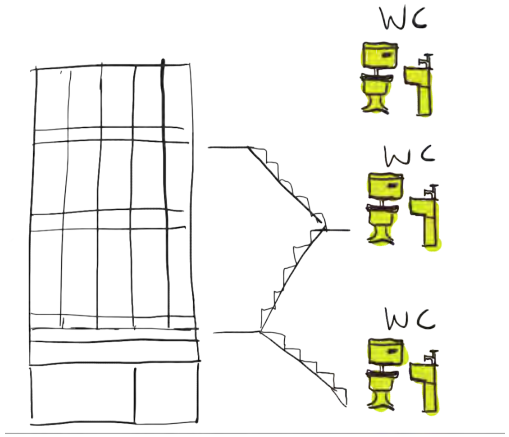
themes which groups shared in their decision-making. One of these was that roads should follow contours and work with the topography of the settlement to ensure that the community is walkable and doesn't channel surface water too quickly down the valley sides.

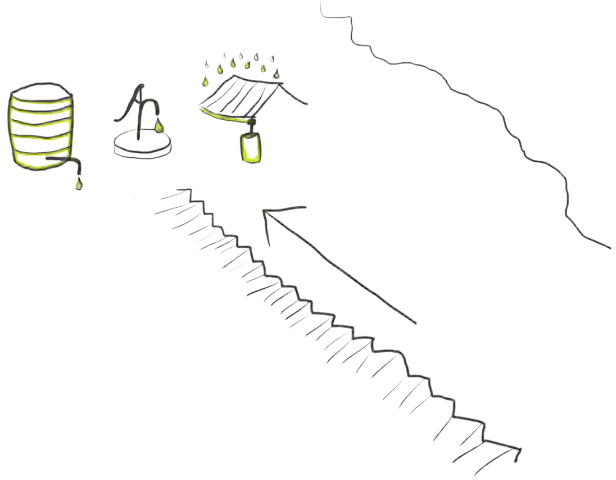
Another shared theme was the addition of street lighting and street signage which participants suggested should radiate from the central football field area and spread out following the main roads. The shape of road layouts was also important for the groups. For some layouts, there was a desire for a grid-like layout where possible, but the element shared by all the group models was a whiplash pattern which could work with the steep topography of Dworzark, leading from the top of the valley to the centre of the community.

Housing:
Housing was an area in which groups had strong shared ideas. The group interactions highlighted the perception that in order to create more space for development the community would need terrace (bank) up the steep valley sides.

In those steeper areas, participants also decided that housing should be less dense and high than that of the central area at the valley floor, as there was a popular belief that the steep topography could not remain stable with larger buildings. Another idea shared between groups was that the higher reaches of the valley should be for wealthier people who like peace and quiet, and that properties which are at the bottom of the valley with better access to services should be more affordable and higher in density.

When deciding to make the central area of the community more dense, groups agreed separately that housing should comprise of a number of apartment blocks of between 4 and 5 storeys high, laid out in a row typology and aligned, to have good access to roads, Where apartment blocks were applied, participants rallied around the idea that these





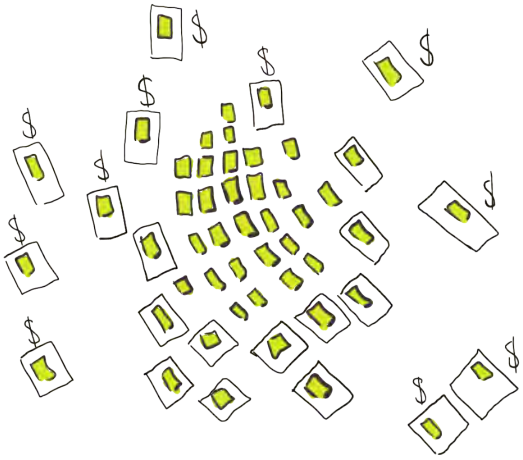


Figure 9.4: Sketch: variety of water amenities

should mostly have ground floor mixed-use spaces for retail and businesses.

Services:
Decisions related to services were often unique to each group, however, one idea that groups shared was to centralise critical services in the middle of the community for all residents to be able to access equally.

Public Buildings and spaces:
When looking at public buildings and spaces the groups had some shared ideas. They chose to distribute community buildings and spaces evenly throughout the community. Another shared choice was the concentration of important community and tribal buildings and spaces on access roads, a decision which participants explained was to help ensure equal access for all residents. Groups also chose to allocate space for new natural spaces on the higher points of the settlement where open space is more abundant to help with drainage and to improve resilience from natural hazards

Unique Decisions Across Model Layouts

Public Buildings and spaces:
The portfolio of options workshops revealed a diversity of choices relating to public buildings and spaces. Perhaps the most simple decision made by group 1 was to maintain and develop existing spaces and buildings including the Chief Barray, religious buildings, football field, leisure centre, and the community centre. Another decision was made by group 3 to create more religious centres across the community. One area where there was strong disparity between groups was the central field area which group one believed could also be used as a car park, and that similar spaces could also be used as car parks when not used recreationally. Group three revealed a different choice, where the football field was used solely for recreation and not for parking. This is clearly an issue which will require further discussion among the community members.

There was some agreement in the idea that the community needs green spaces, however, group 3 also chose to dedicate some green spaces within the main community area for subsistence with the intention to generate subsistence crops and a secondary income as well as to beautify the community.

Services:
When considering services, group 1 set out the most detailed model. Where they located health facilities, educational buildings and other core service buildings, they chose to maintain existing routes of access to the wider city as they believed these routes to be adequate to the communities needs. Another element group 1 chose to include was greater surveillance on areas which featured concentrated activities and services, in order to deter crime in the settlement.

Amenities and Sanitation:
When looking at water, group 1 decided that all houses should have roof water collection

tanks to reduce surface run-off which leads to flooding. This would give residents a secondary source of water as well as reduce flood risk in the settlement. Another sensible decision put across by group 1 was for emergency services and health facilities to have their own water facility which could allow them to be self-reliant in emergencies.

In terms of sanitation, group 3 decided that there should be shared compound toilets to provide for low density housing, and that these amenities could be shared between two houses. Two groups chose to include self-contained toilets, however, there wasn't a consensus on who these should be for. Group 1 decided for their model that all homes would have self-contained toilets, especially high density apartments, as access to a convenient toilet would be very restrictive otherwise. Group 3 decided that only apartment blocks should have self-contained toilets.

When considering waste management options, there were three choices presented for Dworzark. Group 1 selected options for a waste processing site to be located in the centre of the community for everyone to access easily. Group 3 on the other hand chose for waste collection to occur throughout the settlement and for transfer points to be located at the bottom and the top of the valley to relay waste out of the community to be processed elsewhere in the city.

The second option presented by group 3 was for the community to construct a biomass plant to supply energy to the proposed medical centre and if possible the rest of the community.

Another decision which was extremely well thought through was the idea that drains should be covered to prevent children from falling into the drains and injuring themselves, or worse, dying in the heavy rain water torrents.

Roads and Access:
Participants revealed a diversity of choices with relation to roads and access in the community. One of the core decisions made by group 1 was to include the already proposed connection between Leicester Peak and Dworzark Junction. They argued that this decision would open up a greater choice of services available to the community and would remove some pressure on George Brook Road. Group 1 also designed their model to feature secondary roads which were laid out in a grid-like arrangement which it was suggested would be able to take motorbikes and Kekeh's (tutuks) as well as help formalise the structure of the settlement better. Group 1 were also concerned with road safety and decided in their model that all roads should have road signs and signalling. In a similar vein, group 3 recognised the need for new pedestrian and vehicle bridges to cross the George Brook River which can be dangerous in the rainy season.

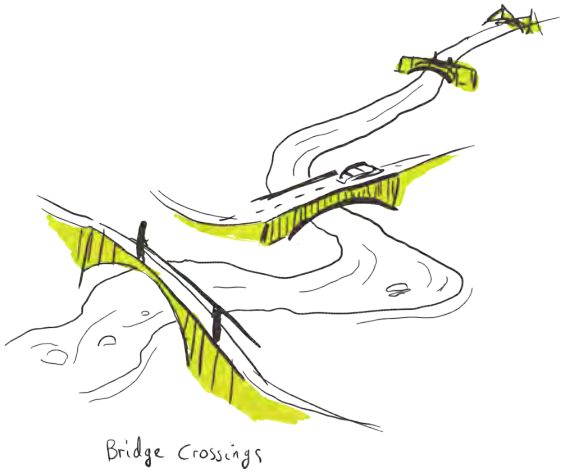
When looking at alternative modes of transport, group 3 innovatively decided to add the option of a cable car connecting the valley floor to the top and from one side to the other. They also chose to include one large central bus stop in the centre of the community near the football field, so that everyone could have access to the city.

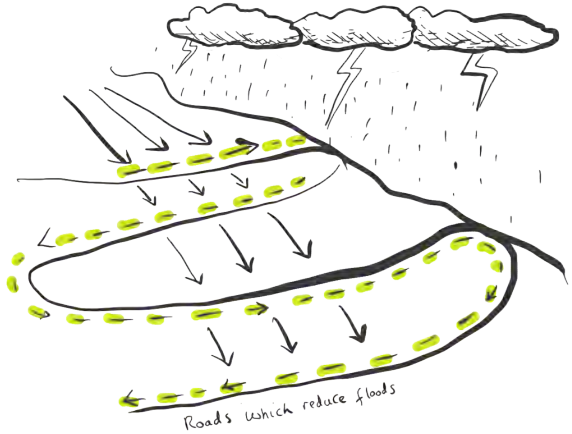
A rich discussion centred around the question of footpaths. Group 2 considered two very different approaches to footpaths in Dworzark, one which featured meandering paths up the hillsides to allow for an easier ascent, and the other providing direct routes up the valley sides using steps. Both decisions reflect the need for Dworzark to improve the walkability of the settlement. Group 3 decided to make footpaths connect to all roads and to not lead to dead ends, an simple and logical idea. Reflecting this, group 1 proposed that footpaths follow existing routes and connect to key services, as well as suggesting that all vehicle roads have sidewalks/footpaths for pedestrians. The final unique decision made by group 2 was that in the most severe gradients, footpaths and single track roads with passing places should be created.

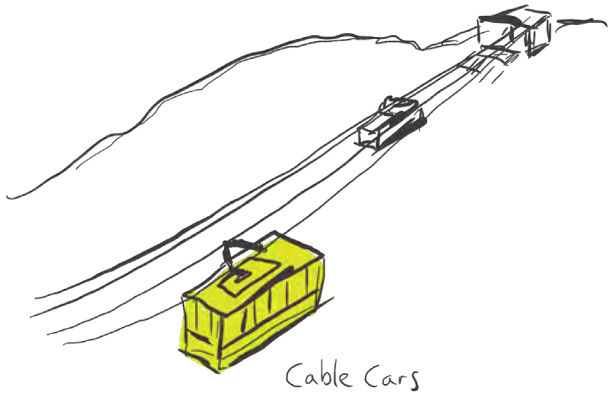
Housing:
Although most housing choices were synchronised between groups, some further detailing emerged predominantly from group 2 who stressed that they would like to have flexibility with the second floors of proposed apartment blocks to host office spaces as well. Groups 1 and 2 also further developed their ideas around density in the community. Group 1 decided that where the ground could support larger structures they should construct higher density buildings to cater for more people in the community and to provide for future growth of the settlement. Group 2 similarly suggested that some of the ground in the intermediate areas where the slopes are not too steep could accommodate 3-4 storey apartment blocks arranged in a row typology.

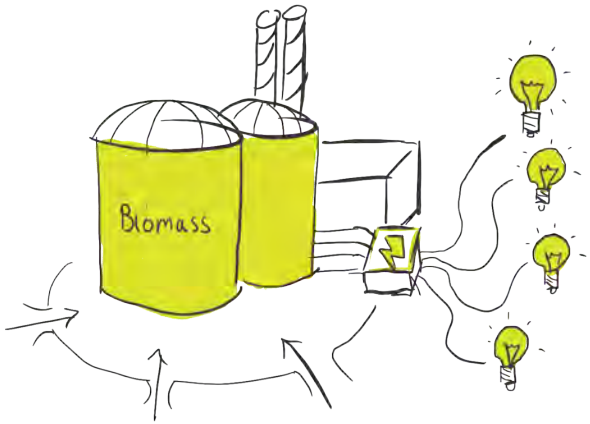
Economic Spaces:
There were a number of unique decisions

made by the groups with regard to economic spaces in Dworzark. Group 1 proposed to add a large market to their plan and to locate it next to a day care centre, so that stall owners and customers could leave their children somewhere safe nearby. Another decision related to market spaces made by group 3 was to locate the market on a secondary road with access to footpaths, services, public toilets and water tanks, so that the market became a greater hub of activities in the community, Similarly, group 1 decided to include a large market located higher up in the valley so more people from different neighbourhoods could have access to amenities, goods and services. One of the decisions which could ensure that everyone has access to economic activities was group 1's suggestion to create many small scale opportunities such as markets, shops, and urban farms throughout Dworzark.Participants in group 3 decided to retain the existing bottling plant, and to create further factory production facilities, restaurants, bars, office blocks and to expand Dworzark's northern boundary to create further economic spaces in the settlement.



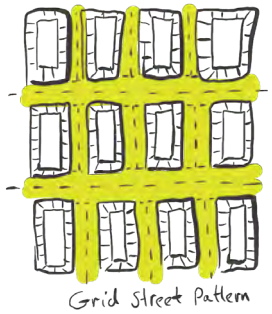


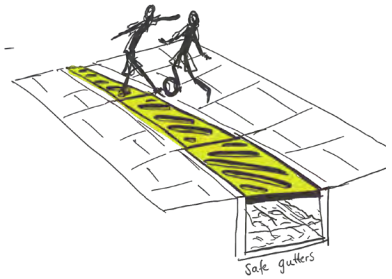




Discussion

The plans generated in the modelling activity were the product of rich debate within each group and there were detailed, well thought out ideas presented by each group. The results show that there are some strong community-wide ideas on how the community should develop which have been described in the shared decision patterns section. However, the unique choices made by different groups demonstrated some excellent examples of ways in which the community could develop equitably. Ultimately, two recurring themes that came up in most of the modelling exercises and across categories were how to deal with the settlement's difficult topography, and ensuring that everyone in the community has good access to all services and amenities.





9.2 Planning an organisational strategy

This activity allowed resident to explore appropriate strategies for delivering improvements to the settlement considering who is involved in the decisions and delivery also financial implications. This section presents the findings from each group and then reflects on common themes and considerations.

Figure 9.5: Organisational activity

Community Development Strategy Planning Findings Group 1

Patterns in decision making:
Looking at the results from the community organisation section, group 1's decision-making was primarily focussed on the current realities experienced in the community. The group decided that most developments should be delivered by the government with the community being consulted and responsible for management and upkeep. The categories in which the community felt that they have the capacity to deliver were amenities, public buildings and spaces, as well as mobility and infrastructure. Housing, economic spaces and services and facilities were areas in which the community felt the government and private sector actors should lead development.

Unique reflections:
Group 1 had a robust discussion about how housing needs could be delivered in Dworzark. They agreed that there is a need for some rent to buy or mortgage schemes which residents could access as most individuals and families could not afford the full amount for a house up front. The group also reasoned that housing should be lead/constructed by the government with important decisions made by elected community committee members.
When discussing economic spaces, group 1 emphasised the private sector in many of their decisions, but ensured that traditional leaders and the government were also included to provide some oversight of economic activities.

One of the most dynamic categories which the group approached was the public buildings and spaces category where participants chose different financing options for every type of public building and space. They chose natural spaces to be financed by NGOs, religious spaces to be financed by shared collection boxes, cultural spaces to be financed by traditional leaders, community spaces to be financed by government, and recreational and leisure to be financed by CBOs and charities. These wide-ranging options highlight a need for multiple investment streams to ensure that development can go ahead.

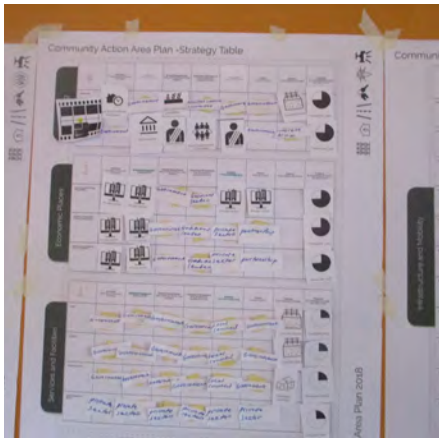
Figure 9.6: Group 1: Community development strategy planning findings

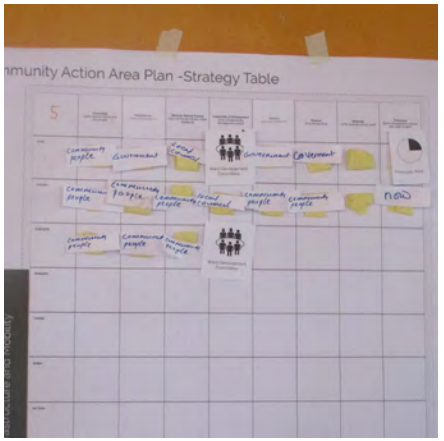
Amenities	Public Buildings & Spaces	Housing	Economic Spaces	Services & facilities	Mobility & Infrastructure
The Community	The Community	The Government	The private sector	The government	The community

Choices by average within planning areas

Ownership (what types of tenure and ownership)	**Post-Build Maintenance** (Who's involved with upkeep once created)	**Decision Making Process** (How will the community make decisions)	**Leadership of Development** (Who will coordinate development actors)	**Delivery** (Who will construct the final development)	**Finance** (Which organisations will pay for the development)	**Materials** (What will the main materials used)	**Timescale** (Is the development needed now, soon, or, later)
The community	The Community	The Government	Traditional leaders (Chief & Chairperson)	The government	The government	Concrete Blocks	Now
		Traditional leaders (Chief and Chairperson)	Elected community committee				Soon

Choices by average within strategic areas





Community Development Strategy Planning Findings Group 2

Patterns in decision making:
The choices made by group 2 with regard to community development organisation revealed that when compared with each other, the group decided that development should be mostly coordinated by the community with only finance coming from outside the community. Unlike the previous group, this team included a larger variety actors to strengthen the possibility of better organisation management within the community.

Unique reflections:
Group 2's approach to the development organisation activity produced some interesting decisions. When looking at construction materials they selected high-quality long-lasting materials for buildings of civic value. They chose to use mud cement blocks for religious and emergency buildings as these were perceived to be stronger than traditional cement. They also decided to use innovative materials for housing, which suggests that they would like modern housing.

Interestingly, when group 2 looked specifically at housing, they chose homes to be under shared ownership and for decisions to be made by popular community vote, This was a very original way of approaching housing in Dworzark and could allow for the community to be more self-sustainable in developing homes in the settlement.

Another unique factor group 2 included was that they agreed to services and facilities as well as public buildings and spaces being more urgent in delivery need than other areas like amenities and housing.

Infrastructure and mobility was interesting as the community chose cultural/religious and community leaders to make decisions for all infrastructure except actual roads and transport hubs which were perceived to be the responsibility of the government and local authorities.

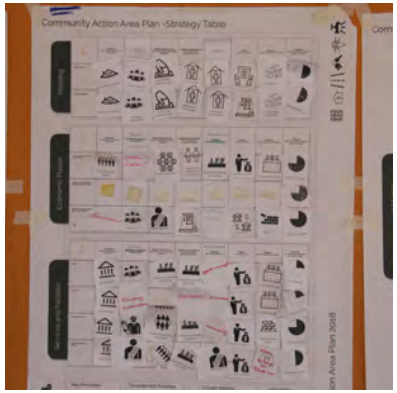
Figure 9.7: Group 2: Community development strategy planning findings

Choices by average within planning areas

Amenities	Public Buildings & Spaces	Housing	Economic Spaces	Services & facilities	Mobility & Infrastructure
The community	The community	The community	The private sector	The government	The government
			The government		The community

Choices by average within strategic areas

Ownership (what types of tenure and ownership)	**Post-Build Maintenance** (Who's involved with upkeep once created)	**Decision Making Process** (How will the community make decisions)	**Leadership of Development** (Who will coordinate development actors)	**Delivery** (Who will construct the final development)	**Finance** (Which organisations will pay for the development)	**Materials** (What will the main materials used)	**Timescale** (Is the development needed now, soon, or, later)
The community	The community	Traditional leaders (chief and chairperson)	Elected community committee	Community contractors	The government	Concrete block	Soon
The government			The community	The community			Later



Community Development Strategy Planning Findings Group 3

Patterns in decision making:
When deciding how the development should be coordinated in the community, group 3 selected a diversity of actors to focus on certain areas of responsibility, as well as to include a partnership approach to development.

Unique reflections:
one of the most interesting decisions made by group 3 was that water provision was not perceived as a government responsibility; instead NGOs and the wider community were seen as responsible for this amenity. Electricity and sanitation were the opposite; the participants chose for these to be developed predominantly by local authorities and the government.

Another original decision was related to public buildings and spaces, which the participants decided should be mostly coordinated by the community and traditional leaders. However, they also chose to include a strong diversity in funding sources which highlights a concern that this is an underfunded area and will require more community focus.

Services and facilities were decided to be almost all government-led, a decision which would leave very little room for the community to have their own say in these important areas, as well as having a high danger of no delivery. Infrastructure choices mirrored this as well, and choices relating to economic spaces were perhaps too market-led, which again could be detrimental to the community's self-determination.

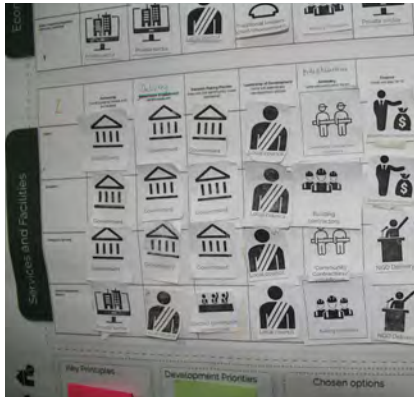
Figure 9.8: Group 3: Community development strategy planning findings

Choices by average within planning areas

Amenities	Public Buildings & Spaces	Housing	Economic Spaces	Services & facilities	Mobility & Infrastructure
The government	The community	Balanced mix of actors (partnerships)	Balanced mix of actors (partnerships)	The government	The government

Choices by average within strategic areas

Ownership (what types of tenure and ownership)	**Post-Build Maintenance** (Who's involved with upkeep once created)	**Decision Making Process** (How will the community make decisions)	**Leadership of Development** (Who will coordinate development actors)	**Delivery** (Who will construct the final development)	**Finance** (Which organisations will pay for the development)	**Materials** (What will the main materials used)	**Timescale** (Is the development needed now, soon, or, later)
The government	The community	Traditional leaders (chief and chairperson)	Local authority (Freetown City Council)	Balanced mix of actors (partnerships)	Balanced mix of actors (partnerships)	Innovative Materials	Soon
						Concrete Block	Later



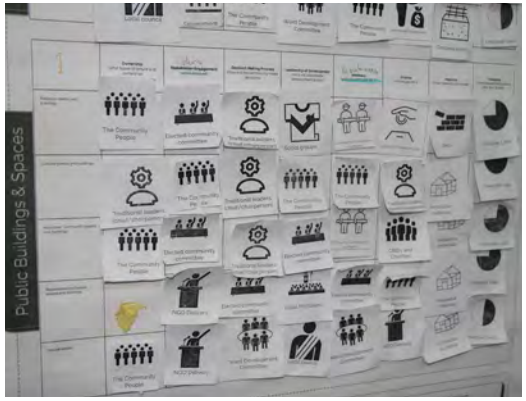


Figure 9.9: Organisational Activities

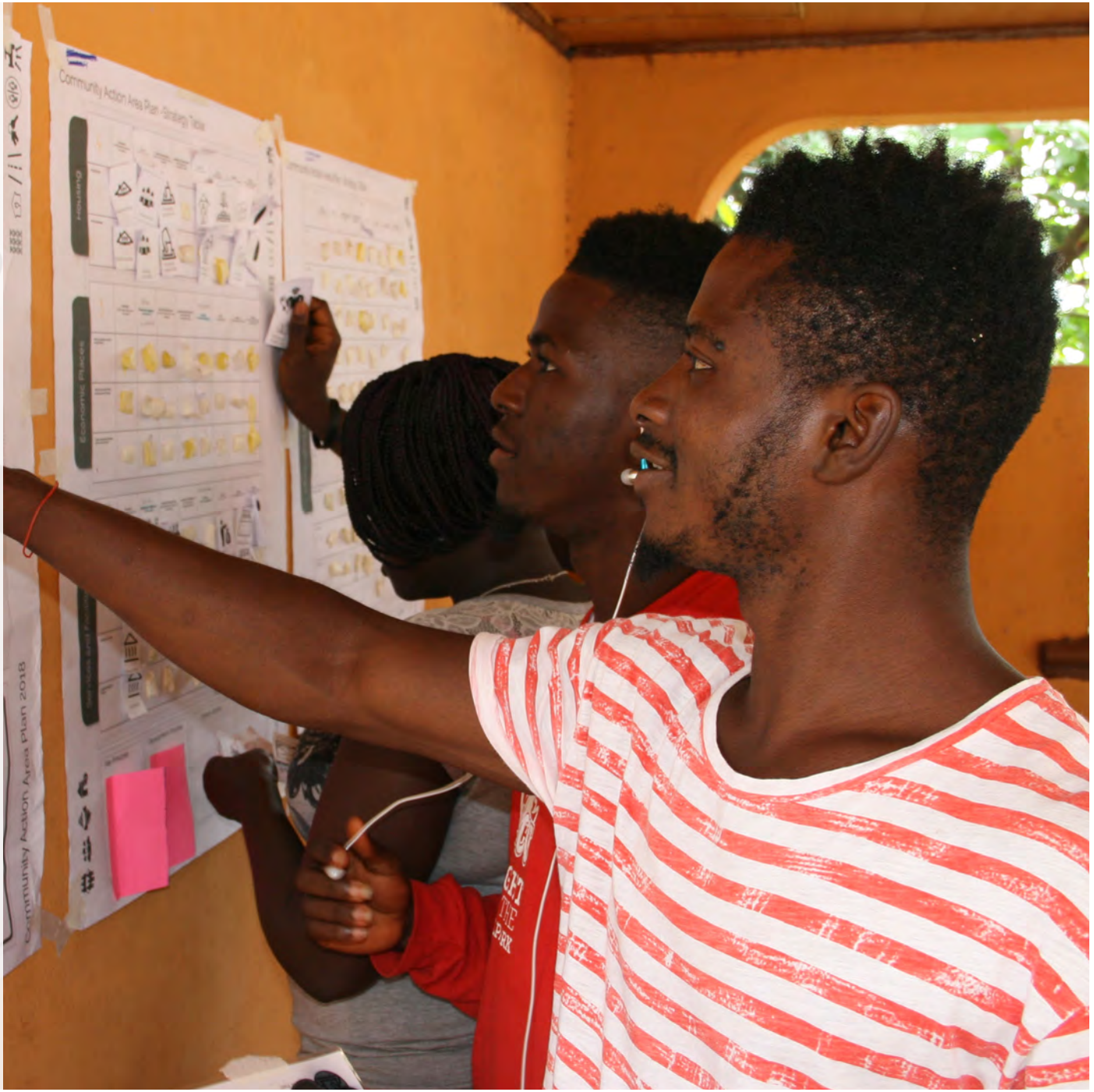
Sector	Group 1	Group 2	Group 3	Average
Electricity	Community	government and community	government	Government and community
Water	Community	community	community	community
Toilets and Sanitation	Community	government	Community	community
Religious spaces and buildings	Community	community	community	community
Cultural spaces and buildings	Community	community	community	community
Municipal/ community spaces and buildings	Community	community	Government and Community	community
Recreational and leisure spaces and buildings	Community	mix	Community	community
Natural Spaces	Community	community	Community	Community
Housing types	Community	community	Community	community
Housing typology (housing grouped)	Community	community	Community	community
Primary industries (farming/mining/fishing)	Community	community	government	community
Secondary Industries (brick, charcoal, product making)	private sector	community	community	community
Tertiary industries (hospitality, office work, technical)	government	government and community	Government and Community	government
Health facilities	community	government	Government	government
Educational facilities	government	community	Community	community
Emergency service facilities	government	Government	Government	government
Waste management	community	community	Community	community
Roads	community	community	Government	community
Footpaths	community	community	Government	community
Cycle Paths	mix	community	Government	mix
Street lights	government	community	Government	government
Drainage	community	government and community	Government	government
Bridges	community	government	Government	government
Rail tracks				
Road Signs and Signalling		community	Government	Community and government
transport hubs		community	Government	
Transport stops		community	x	
Transport vehicles		community	x	
Average	**community**	**community**	**Mixed**	**Community**

Figure 9.10: Community development strategy findings table

Things to consider moving forward

community was mostly responsible for its own development improvements. When examining the findings from the sector-by-sector areas of urban development, the community groups mostly chose amenities (excluding electricity) to be delivered by the community; public buildings and spaces (except natural/green spaces) to be delivered by the community; housing to be delivered mostly by the government; economic spaces to be delivered by a mix of different actors; and services and facilities to be delivered by the government. The final category of infrastructure and mobility was split between community and government actors - the findings suggest that the community should be responsible for small scale infrastructure like cycle paths, street lights, footpaths and bridges within the community but that the government should provide larger infrastructure such as roads and public transport.

At many points in this exercise the groups perhaps rushed their choices, not being in a position to reflect carefully enough on the specific nature of their decisions, about who was really going to lead a development area and what kind of people and organisations would be required to construct, finance and advocate for developments. In conclusion, this area might require greater community scrutiny and agreement on the specifics of what they want and how they as a community will achieve it.



9.3 Drawing refined layouts

This section reviews the three plans drawn by participants.

Figure 9.12: Drawing refined layouts

Drawn Layout Group 01

Working as closely as possible with the existing layout of Dworzark, group 1 predominantly focussed on upgrading current roads, footpaths and infrastructure, as well as formalising the areas between those roads in a more linear format. The result was that the drawn layout looks quite organic, with services, amenities and public spaces distributed fairly across the road network. The group was dedicated in ensuring that roads worked with the topography and that the most dense area of the community was at its core with density reducing with the severity of the topographic incline. Another positive feature of this design is that the group decided to include a large amount of services, amenities and community buildings and spaces in the layout, locating them specifically next to the proposed primary roads.

Figure 9.13: Group 1: Refined layouts

Drawn Layout Group 2

Group 2's plan shows a more formal road layout and uniform housing block sizes when compared with group 1. When choosing how the housing blocks would look, the group considered their model layout in the previous exercise and decided that the central area would have cube-shaped blocks arranged into rows with medium to high density buildings. In the periphery areas where the topography is more problematic, the community selected more rectangular blocks arranged into longer, more undulating rows, which were intended to work closely with the gradient of the valley. The design also heavily considered access to amenities such as water and toilets, where each blue dot represents a water point and the orange dots represent toilets. The idea here was that water points and toilets should never be more than five minutes walk away from all households.

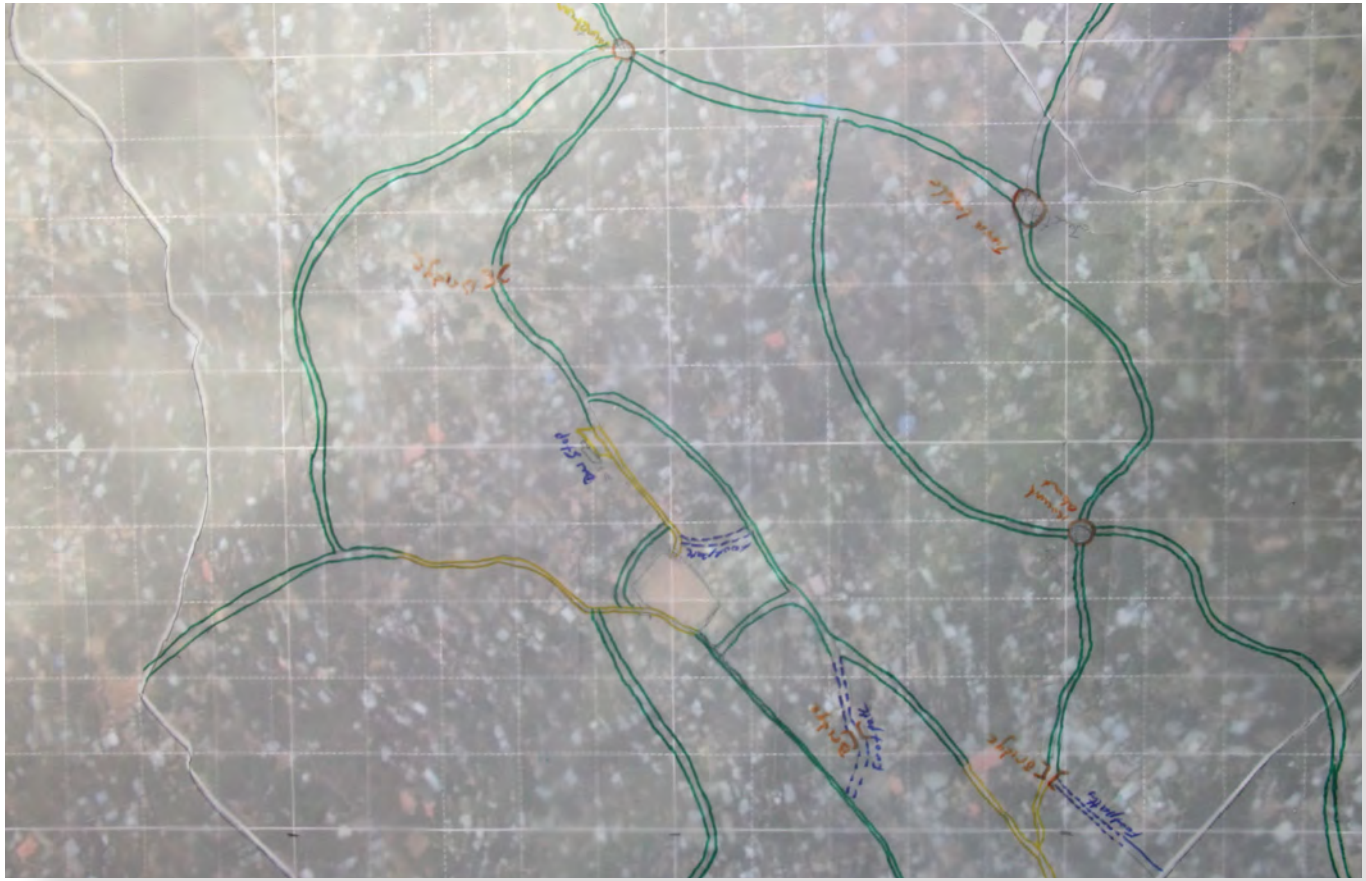
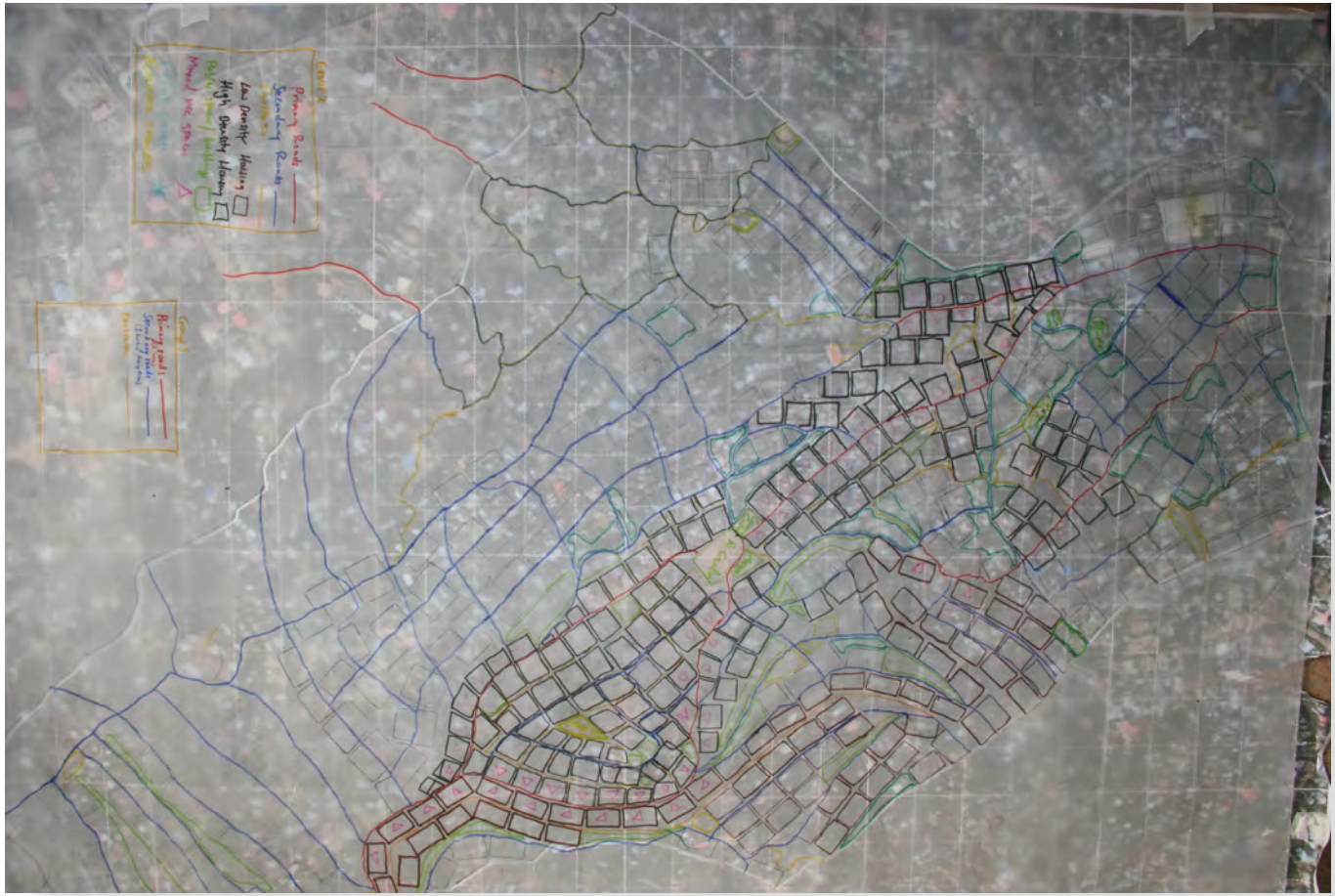


Figure 9.14: Group 2: Refined layouts

Drawn Layout Group 3

Group 3's plan was the most developed of the three and combined some elements of the original previous plans, including trying to maintain existing connections as included in layout 1, and the block patterns used in layout 2. Rather than approaching one select area of Dworzark, this plan attempted to cover the entire settlement, starting with roads, then housing blocks, then community buildings and spaces and finally water points and toilets. The plan includes far more green spaces and public spaces and synchronises a difficult balance of maintaining existing elements and redeveloping the community for greater functionality. However, there is one key consideration which would need to be resolved with this layout: that a number of roads drawn travel vertically up the steepest valley slopes in the community, however this is perhaps due to the difficulties of drawing on an aerial image.



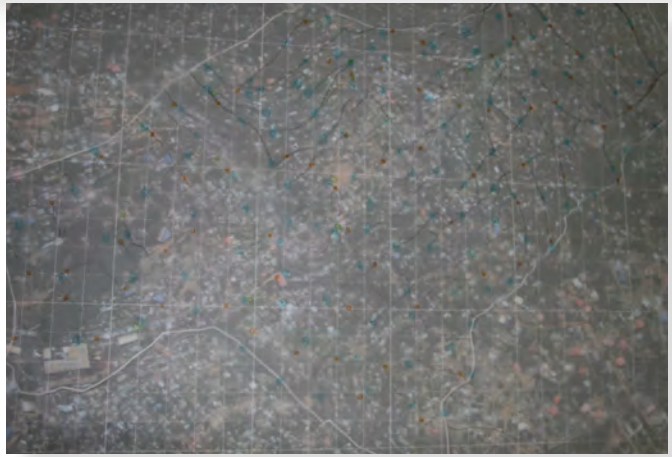


Figure 9.15: Group 3: Refined layouts

10

DESIGN GUIDE

This design guide integrates the learning that emerged from the modelling, organisational and drawing activities into a set of design instructions for the future development of Dworzark.

1. Natural spaces with vegetation and planting located near or on top of valley slopes to improve resilience from natural disasters

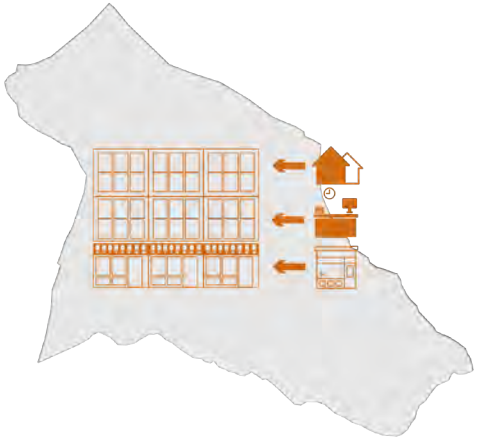
2. Health facilities located close to main roads which connect to the centre of the community as well as outside the community

3. Clustered and centralised services for easy access

4. Improving existing facilities, buildings and spaces

Figure 10.1: Design guide diagrams

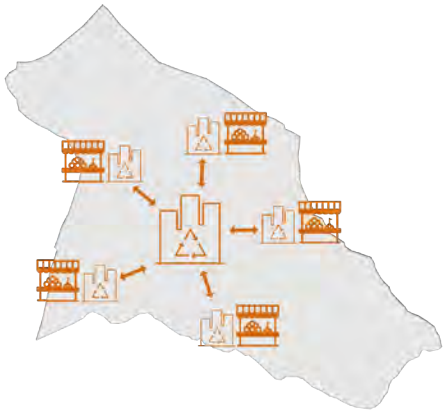
5. Shared use public spaces



6. Mixed use first floor and ground floors in apartment blocks for retail and office space

7. Markets located higher up the valley as well as in the central area so that residents have easier access to goods and services

8. Day care centres located near markets to support parents using those facilities.

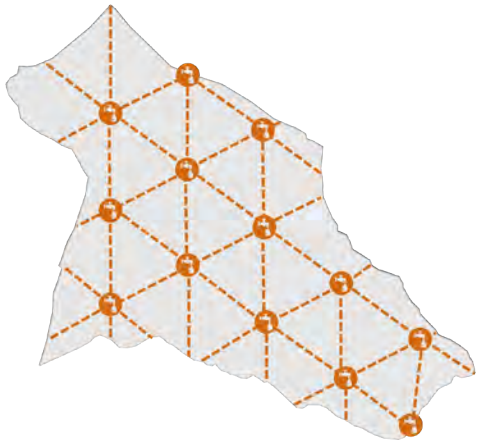


9. Waste management facilities located nearby markets as well as the central area to reduce impact of waste coming from those spaces

10. Public toilets in the central areas of Dworzark and nearby community buildings and spaces

11. toilets and sanitation facilities every 300m where unable to service individual homes.

12. All properties to have self contained (interior) toilets, especially in apartment blocks.

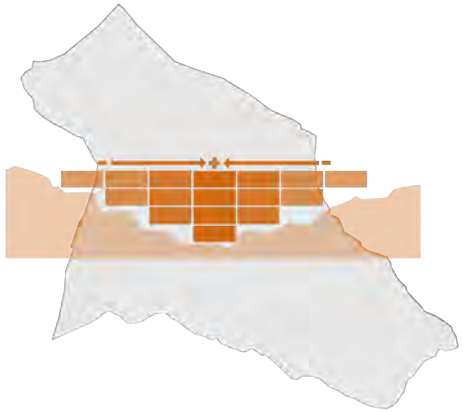


13. Water points every 200m where unable to service individual homes.

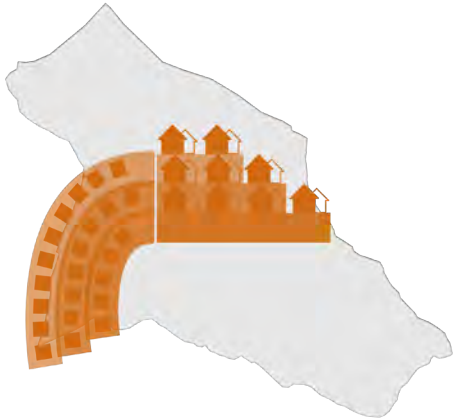
14. Piped water access at the bottom of the valley but shared water tanks and other self reliant water facilities higher up the valley.

15. Water self reliance for emergency and health service buildings.

16. Collection of rain water from roofs and storage to take water out of the drainage system as well as to provide water resilience.



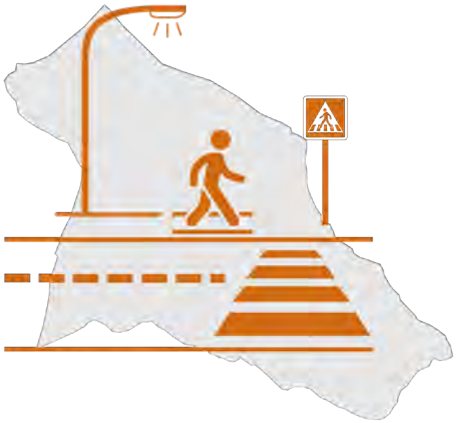
17. Taller, more affordable properties located at the bottom of the valley to improve equity to services and amenities.



18. Terracing of of land to create row style building typologies where possible.

19. Square grid street pattern in central area of settlement

20. Roads which work with contours



20. All roads to have adequate pedestrian facilities

22. Transport stops near nodes/ places of activity and key junctions/ road intersections within the community.

23. Main road to service central areas of settlement as well as connection road to American Embassy.

24. Network of single track secondary roads.

25. Use of steps to make footpaths climb steep valley sides vertically, as well as footpaths which work with topography for a more relaxed assent of the valley sides.

11

WHAT CAN THIS PLAN DO

11.1 Reflections from the process

This document represents the process and outputs of a pilot project exploring how Community Action Area Plans can be implemented in informal settlements in Freetown utilising participatory design and planning methods. This in-depth collaboration was undertaken over the course of a year and included over 25 workshops in Cockle Bay and Dworzark with over 150 residents engaged in the activities.

Alongside the general planning of the settlement, one of the key aspirations of the community was the training and capacity building that residents would receive through being involved in the process. In their assessment of the process, resident expressed that by engaging in the making of this CAAP they learnt new skills and felt more confident to engage with planning and development issues. Both the facilitating team and the community also recognised that some residents had been more involved in the process and excelled in planning activities; it is now hoped that these individuals can be supported through Community Learning Platforms to take actions forward.

We expected some capacity building which I believe we have all gained a huge amount of and also the platform or the opportunity to discuss issues of development. So, our knowledge base has improved greatly mainly through the discussions and the activities we did and the skills we have gained. For most of us, because I cannot speak for everyone, we have learnt how to draw plans, how to map, and a lot of the basics needed for community planning. As far as I am concerned these ideas and skills if used in the right way help make the community a better place for us. So, let me say a big thank you for that (Dworzark Steering Group).

There were several challenges flagged up by the community and the team regarding the implementation of the process. These included:

- Time frame of engagements was quite long for residents who might have other employment;
- Keeping everyone on task particularly when undertaking complex activities was sometimes a challenge;
- Unforeseen circumstances leading to delays in the process such as weather conditions and political events;
- Lack of prior knowledge of the final output, as this was the pilot process.

These challenges have been recorded and strategies for mitigation considered in future CAAP processes.





Figure 11.1: Photographs from various engagements

11.2 Future Actions

'As informal settlement dwellers we are also concerned about the face of Freetown. We want Freetown to be a beautiful city, we don't want our communities to be an eyesore. so, if this can be done in our community and it brings change, we would want it to be done in all other communities in Freetown'. We recommend that the Freetown City Council makes the CAAP mandatory for all settlements. 'A CAAP should be done in all settlements across Freetown, this can be done by either the FCC or any other donor or NGOs and this should now be the development bible for every community. So, when people come and want to work in the community, they should go by the CAAP' (Cockle Bay Steering Group)

The Cockle Bay and Dworzark steering group reviewed a draft copy of this document. The community members recognised that the material produced provided a good overview of the process and community outputs. They were pleased with the content and thought that the document would be valuable to present to city authorities.

'The CAAP report can be something we can show case to the authorities, about the how far the community has gone with ideas and the community's willingness to transform.' (Cockle Bay Steering Group)

In Dworzark the community expressed the need for continuing support from institutions like SLURC in lobbying the relevant authorities to acknowlendge the outcomes in the CAAP.

Furthermore they recommended the Freetown City Council should make CAAP's a flagship programme for all communities in the city not just informal settlements. They also want the government to take some steps in devolving most of the land and housing functions to the FCC as promised in the Local Government Act 2004. They think if FCC is not empowered, then much cannot be done.

One major concern was the length and complexity of the document. To share with the wider community and bring everyone on board the, Steering Group requested that there is a lighter version of the CAAP with less text and focussing on the tangible outputs they can use for future planning in the settlement.

'Once we have other outputs that are easy to read and use, we can easily align our community laws with them, as was mentioned earlier we are going to make rules and regulations that will help put the work or the output into practice'. (Cockle Bay Steering Group)

There was also an acknowledgement that the settlement profile covered the different aspects of the community with the information available, however, to implement the CAAP more detailed settlement information was needed.

The community also identified that the CAAP should not be a fixed document and reflect changes to the community over time. It was suggested that the CAAP should state how long it is valid and when it should be reviewed.

Key points to consider moving forward include;

- The Change by Design process allows for in-depth engagement with the local community. However, activities should be reviewed to ensure that the timescale and level of detail are realistic for communities to engage, as well as for local stakeholders to deliver future CAAPs.
- In its current format, the output of CAAP is long and includes a large amount of technical information, which makes it difficult for residents to access. If the CAAP is to be streamlined and scaled up as a community planning tool utilised throughout Freetown's informal settlements, its format needs to be re-thought in collaboration with the different constituencies who need to utilise the final document (local community, socio-technical support organisations, local government)
- The time-frame of informal settlement upgrading should be considered in future CAAP's
- Support should be provided for residents who have been involved in the process to continue to develop their skills in participatory design and planning.

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