Transfromative Tenements
Strategies for urban renewal in Trench Town, Kingston, Jamaica

by

Sheldon Ricketts

A thesis
presented to the University of Waterloo
in fulfilment of the
thesis requirement for the degree of
Master of Architecture

AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

The hardened inner city community of trench town represents one of several impoverished communities that form the heart of the Jamaican capital city, Kingston. As wealth and influence have moved inland, off the coastal plains on which the city was originally settled on, to the slopes of the surrounding mountains, the once vibrant downtown core has decayed. With this urban decay came the social ills that usually accompany failing communities such as crime, violence, shadow economies, health and sanitation issues. As has been the case with many urban centres worldwide, this problem was further exacerbated by an ever present influx of rural immigrants in search of a better life in the city. These associated urban problems not only affect the inhabitants of these communities, but they stifle the growth of the larger national economy.

This thesis aims to explore and propose urban design interventions to the inner city community of Trench Town, that not only address the issues of providing viable shelter to the residents of the community, but also begin to set up a frame work of self reliance and economic sustainability and growth, so that the community members can begin to develop their lives for themselves. It also begins to look at ideas of communal living that have been experimented with at on a small scale over the years, but have never been fully integrated into the urban fabric. This thesis looks to examine one specific community within the urban fabric of the city, but all the while cognisant of the fact that this one community is but one in the overall urban fabric, yet recognising that as each informal inner-city community has developed out of a unique set of conditions and thus must be treated individually as such.

Throughout the years, several interventions have been implemented to address the overall need to house the population of the expanding urban centres, with many variations of urban housing solutions being used, with varying degrees of success. This thesis will explore the implications of these solutions on the proposed site, and explore viable modifications and variations.

Firstl an in depth exploration into the historical and cultural context of the case site will be explored to gain important background knowledge of known factors of spatial development and community needs, and this will form the foundation of any further development going ahead in the case study, which will provide the analytical breakdown of the site and influences. The thesis will then explore international case studies of various approaches to similar situations to identify challenges that have been experienced elsewhere and that may inform the design site. From this research information, parameters and principles will be distilled to inform the overall design intervention. Finally, the proposed design intervention will be reflected upon, and evaluated to try to determine any shortcomings and indentify how the design might be replicated in other communties in Kingston facing similar social and economic conditions.

ACKNOWLEDGEMENTS

I would like to thank my Advisor, Ryszard Sliwka for his continuous guidance and support during the long and difficult process of producing this thesis. I would also like to thank my committee, Robert Jan van Pelt and John McMinn for their continued insight and inspiration, which allowed me to refine and fine tune the ideas within the presented thesis. Finally, I would like to thank Nancy George, for her tireless support and assistance with the editing process.

DEDICATION

This thesis is dedicated to my family, especially my Mom.

TABLE OF CONTENTS

CHAPTER 3 - SITE ANALYSIS & CONTEXT

PREFACE

My relationship with my country of birth, Jamaica, has always been an unusual one. Having left the small Caribbean Island at the age of five, and returning as a relative stranger at age 13, I can say that I spent my most formative years in the clutches of this potent mix of dark rum, equally dark and beautiful women, lingering plumes of marijuana smoke, and pulsating rhythmic music, set against a backdrop of desperate poverty spawning the most colourful of characters and culture. I have been undeniably impacted by the rich cultural background that envelops anyone who is fortunate enough to find themselves on the island referred to as the 'Jewel of the Caribbean,' despite the fact that, at the time of my return in 1996, I was considered a "foreigner" – out of touch with the intricate subtleties of the rich Jamaican culture. Although I had been globetrotting for the previous eight years - travels that exposed me to the diverse cultures of North America, East Africa and the Middle East, immediately upon my return to the Island, I remember being enamoured with the potent cultural energy in the air of this small Caribbean former colony. So began my journey to reintegrate into my homeland and my attempt to assimilate with the culture and status quo - a journey that would ultimately lead me to produce this thesis.

There is an undeniable "vibe" that one experiences in Jamaica; not the Jamaica perpetuated in travel brochures and television advertisements – where never-ending white sand beaches and bottomless rum punch glasses are at hand in super inclusive resorts to lull visitors into lazy, sundrenched, slumber in a hammock suspended between two well-stocked coconut trees; while this side of Jamaica undoubtedly exists, it is not the Jamaica of this thesis. To experience the other Jamaica, one must move beyond the safe confines of the resorts to discover the rich culture and heart-rending ambience created by those involved in a daily struggle for survival against poverty and circumstance.

Emerging from its colonial history - and even during some of the darkest chapters of its recent history, this small island with a total population of 2.8 million people has produced a culture that is revered and respected around the globe: it has produced a plethora of world class entertainers, athletes, political figures, cultural icons, gangsters, civil rights leaders, scholars and researchers.

Against a backdrop of great diversity and contrasts - often most obvious in the disparity between those above and below the poverty line - the Island still battles with the ghosts of its colonial past, where the structure of inequality perpetuated by the Transatlantic slave trade has reconfigured itself into a social structure that sees the largely black population, the descendants of West African slaves, amongst the poorest inhabitants of the Island, often living in the most challenging of circumstances. Yet, these circumstances have led to the creation of some of Jamaica's most illustrious figures, a fact which has always generated a curiosity within me about the places that produced these luminaries, and has, over time, created great respect within me for the communities themselves.

The mix of more than 15 years of gradually understanding as many of the intricacies of the culture as possible, my developing respect for the power of Kingston's inner city spaces within the context of the larger urban fabric, and my own progression in the field of architecture became the driving force for my thesis exploration. From an architectural standpoint, I have always been interested in examining the role that the built environment might play in facilitating the advancement of the seemingly intrinsic cultural aspects of Jamaican society, especially within the most impoverished communities in Jamaica, and the possible role that architecture might play in regenerating an inner city community; a combination that, at the core, forms the foundation for my thesis explorations.

Initially, I focused on the realm of low income or social housing; however, while this remains a component of the work, it is no longer the primary focus; instead, it explores the creation of a supplementary economic component to complement the current social housing approaches to providing truly economically, viable housing stock for the lowest stratum of society.

Trench Town almost immediately became the focus of my study, as the cultural significance of the community is widely recognised, primarily because of the associations with reggae icon Bob Marley, although he is just one of many national figures associated with the community. The potent cultural history associated with this community seemed to make it ideal for the exploration of how the culture and expression intrinsic to the community might be enhanced and harnessed to create an economic foundation for the community that will lead to a truly sustainable and healthy community, allowing individuals and families who live there to become self reliant and able to move out of relative poverty.

INTRODUCTION

As far back as I can remember Jamaica has represented a land of contrasts to me, and it has always intrigued me that such great variations and complexities could exist within such a compact social fabric. The contrast between the spectacular beauty of the island and its people, and the sheer ugliness of many aspects of Jamaican society has always intrigued me. Of equal importance and interest is the relationship between the various socioeconomic forces in Jamaica - aspects of the built environment and urban fabric of Kingston, and the ways in which they have been influenced and shaped by contrasting polarities.

As a child, one of my earliest memories of Jamaica is of feeling this strange curiosity and intrigue during the journey into Kingston from the airport during one of our annual pilgrimages to the western hemisphere from my mother's and my current home in Kenya. We arrived at night, and as we descended the stairs wheeled up to the the aircraft, I remember being engulfed in the familiar warmth of the tropical air and the strong smell of the nearby ocean. We were met by my mother's long time friend who took us to our hotel in Kingston. We left the small, antiquated terminal, my first clue to the economic and social climate in Jamaica at the time, and drove along the long narrow spit of land that connects the airport and the historic pirate town of Port Royal to the mainland, and I remember gazing at the sparkling lights of the city across the Kingston Harbour and admiring its beauty.

But as we travelled along the dual carriage way linking the airport and the city, I saw a number of small, poorly constructed dwellings scattered along the roadside that increased in number as we moved towards the city. As we proceeded towards Kingston, we turned onto a narrower two-lane road that leads directly to the urban centre of Kingston, and through what I would later in my life come to know as the relatively volatile inner city communities. We began to travel through a much more dense urban fabric of decrepit buildings and narrow, dimly-lit lanes that ran off the not-so-well-lit road on which we were travelling. I knew little about Jamaica, Kingston or these neighbourhoods then, but I knew that this was somewhere I did not feel particularly comfortable or safe, even just viewing it from the back seat of a moving car.

However, very shortly the character of the buildings began to shift from this obviously decaying urban landscape to the new, more cosmopolitan, and manicured environment of New Kingston, the modern central business district of Kingston where we were staying. I can now see that this early impression of Kingston was that this was an unapologetically divided city, a contrast between the new prosperity of a Jamaica, moving towards developed world status and huge portions of the landscape that seemed firmly stuck in the Third World.

Poverty, and the often difficult circumstances it creates for those who must endure it, was not a new phenomenon for me even at the time. Being born in Jamaica and spending the first few years of my life there, and then moving to the even more impoverished Kenya meant that I was no stranger to the realities that poverty produced. Kenya and much of Sub-Saharan Africa endure some of the most severe poverty in the world, with many people living in what would be described as extreme poverty. As a result, during my childhood, I quickly developed strong notions of the indicators that signalled the type of socio-economic environment in which I found myself and the perceived threats associated with them.

While living in Kenya, I recall Esther, our housekeeper, having to attend to an urgent family matter that necessitated her taking me to her home in one of Nairobi's largest slum settlements while my mother was travelling abroad. The single exposure to this slum community and this part of the global urban fabric had a tremendous impact on my understanding of how "the other half" lives, and served as a foundation for my emergent concepts of a radically divided world. I quickly recognised that in many societies there was usually some sort of marginalised section of the society, where those with the least in the society would

typically find themselves. Later, when we eventually returned to live in Jamaica, this understanding helped form my appreciation of the urban landscape of Kingston.

After our return to Jamaica, as I began to familiarise myself with my new urban environment, I began to realise that there were these seemingly "bad" parts of town in the urban fabric of Kingston - curiously, many of which were closer to the sea (downtown) and below an imaginary and almost intangible line that bisects the capital city. Over the years, I learned the names of these marginalised pockets within the urban fabric of Kingston, including names such as Tivoli Gardens, Arnett Gardens, Rema, Jungle, Trench Town, and Olympic Gardens, and developed a growing inventory of mysterious communities that I should avoid at all costs. I was exposed to many myths about these communities as well as other aspects of life in Jamaica, from the deep rooted culture, to the supposedly inherent crime and danger that existed in these impoverished and marginalised urban communities. Over the years, I was socialised to the realities of Jamaican life: on one hand the great levels of poverty and urban decay were impressed upon me, but so, too, were the tremendous importance and social value of culture and entertainment, particularly the arts, with Jamaica's music being the paramount within the cultural sphere.

During my adolescence I began to see and understand how the energetic Caribbean culture of music and dance were deeply integrated into many facets of Jamaican life. During my early high school years, I remember hearing about other older students at the fairly prominent "uptown" high school I attended, talking about the last weekend's happenings, which often involved talk about whatever "session" had gone on (a "session," I would later come to learn, was a party or street dance). In subsequent years, I would continue to hear about these "sessions", but it would be several years later, when I began to enter the world of Jamaican nightlife as I became older, that I would experience the Jamaican party scene and begin to appreciate fully the true importance of this part of Jamaican culture.

The "session' experience is a combination of a street and back yard transformed into a venue, with towers of speaker boxes belting out a continuous mix of local music, a generous availability of drinks and food, and a truly special atmosphere of vibrancy, unity and togetherness. This experience is a microcosm of the larger cultural experience in Jamaica involving music and dance. After gradually piecing together a greater understanding of the role of culture in the larger Jamaican experience, I began to find myself exploring a greater variety of aspects of Jamaican society, and discovering the origins of the social realms that extended from the informal Street Dance to the Dancehall.

Years after I moved back to Jamaica, I met my eldest half-brother, who had spent his entire life in Jamaica, and he became a great mentor to me, particularly in developing my understanding of Jamaica – and especially my understanding of the lower strata of Jamaican society. My brother, as most Jamaicans do, possesses a seemingly intuitive understanding of the larger concept of life and society in Jamaica, but, in addition, because he undertook much of his medical residency at the Kingston Public Hospital, which is located in the centre of the notoriously dangerous low income areas of downtown Kingston, he has a greater connection with, access to and understanding of these communities and their residents. With his help and guidance, I was slowly exposed to the side of Jamaican society with which I had had very little experience, ultimately giving me some of my first real access to a true understanding of these often mythologized and marginalised communities. With my brother, I experienced my first real inner city street dance, and got my first glimpses of the true importance that the culture of Jamaica holds within the lower segments of society.

The aspect of Jamaican culture and life that has intrigued me is the way in which the culture of night life, music and dance has become so central to Jamaican life. The Jamaican

entertainment industry as a whole is generally very healthy, diverse and multifaceted, providing many different opportunities and options that cater to a variety of tastes. The range of nightlife and entertainment options across Jamaica, and even in the capital Kingston alone, is quite impressive; especially in light of the Island's relatively small size and population. On any given night of the year, one can find a range of cultural happenings occurring across Kingston, from uptown night clubs that cater to the affluent, to plays and concerts, to informal community street dances in inner city communities, where the ends of a road are blocked off, and a party is held in the streets.

The true origins of the Jamaican cultural and musical traditions of the sound system, the music selector (or DJ) and the concept of the dancehall as a temporal condition in the urban fabric lies in these street dances that began to emerge in the ghettoes of Kingston soon after Independence.

Not only is there considerable variety in the options within the entertainment industry in Jamaica, but the range of options is perhaps one of the most inclusive parts of Jamaica's often otherwise polarised society. In fact, as partying in the street often serves as the main outlet from harsh realities of life in the Jamaican ghetto, the entertainment industry and the events that it spawns tend to be deeply entwined with daily inner city life. Also, as much of the cultural energy and direction of the Jamaica cultural scene comes out of many of the low income inner city communities, these communities have significant influence and impact in this realm of Jamaican society, which is perhaps one of the few ways in which these often-marginalised communities have any influence in the larger Jamaican society.

The story of Jamaican music is a complex and important one in the larger context of Jamaican history, particularly since Independence. Jamaican culture, particularly music, has played an important role in developing the identity of a people who were a newly-independent country and were still dealing with the ghosts of the transatlantic slave trade. In this newly emerging post-independence landscape, music quickly developed as a way for the largely black population of Jamaica - the descendants of the slaves that had been brought to the Caribbean from Africa - to capitalise quickly on the prevailing sentiments of self-determination for the country and its people that the population of the country was now advocating. Combined with a range of influences, including the African roots of the slave descendants, the various colonising forces and migrant populations that have contributed to the gene pool of Jamaica, this eclectic collection of forces has come to provide the basis for Jamaican culture. Additionally, the often difficult circumstances faced by a large portion of Jamaican population, who, in an increasingly interconnected world, were dealing with the problems associated with the poverty that was prevalent in many parts of Jamaica, acted as a major catalyst to the emergence of Jamaica's quickly accelerating cultural awaking.

Since then, Jamaica has become world renowned for creating several internationally celebrated genres of music, including, ska, rock steady, reggae, and dancehall and directly influencing the larger development of many of the most popular styles of music internationally, from the development of rock, jazz, blues and, most importantly, hip-hop, (which is widely considered to be pioneered by Jamaican emigrants in New York City), and, for an Island of such small size and population, producing a disproportionately large number of local and international entertainment figures and musicians.

As a result of the overall successes of the entertainment industry in Jamaica, and the ability of many from humble backgrounds to create veritable nothing-to-something stories for themselves by their involvement in the entertainment industry, especially as artists or performers, there is a large local entertainment industry that serves as the local battleground for access to the much more lucrative international stage. There are countless numbers of new

and up and coming artists and entertainers that emerge from all walks of Jamaican life , but particularly from lower-income communities, who become involved in the Jamaican entertainment and cultural industries, as they see this as one of their few avenues for bettering their quality of life. However, unfortunately, the reality for many is that there are only so many opportunities for people to make the "big time" and become a "star". However, that said, there still exist extensive opportunities to use the already transformative power that this aspect of Jamaican culture offers to begin to provide real opportunities for development and sustainability, particularly in low income, inner city communities. While there may only be a limited number of opportunities for the creation of luminaries in any of the cultural realms of music, performance or art, there may be almost limitless opportunities for the creation and development of support industries, micro-enterprises and larger economic undertakings, that are developed within the existing context of the social and cultural landscape of Jamaica, building on the already rich cultural history.

Using nearly two decades of my gradually-growing understanding the intricacies of Jamaican culture and society as the basis for my explorations, this thesis explores the architectural and socio-economic implications and opportunities of using the rich cultural history that is prevalent in Jamaica as the basis of the creation of economic opportunities in order to begin to reverse the dramatic effects that globalisation and poverty have had on the small Island nation of Jamaica and much of its population since becoming independent from the Britain almost 50 years ago in 1962.

The thesis focuses on the community of Trench Town because it has great potential for the development of an architectural intervention which develops social and economic opportunities as critical missing elements in the overall development and long term sustainability of low income areas in Kingston. The community has been selected as the site and context for the explorations of this investigation because of its greatly concentrated cultural importance within the urban landscape of Kingston, the rich political history of the neighbourhood and the surrounding communities, and its proximity to Kingston's downtown core. By exploring the causes and factors for many of the socio-economic conditions that currently exist in Jamaica, particularly in an increasingly globalised world, examining the directions of international strategies and precedents in the larger international arena of poverty reduction and development, and conducting an in-depth site and contextual investigation, this thesis offers a design strategy to increase significantly the economic viability of the community and its members as a potential direction for future low income housing and social initiatives in urban areas of Kingston.

Fig. I.01   OPPOSITE - Image of Original Trench Town Tenement Yard at the corner of West Road and Lower Second Street.
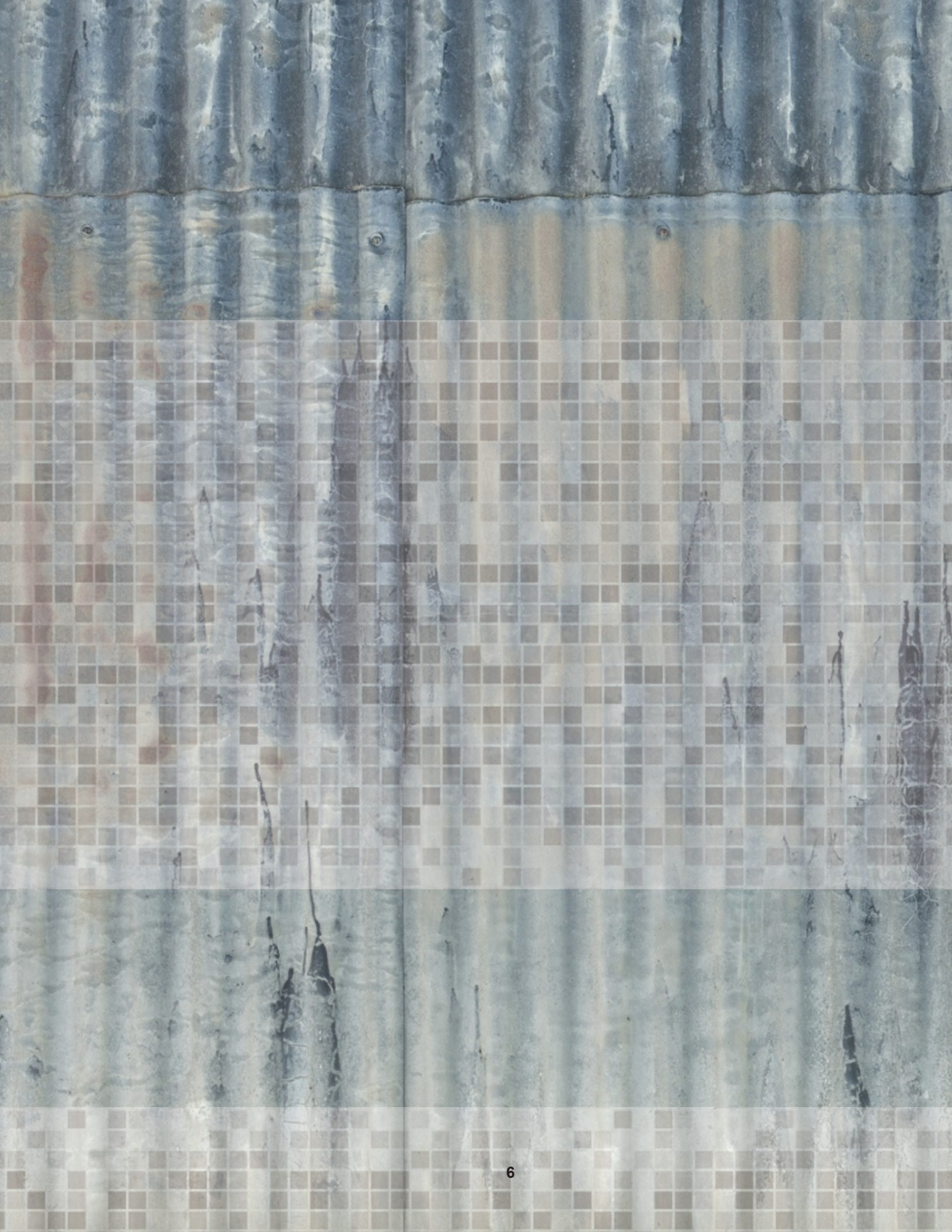
1.0 > GLOBALISATION & POVERTY

Fig. 1.01   LEFT - A Sprawling favela in Caracas,
             Venezuela occupies a vast amount of land in the
             capital city.
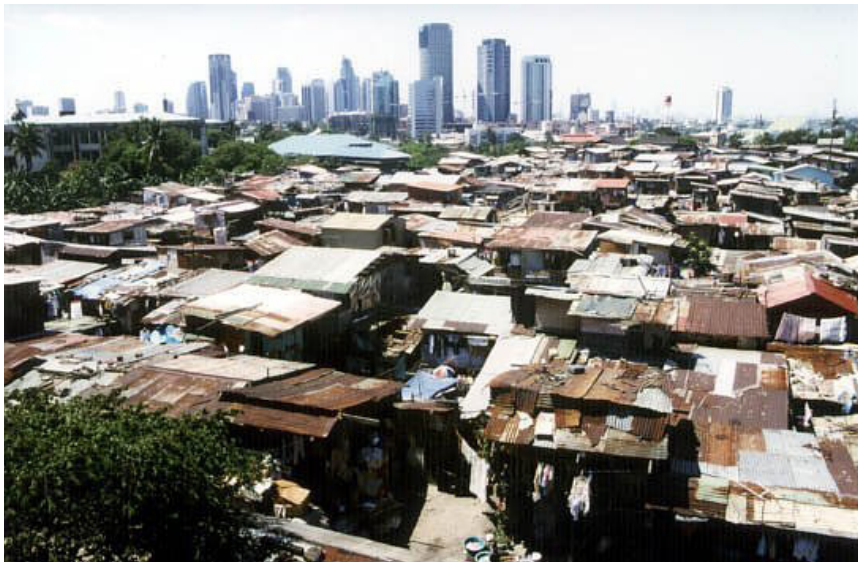
Fig. 1.02   LEFT - A slum in Mexico City, Mexico set against
             a backdrop of the city's prosperity in the distance.

Fig. 1.03   LEFT - A busy and chaotic urban street in an
             informal community in Manila, Philippines.

Number of people (in billions) living at different poverty levels, 2005

Above $10.00 a day: 0.32

$0 - $1.00 a day: 0.88

$1 - $1.25 a day: 0.52

$1.25 - $1.45 a day: 0.32

$1.45 - $2.00 a day: 0.88

$2.00 - $2.50 a day: 0.54

$2.50 - $10.00 a day: 3.00

Source: World Bank Development Indicators 2008
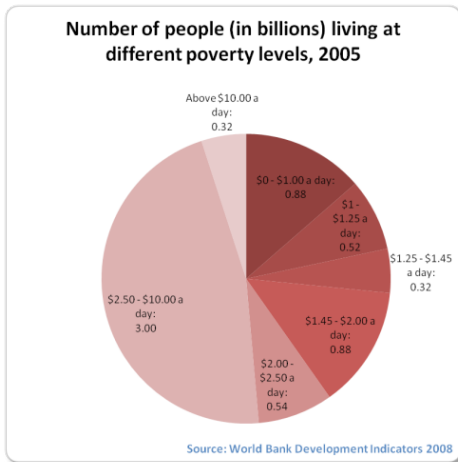
Fig. 1.04   ABOVE - Global Poverty Levels, Number of people (Billions) (2005)

Percent of people in the world at different poverty levels, 2005

	$1.00	$1.25	$1.45	$2.00	$2.50	$10.00
Above	5.58	5.06	4.74	3.86	3.32	1.31
						5.15
Below	0.88	1.40	1.72	2.60	3.14	

Poverty Line (USD Dollars a day at 2005 Purchasing Power Parity)
Numbers inside bars are world population at that indicator, in billions

■ Below the poverty line ■ Above the poverty line

Source: World Bank Development Indicators 2008

Fig. 1.05   ABOVE - Global Poverty Levels, Percent of People in the world (2005)

POPULATION LIVING ON LESS THAN $1 PER DAY, 1981-2004

— Sub-Saharan Africa
— South Asia
— East Asia & Pacific
— Latin America & Caribbean
— Middle East & North Africa
— Europe & Central Asia

Source: World Bank 2007
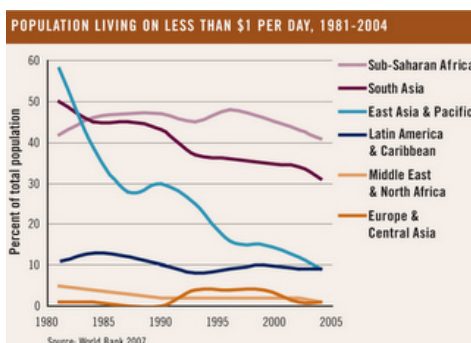
Fig. 1.06   ABOVE - Regional Extreme Poverty Levels, Percent of population living on less than $1 (USD) per day (Billions) (2005)

Fig. 1.07   RIGHT - Regional Numbers of People living in extreme poverty (living on less than USD$1) (Millions) (2007)

As the world moves further into the 21st century, the number of people in the world living in poverty continues to increase. It is estimated that approximately one in three people of the world is currently in poverty, with estimates projecting even further increases. Of those living in poverty, The World Bank estimate that 1.4 billion people live in extreme poverty, which is defined as living on less than $1.25 USD per day.[1] What is poverty? It becomes helpful to define and explore the issues associated with the phenomenon.

Definitions of Poverty:

Fundamentally, poverty is a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation[2].

-        United Nations .

Poverty is pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life[3].

-        World Bank .

Poverty itself is often the cause of many of the socio-economic issues that are faced by societies around the world. The lack of access to resources causes those at the bottom strata of society to have inadequate access to those things that ensure our well being, such as decent work , education, healthcare and, importantly, adequate shelter.

Europe & Central Asia

1.2 billion people living in extreme poverty
People living on less than $1 a day (millions), 1998

24

East Asia & Pacific

South Asia

Sub-Saharan Africa

Latin America & Caribbean

Middle East & N. Africa

78

291

6

522

278
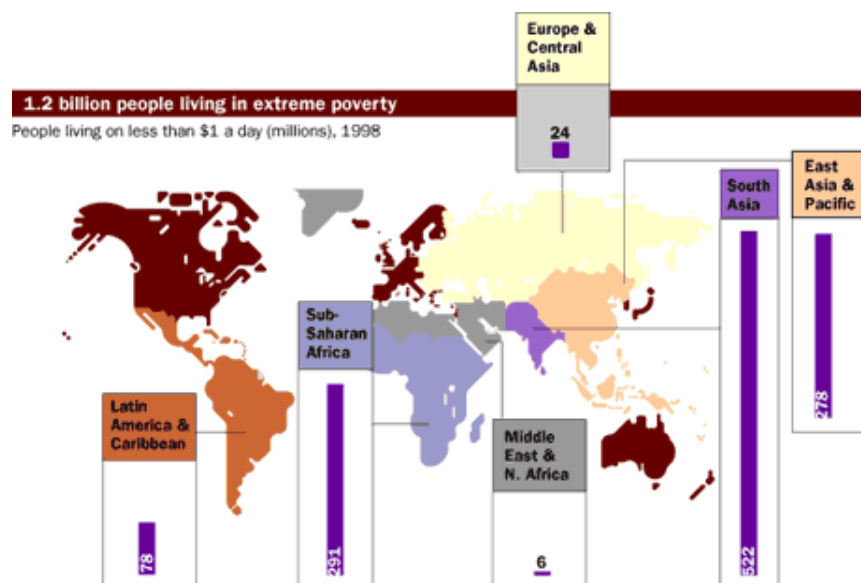
GLOBALISATION & POVERTY

The United Nations describes globalisation as:

…a widely-used term that can be defined in a number of different ways. When used in an economic context, it refers to the reduction and removal of barriers between national borders in order to facilitate the flow of goods, capital, and services and labor... although considerable barriers remain to the flow of labor... Globalisation is not a new phenomenon. It began towards the end of the nineteenth century, but it slowed down during the period from the start of the First World War until the third quarter of the twentieth century. This slowdown can be attributed to the inward-looking policies pursued by a number of countries in order to protect their respective industries... however, the pace of globalisation picked up rapidly during the fourth quarter of the twentieth century ...[4]

The phenomenon of globalisation in many ways has created or at least acted as a catalyst for many of the poverty issues that exist in the world at present. Since the industrial revolution enabled the mass production of goods, reducing cost, and allowing for greater accessibility, there has been a promise of an increased standard of living for workers, and, in many ways, this promise has been undeniably true. However, it is also the scientific and technological advances that came with this period of exceptional human advancement that increased life expectancies and allowed the earth's population to expand rapidly to today's present population of approximately 7.5 billion people. However, the wealth that was created through this process of human advancement, as has been the case throughout much of human history, has not been equally distributed amongst the world's population, as various forms of class systems, territorialities and hierarchies have forced a disproportionately large segment of the population to live with very little.

The power structures that have dominated geopolitics for much of recent human history established the current status quo, although arguably they have evolved and morphed to take on new forms. Globalisation has its roots in the systems of empires that once controlled the earth, where, at its peak, the largest and most successful empire, the British Empire, had territory and colonies that covered much of the earth. The creation of empires guaranteed Britain access to the resources that were now required for the ever expanding industrial revolution. The control over these resources and the technology to exploit them meant vast wealth, power and dominance were created for the Empire and a few select at the top of the economic pyramid, allowing the system to be sustained for a time.

This system often meant that resources left the colonies, benefited the Mother Country and little, if any, of this created wealth would then make its way back to the colony in terms of direct income for residents of the colony or investment in social improvement and capacity building, ultimately leaving a large portion of the local population out of the wealth generation equation, thereby creating one of the foundational components of underdevelopment in many parts of the world and led to the acceleration of poverty. In other cases, the direct involvement of various colonies in the slave trade meant that almost the entire population of colony countries were marginalised, denied basic human rights, and forcibly excluded from being able to develop, while being used as the manpower to develop the wealth of the Empire and the few landholders at the top of the society.

With the decline of the last true empire, the British Empire and the power of the Monarchy, the Empire gradually lost its hold on or gave up many of the territories it once controlled as they declared their own independence and began reconstructing the geopolitical map of the world. Simultaneously, the ruling class and wealthy of the world began restructuring the worlds of finance, politics and development, taking cues from lessons learned during the rule of empires, restructuring the control of wealth and resources under private or government-controlled companies and corporations. In many instances, after independence

in many former colonies, vast portions of the local natural resources were already owned by foreign entities and commonly remained under their control, save the few former colonies that may have soon after been swept up in socialist revolutions that often had their own socio-economic consequences. However, the opportunities for those outside the existing power structure to benefit from the creation of wealth through enterprise have been limited, to say the least. Undoubtedly, however, there are those who have created personal wealth through veritable nothing-to-something stories, as the ideas of democracy, capitalism and free market economics have spread throughout the world.

Today, the concept of globalisation is associated with an increasingly connected and net-worked world, where the free flow and exchange of good, services and ideas, is theorised to enable the development of equality within the global marketplace, and, as a result, should allow for the further growth and development for all parties. However, in many countries this theory simply doesn't work. The considerable power and influence wielded by developed nations, who have interest in obtaining the maximum benefit from their various global transactions, often support policies that leave less powerful developing nations at a disadvantage, often using the leverage of foreign-held debt to privatise local industries under international corporations that, in a similar fashion to their colonial predecessors, export the created wealth offshore, creating a flow of capital out of the developing country. [5]
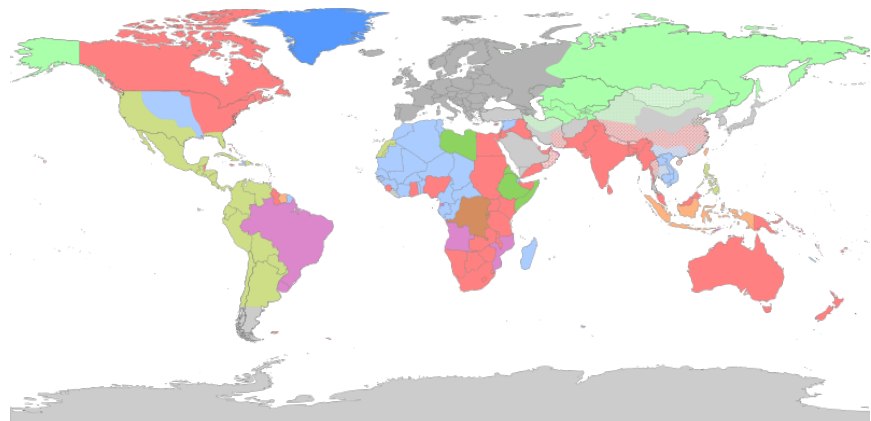
Fig. 1.08   ABOVE (TOP) - Map of major historical empires and colonial influences of the World.
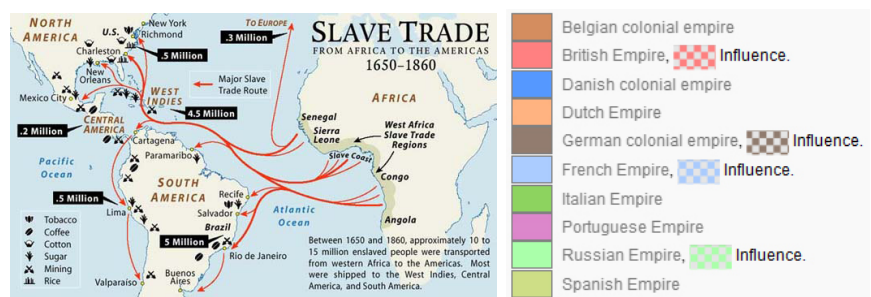
Fig. 1.09   ABOVE (BOTTOM) - Map of Major African Slave Trade routes to the Caribbean and Americas.

DEBT, POVERTY & JAMAICA

Globalisation has had a devastating impact on Jamaica, as shortly after the country's independence, when a series of oil embargos and oil crises shocked the newly free and economically unsupported nation, the sudden increase in fuel prices meant that the government had to come up with huge sums of money to pay its bills. The government of Jamaica was unable to make ends meet and had little choice but to approach the newly-created International Monetary Fund (IMF), The World Bank (WB), and its regional counterpart, The Inter-American Development Bank (IDB) for loans. These institutions were formed by the Anglo-American power structure in the aftermath of the Second World War, in an attempt to ensure that in a post war environment, economies of these nations would not face a repeat of events of the 1930's and help provide capital for the rebuilding of Europe at the end of the war; ultimately, they were concerned with the interests of the founding nations.

The loans undertaken by Jamaica were used to pay for the bills of the historically heavily import- reliant nation, instead of being used to increase the nation's ability to increase manufacturing output and moves toward self reliance. Making matters worse was the fact that the IMF loans provided to Jamaica were merely short term loans at full interest rates to get the cash-strapped country out of its current financial predicament, and were no way concerned with or put into the context of the country's long term development plans.

Beyond being used initially for the wrong investment purposes, the loans undertaken by Jamaica under its IMF agreements came with conditionalities with which the country was made to comply with to qualify for the loans. Among the requirements, were restrictions on how the government could spend the money, and a program of fiscal cuts to curb spending, including reductions in social programmes. The IMF did not directly mandate cuts to social services, but by imposing limits on spending for health and education, for example, the inevitable outcome was cut to these services. Ultimately, these cuts would affect those already at the very lowest levels of society, as they benefitted the most from such social programs, and had the most to lose.

Additionally, the conditions imposed by the IMF in the borrowing of money, meant that the IMF had influence in the setting of policies regarding fiscal spending, banking, monetary policy, exchange rates, interest rates, and privatisation. These policies were concerned with addressing the current financial bind that faced Jamaica, and not for long term development, thus by the end of the loan cycle, the country would find itself in a worsening economic situation that would require it take out additional loans, and thus the loans were compounded and the national deficit grew.

As the debt burden of Jamaica increased, the IMF and The World Bank began a series of devaluations of the Jamaican currency that further exacerbated the situation in country. The intention of these devaluations was to expand exports and reduce imports by making the US dollar more expensive, but in a country as heavily reliant on imports as Jamaica, the strategy meant that the price of food, fuel, medicine and everything else that was imported increased for the people of Jamaica. Interest rates began to sky rocket, which also had a devastating effect on production in the Island, as the cost of borrowing money could run at anywhere between 20%-40% . The lending rate made the country even more unattractive to many investors and impossible for local businesses.

In an attempt to increase investment and employment opportunities the government undertook an IMF-supported initiative to create a free trade zone within the capital, which proved to be another instance where globalisation complicated the situation in Jamaica. The Kingston Free Zone of Newport West was created, where an area of land connected to the ports was identified and factory facilities were constructed with loans from the IMF as part of the Caribbean Basin Initiative (CBI) during the 1980's, New Port West attracted foreign

manufacturers to set up garment assembly facilities by offering tax incentives and by providing a low skilled work force that could be paid lower wages than what workers in the United States, Canada or Europe would accept. The workers were primarily women, who were not permitted to unionise and were expected to work long shifts.

The Free Zone became a series of veritable sweatshop industries where women from the surrounding low income communities churned out products from which the corporations for which they worked made huge profits, while they received a salary that would not enable them to improve their quality of life. Additionally, the production process did little to support the local economy, as all the materials were manufactured and pre-cut elsewhere, shipped to the Free Zone where there were unloaded and assembled by the cheap low-skilled labour, and then exported through the same port they entered, therefore technically never entering Jamaican territory. The Free Zone operated as a foreign territory within Jamaica. In some cases the owners of the garment factories further outsourced the work to Chinese and Korean immigrants, who had been brought to Jamaica specifically to work within these facilities, as they were willing to work longer hours with higher output, for the same pay, negating one of the original purposes of the Free Zones – local job creation. Today, many Free Zone factories lie vacant as manufacturers have chosen to move their operations elsewhere in Latin America or South Asia, where they can pay workers even lower salaries. These industries became known as "umbrella industries," since owners could fold up their operations and move them on very short notice. [6]

The decline of the Free Zone garment industry was just one of many examples of the negative effects that globalisation has had on Jamaica, culminating most critically with the impact it has had on local industry as a whole.
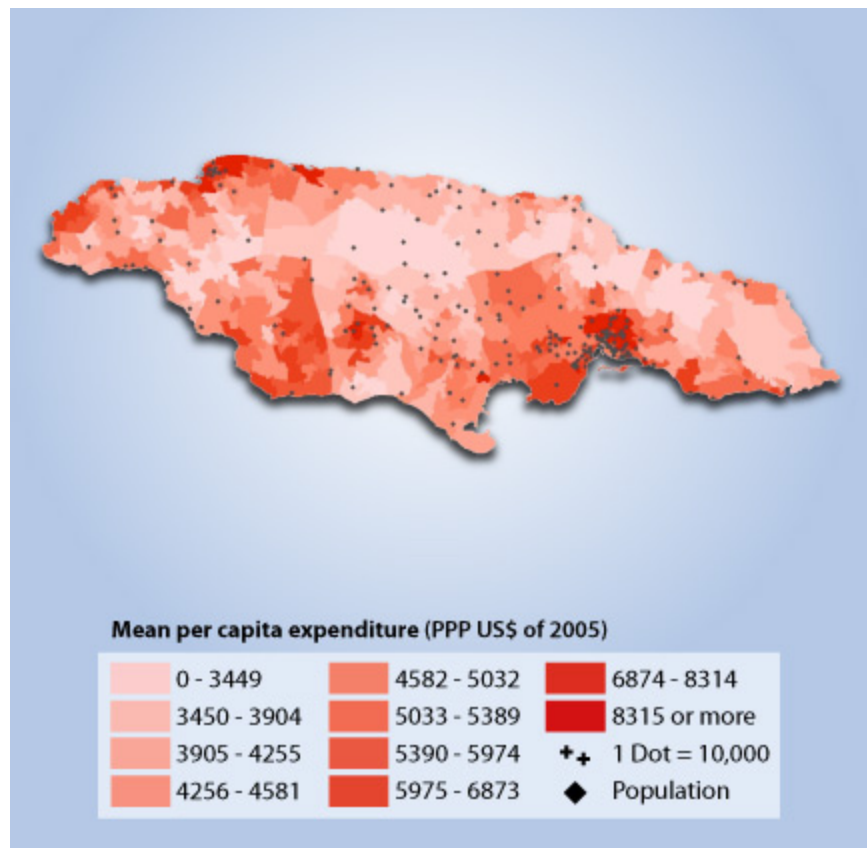
Fig. 1.10   ABOVE - Map of Mean Per Capita Expenditure and
Population Density in Jamaica. (2005)

DEATH OF LOCAL INDUSTRY

Another long-lasting effect that globalisation has had on Jamaica is that it severely hurt local industry. Jamaica has long been recognised as a resource-rich nation despite its relatively small size. It has large reserves of bauxite, the primary component in the manufacturing of aluminum, and limestone for the production of cement, and its land is extremely fertile because of the Island's volcanic nature, with the hills and plains of the Blue Mountains being among the most prized. Combined with a diverse range of climatic conditions, Jamaica has a long history of production of large quantities of bananas, sugar cane, and ethnic vegetables like yams and sweet potatoes. Its Blue Mountain coffee is prized worldwide. However, globalisation of the local marketplace, especially under the strict economic constraints and financial conditions the country has suffered under the IMF, the World Bank and the Inter-American Development Bank, has had disastrous consequences for Jamaica. The disastrous consequences can be seen clearly in the effects the international agreements have had on Jamaica, one of which was that many of the largest and most historically grounded industries - the sugar industry, and the banana industry, for example, have been privatised and/or sold to international entities. The bauxite industry has been traditionally foreign-owned; however, many of the traditional North American companies left. Consequently, many of Jamaica's national resources of Jamaica were no longer benefiting the nation directly or indirectly.

Under various loan and international agreements, the opening of the Jamaican marketplace to an influx of international products was another such conditionality that produced disastrous consequences. Under a globalised market, genetically modified imported foods began to enter the local marketplace. Genetically modified crops from the United States were now cheaper than the local produce due to sheer economies of scale, the use of genetics to increase crop yields and the US subsidisation of farming; Jamaica could not produce competing products for a similar cost. In fact, despite the promise that globalisation was supposed to open trade avenues in both directions, local Jamaican farmers have found it difficult compete or even penetrate the international markets in many cases. To be able to compete, a farmer would have to modernise significantly, importing and applying foreign-manufactured fertilizer, once again creating a flow of capital out of the country. To purchase the fertilizer, a farmer would have to apply for a loan at exorbitantly high interest rates making it even less feasible.

In fact, when it comes to the local agricultural marketplace, the West, especially the United States, has little interest in buying Caribbean products, but is more interested in what it can sell to the region. Often, when representatives of foreign farming interests are in the region, they are not looking to buy local produce to sell in their markets, but are instead trying to sell farmers genetically modified seeds and the accompanying fertilizers that have prolonged negative effects of their own, selectively destroying the nutrient content of land on which these crops are grown, creating a situation where indigenous crop strains can no longer thrive, and making the local farmer dependent on imported seeds and fertilizer - the only ones that can produce on the leeched soils.

There has been a similar impact in the livestock industry. Large segments of the dairy industry have been crippled as the market has been flooded with cheap, subsidised, reconstituted powered milk. The internationally-produced milk powder has been so heavily subsidised that should the real cost of the milk powder ever be applied, it would be far more expensive than the locally produced fresh milk. Globalisation has also negatively affected on the local beef industry, as meat from steroid-injected cattle from the United States is driving down prices, while exposing the local market to the negative health threats associated with these products. Although the Jamaican government established standards for local beef patty production to supply the various international fast food chains that began to appear in Jamaica over the past few decades, many local producers have been unable to supply them;

although the local suppliers can meet the standards, the chains prefer to import the cheaper American beef products.

The importation of chicken products, which sell below the cost of chicken produced by local farmers, is a further example of the incursion of international producers into the Jamaican marketplace. And routine dumping of eggs whose "sell by" date is about to expire on the Jamaican market is a further example of the negative effects of international trade on the Jamaican farmer and his/her produce.

Industries that have been so historically significant in the development of Jamaica as a nation are now in decline, owned by entities outside the country, or have been lost all together. [7]

Fig. 1.11   ABOVE - A factory worker in Jamaica empties a bag of US produced Milk power in to an industrial mixer during the reconstitution process.

Fig. 1.12   ABOVE - A Jamaican dairy farmer dumps the contents of milk storage vat containing fresh milk, due to lack of demand within the local market.

Fig. 1.13   LEFT – View along an empty Harbour Street in Downtown Kingston at night, showing an abundance of vacant buildings.

Fig. 1.14   LEFT – View of the decaying facade of a vacant building in Downtown, Kingston.
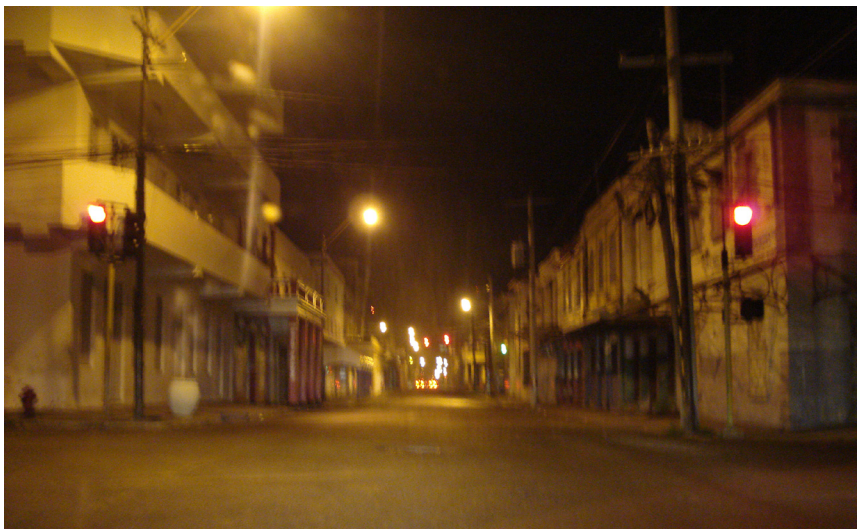
Fig. 1.15   LEFT – View along desolate street in Downtown core of Kingston at night.

INNER CITY URBAN DECAY

The decline of farming and industry and the transformation of the economic landscape of Jamaica have been mirrored by a slow decay of the original infrastructure that once supported it. The downtown core of the Jamaican capital Kingston, originally established by the British as the centre of local power and finance, has slowly lost prominence in the urban landscape of Jamaica. Though the downtown core still has some significance as the a major economic zone within the urban fabric of Kingston, the most prominent business district has become the area of New Kingston, that is home to many of the Island's leading businesses and multinational entities.

A main factor that has led to the general decline of the central core of Kingston is the decreased importance of the city's waterfront area in the economic landscape of the Island. Originally, the waterfront had played a vital role in the city's establishment as the capital under British rule. The location was ideally suited to serving the needs of the highly trade-based economy of the British colony, as the site lay on the gentle plains that led to the foot hills of the Blue Mountains, while facing a deep naturally-protected harbour on the other side. The city quickly grew inland from the water's edge, creating a vibrant, well-planned port town that not only catered to the trade of goods, but also acted as the main point of arrival in an era before the aeroplane.

However, with the end of British rule and the subsequent decline in trade from the Island, and with agricultural products often leaving from other ports on the Island, the importance of downtown Kingston declined. Additionally, as the city developed, those with wealth and influence moved toward the outer periphery of the city core or lived in great houses in the foothills surrounding the city, pushing deeper into the Liguanea plain, and creating new areas of wealth and affluence in the outskirts of the city. Neighbourhoods that were once upper class areas at the edge of the city became middle class and eventually declined to become lower class areas within the expanded city footprint. Houses that were once middle class single family homes were commonly divided up among several families, or portions of a plot annexed for a family or individual. Also as rural-to-urban migration increased after the Second World War, a housing shortage began to develop.

As many rural Jamaicans began to seek increased opportunities in the capital, often with little education or skill other than a strong culture of farming, migrants would often end up living in slums that were developing on abandoned land or in "squatter" settlements in abandoned houses. This system had a self-propagating effect: as the exodus of wealth and influx of squatters served to accelerate the inner city urban decay, property values of the area and its surroundings began to fall; the local economy contracted, as did the number of corresponding employment opportunities, further extending the cycle of poverty and opening avenues for the emergence of crime. [8]

Fig. 1.16   LEFT - A field of Marijuana grows illegally in the country side of Western Jamaica.

Fig. 1.17   LEFT - A Member of the Jamaica Constabulary Force (JCF) watches over a pile of burning marijuana confiscated as part of eradication efforts.

One of the other major negative influences that has come with globalisation and has been exacerbated by inner city decay has been the establishment and infiltration of international crime networks into the local Jamaican landscape. Undoubtedly, there is a direct correlation between poverty and the occurrence of crime, as it often puts marginalised people at greater risk both from being involved in a range of criminal activities and being victims of it. When people have few employment opportunities, they may engage in illegal activities or shadow economies to feed themselves and their families, and slums, ghettoes, favelas or whatever name and shape these informal low income communities assume, often become the preda-tory breeding grounds of criminal networks, who seek vulnerable, poorly educated youth, with few other opportunities, to fill their ranks.

Jamaica has had a long and complex history relating to crime, dating back to an era when the Caribbean was a haven for pirates who used the Island as a launching point for attack-ing merchant and military ships of various Caribbean colonies under the patronage of the British. However, since pirating in the Caribbean disappeared over the past two centuries; more recently, a more dangerous and insidious type of criminal enterprise has replaced it: the international drugs trade.

Jamaica has had a long history of local marijuana cultivation since the initial introduction of the plant to the Island by Indian labourers and the later adoption of the plant as part of the locally-born Rastafarian faith as a religious sacrament. Marijuana, or "ganja," as it is known locally, also resonated with the large population of African descendants, who, through a collective memory of Africa may have further fuelled the inclusion of the plant within seg-ments of the Jamaican culture. The free- thinking ideas being encouraged across the world during the 1960's and 1970's led to greater exposure of marijuana to the global market, and Jamaica's reputation for producing high-yielding, high quality marijuana cemented the plant's association with the Jamaican culture permanently.

By the 1970's, Jamaica's reputation for producing high quality marijuana, and the general inefficiencies of the country's policing and justice system under the country's growing debt burden, meant that the marijuana export trade flourished. At one end of the economy, many small farmers sent their children to school on the profits from growing a few marijuana plants, and many fortunes have been thought to have been amassed during these years, as locally grown "ganja" was being shipped by the tonne by sea and air to the United States and Europe, where it would either be sold wholesale or through distribution networks estab-lished by expatriate Jamaicans.

With the United States beginning its now 40-year-long "War on Drugs", and still having great interest in maintaining influence in the region, the Drug Enforcement Administration (DEA) began to sponsor marijuana eradication programmes in Jamaica as part of the Carib-bean Basin Initiative (CBI). The programmes saw relative success, as many farmers watched their marijuana crops go up in flames, but also, importantly, so did their livelihoods. The complete saturation of many marijuana markets after years of flooding the market with the abundant Jamaican marijuana, caused the markets to deteriorate. Marijuana prices became unsustainably low, and 40 foot containers full of rotting, unsold marijuana were abandoned in US ports . This collapse in the marijuana market had further disastrous consequences for Jamaica, as it was then filled by the newly-created and much more violent cocaine trade.

As cocaine exploded onto the world market in the late 1970's and early 1980's, Jamaica like many other Caribbean Islands, found itself an integral player in the newly developed trade, though arguably Jamaica was perhaps one of the countries most impacted by the trade. As South American cocaine cartels quickly began to realise the value and potential of their product, they sought avenues to smuggle as much as possible into their largest market,

United States, and Jamaica became a key link in the cocaine delivery chain.

Since Jamaica shares a maritime border with Columbia, the producer of the vast majority of the world's cocaine supply, and since it also lies almost midway between Columbia and Florida, it is an ideal trans-shipment point. Additionally, the previous experience of the key players in the marijuana trade became a valuable resource to the Columbian drug cartels, as they could use the existing transportation and distributions routes established for the marijuana trade. Finally, the overall decline in the marijuana trade in itself became crucial for the cocaine trade to take hold: influential criminals who had previously been involved in the "ganja" trade were desperate to replace their lost incomes from that trade, and the high levels of poverty and unemployment meant that there were locals who could be recruited into the trade and also provide a secondary market.

The cocaine trade infiltrated many echelons of Jamaican society, but perhaps the poorest segments of Jamaican society were most strongly affected. As the number of local players in the cocaine trade increased, so, too, did the schizophrenic results that those involved created. While the marijuana trade that had initially existed was abundant and wide spread, it was primarily a slow-paced, peaceful and agrarian culture that saw many rural farmers making a decent living through smallholder cultivation. The differences between the psychological effects of these two different drugs was mirrored by the social effects they spawned: while marijuana had long been associated with a "laid back," easy going life style, cocaine had a paranoid, psychotic effect on Jamaican society. The cocaine trade stimulated a more violent and aggressive drug culture. Under the tight hold of the addiction, and the power that came with the vast amount of money often involved in transactions, the crime statics began to trend upwards. Additionally, some of the cocaine flowing through the Island inevitably entered the local market, creating a violent criminal element driven by addiction. The links between the international drug trade and the associated criminal networks that accompanied it and the political landscape further exacerbated the already delicate political situation in Jamaica.

Even from its earliest days Jamaica had a strong link between violence and politics: during colonial times uprisings were violently put down and the leaders executed. Four of Jamaica's seven National Heroes, Nanny of the Maroons, George William Gordon, Paul Bogle, and Sam Sharpe, were named National Heroes because they died or were executed under colonial law for standing up against what they considered injustice. Since the early stages of independence and the emergence of competitive party politics in Jamaica, the use of violence to promote political influence and sway votes has been endemic; as a result, Jamaica has had a long history of politically motivated violence. This violence accelerated amid the economic crisis and international turmoil of the 1970's, as a culture began to emerge of strategic alignment between elements of the criminal underworld and various political forces in Jamaica.

As the urban population began to swell with ever-expanding informal settlements, and fewer resources were available to police these already difficult areas, the figure of the "don" or "community leader" emerged. Various criminal networks territorialised clearly demarcated areas of the cities in which they operated and fought the typical turf wars that tend to be associated such territorialisation. The leader of the criminal network that controlled a particular area became the "don" or "community leader", a criminal dictator of sorts. Politicians began to realise that they could use this influence that these criminals had over these communities to affect the outcome of elections, often through the threat of violence.

Politicians used the don and his gunmen to secure votes from the population of a particular area: the politician would covertly ensure the safety of the don from the justice system, and

provide him with political influence and financial and material support, particularly in the acquisition of guns, a vital component in the control of power in a community, in exchange for the votes from that community. Dons had support of members of the community because they would be the conduit by which development projects might be allocated to the community from the legitimate political representation, and, typically, the dons ensured a portion of the spoils of the criminal enterprise would make it back into the community, although this generosity probably tended to be less altruistic and more designed to ensure relative stability and support within the communities.

This system could result in a whole territory with the cityscape being homogenously aligned to one of the two political parties, the Jamaica labour Party (JLP) or the People's National Party (PNP). This political territorialisation of the urban fabric created a veritable patchwork of polarised territories, which often meant opposing political territories were adjacent to each other in a landscape of dire poverty, and where many aspects of life became elements of survival and competition for limited resources. This political competition resulted in further violence between rival factions. In such a divisive political structure, the overall wellbeing and survival of the members of a community might depend on the political party that they supported being in power.

Over time the politicians further capitalised on this politicised system, by using new low income housing projects as further leverage to ensure votes and community loyalty. The allocation of new low income housing projects and social housing began to be allocated primarily to the communities of the supporters of the party in power, or as a tool to territorialize an informal community aligned to the rival political party. Large political enclaves were formed by the two main political parties as they built low income housing projects in what would later become known as "garrison communities."

As guns quickly became the means of control and power within the lower income areas of Kingston, regional tensions that were playing out in the Caribbean during the 1970's between the main super powers at the time had dramatic consequences in Jamaica. The US began to fight communist influences from a newly Socialist 1970's PNP government, by lending its financial support and influence to the right-of-centre JLP, and alleged CIA support to the "community activists" associated with the JLP. At the same time, Jamaica's close neighbour, Cuba provided support to the Socialist government of the PNP to combat the western influences that had been arming JLP-aligned factions. The existing territorialisation of much of the urban landscape of Jamaica and the proxy war that was fought by the Cold War superpowers in the streets of downtown Kingston further undermined the development for a large segment of the population who lived in the inner city communities. Indeed, the 1980 election saw the importation of large quantities of guns that were issued to young men on both sides of the political divide, who were recruited and paid a salary to terrorise the communities aligned to the other political party.

The system of political patronage of the criminal networks and their leaders quickly began to intersect with the increasingly globalised international crime networks that began to penetrate the Jamaican landscape. The dons and their local criminal networks undoubtedly were already involved in the marijuana trade by the time cocaine was becoming a dominant market force in the United States, and they quickly adapted by converting to the cocaine trade. With the help of their political ties in Jamaica and renewed closeness to the United States under a newly-elected JLP government in the early 1980's that coincided with beginning of the crack-cocaine epidemic that swept many parts of the United States, many of the criminals from the particularly politically violent and turbulent 70's and 80's eras were able to migrate to the United States to distribute cocaine.

Jamaican crime networks penetrated the already well-established and traditionally popular Jamaican immigrant communities in New York, Miami, Toronto and the United Kingdom, and used their previous experience with political violence in Jamaica and the marijuana trade to take over the drug markets in these communities aggressively and often violently. The Jamaican gangs and their South American suppliers soon began to see enormous revenue from the crack-cocaine trade that is thought to have been pioneered by Jamaican gangs, particularly in New York and Miami. As the Jamaican crime networks began to embrace the increasingly globalised situation of Jamaica, they began to augment the cocaine trade into North America with a reciprocal flow of guns to Jamaica to reinforce support for their political connections at home.

Eventually, many of the criminal networks that were operating abroad, which had once been an extension of the political mechanism in Jamaica, found that they no longer needed the support of their Jamaican political patrons, as they had adequate resources and power to be self sufficient and they began to operate independently both in Jamaica and abroad.

In the context of a proxy war between US and Soviet powers in the region, the involvement of Jamaica in the international drug trade, and the violent political landscape that was developing in Jamaica, the arms trade has been the final devastating blow that globalisation has dealt to Jamaica, which, in turn, has further inflamed the poverty situation in the country. Though the peak of these various influences is long past and has begun to dwindle, the legacy of these forces has been greatly responsible for much of the urban landscape that exists in the downtown core of Kingston. [9]

Fig. 1.18   LEFT - A large quantity of cocaine sits on the deck of a US coast guard vessel after being intercepted enroute to Jamaica from Columbia.

Fig. 1.19   LEFT - Members of the Jamaica Defense Force (JDF) patrol the political enclave of Tivoli Gardens after a major effort to dismantle the alleged criminal organisation that once controlled the community.

POVERTY, DEVELOPMENT & SUSTAINABILITY

To begin to reverse the effects that globalisation has had on Jamaica and the subsequent poverty that it helped spawn, a considerable development effort will have to be undertaken that will likely take generations to effect real change. Strategies for development of these decaying and largely informal communities will have to combat the forces that have led to the development of these communities.

The development of these inner city communities, whose households are at the bottom of the economic pyramid, is very important for the greater development of Jamaica, and for the country's long term ability to rebound from the economic woes it is currently facing. As this segment of the population is of a relatively significant size , the future potential of integrating these members of society into the larger economic picture will be crucial for growth of the local economy in order to counteract the effects of Globalisation on Jamaica. One of the greatest possibilities for the development of these neighbourhoods is through empowerment of the residents, particularly through the provision of housing, basic social services and the creation of livelihood opportunities.

The international consciousness of the increasing need to conserve resources, improve efficiency, move towards sustainable energy sources, and better manage environmental resources has a direct interest in the fight against poverty, because those in poverty represent such a large percentage of the world population. It therefore becomes impossible to separate the struggle against poverty from the quest to create a more environmentally sustainable world. [10]

CAUSES

URBAN POVERTY

Financial Assets:
Limited Access to Money and Credit

Social and Political Assets:
Little Voice or Influence in Governance

Resource Assets:
Limited Access to Land and Water

Human Health and Capability Assets:
Poor Health, Limited Education, or Low Self-esteem

EXACERBATES

SETTLEMENT ON MARGINAL LANDS

LIMITED ASSETS OF THE POOR

ENVIRONMENTAL BURDENS

Lack of Services

Environmental Degradation:
Pollution & Overpumping

Vulnerability to Natural Disasters

LEADS TO

ERODES

Fig. 1.20   RIGHT - Diagram Urban Poverty Cycle; factors and consequences of the cycle of poverty commonly experienced by inner-city residents.

2.0 > STRATEGIES

In Jamaica the present situation is the same one that is faced by many developing countries around the world, where inadequate financial resources and limited long term planning have seen the demand for housing, and all the securities that accompany it, far out stripping the available housing stock in the country - in particular in the urban areas like Kingston, where rapidly increasing population densities have exacerbated the situation. This shortage of housing has particularly affected the most vulnerable members of society, since the resources to provide adequate housing by themselves is limited, and the government, suffering under its huge debt burden, has been able to dedicate only limited resources to developing the nation's low income housing stock.

There is a lack of economic sustainability in the low income housing stock created by the government in its various attempts to provide housing solutions for this segment of the market. This lack of sustainability of this housing stock seems to be tied in part to the socialisation of these communities that developed with the increasing tribalism of the political party system. Perhaps one of the largest challenges faced by the government in its provision of housing over the years is that within the lowest income earning communities of the Island, the communities that are often in the most desperate need of housing subsidies, there is a culture of reliance on political handouts that developed during the years when much of the low income housing developed was a tool of political control and tribalism given away to party loyalists.

Much of this housing quickly fell into disrepair, since residents had no increased capacity to generate income to maintain it, but now had the liability of property ownership with which to contend: the money to invest in the maintenance or upgrading of their housing was largely unavailable. In addition, there was often a sense of entitlement which led the low income residents to feel there was no need to maintain their housing or environment, assuming that if it became uninhabitable, it would be replaced by the government. Today politicians bemoan the fact that a culture of "freeness" is prevalent in these communities where many have come to depend on political handouts for their survival. Many of the low income housing projects that emerged during this period of political patronage and tribalism are also faced with social problems such as high unemployment, low levels of education and literacy, and high crime rates.

Ultimately, the true value that housing ownership offers low income inner city residents as real economic development has never been used to regenerate the most vulnerable inner city communities. Many of the low income housing projects undertaken by successive governments over the past several decades have achieved little in terms of actual poverty reduction; instead, they only created organised and formalised pockets of concentrated poverty, doing little more than changing the context of the physical environment, rather than being used as a resource to empower community members. This thesis presents the hypothesis that the development of the physical environment of these low income communities holds great potential in the larger development of the nation. Housing infrastructure can play an important role in the overall development of Jamaica, by narrowing the economic disparities in the nation, by becoming a major force driving economic development within these communities. The development of a comprehensive strategy incorporating policy, process and community partnership as key components will allow elements of the built environment to act as a catalyst for economic development. [11]

Fig. 2.01   LEFT - View of An elderly Resident sitting on landing of a decaying original Trench Town Government Yard building.

POLICY AND PROCESS

Existing Strategies (Resettle, Rebuild, Upgrade)

In many cases around the world where informal communities emerge in interstitial spaces in urban areas, the communities are considered undesirable and are completely excluded and ignored by the formalised urban infrastructures. However, internationally, these slum communities house approximately 70% of the world's population . Since these spaces are seen as undesirable and unwelcome neighbourhoods that must be removed, various governments around the world have employed a variety of methods to clean up these broken urban spaces. The residents of these informal communities that have "captured" land are often referred to as squatters. The strategies employed when dealing with informal development vary depending on the context of the exact situation, but can often be classified into three main strategies: Resettle, Rebuild or Upgrade.

Resettle

The first alternative for the improvement of inner city informal communities is a strategy of resettlement. As these informal inner city communities often occupy important development land within the urban fabric, the first method seeks to clean up slums by relocating residents of these informal communities to newly-constructed housing elsewhere, often freeing the land occupied by squatters for other development purposes. During the 1970's and 1980's one such project was undertaken by the Brazilian government, where squatters from the communities, including residents of Brasilia Samambaia, were relocated as part of the government's resettlement efforts. However, despite the government's efforts, informal communities continued to emerge in most of the cities because of the significant number of employment opportunities that were available there. This method of resettlement has also proved costly for the government, because it had not only to fund the physical move and the construction of the new housing stock, but also create new public infrastructure, particularly the transportation network for commuting workers. As these informal communities often developed alongside and within the formal built environment, many of the residents had established strong roots within the community, making the process of resolving the political, legal and ethical issues extremely complex.

Rebuild

The second strategy employed to tackle the issues of informal communities is similar to the first method, but recognised the shortcomings of the resettlement strategy, and used the clear and rebuild method. This method required clearing the site occupied by the informal community, temporarily housing the residents of the community offsite while the original site was redeveloped into formal housing which was eventually re-occupied by the original residents of the site. This method mitigated the issues associated with the resettle method by eliminating the need to construct an extensive transportation infrastructure and by continuing the existing community bonds and roots. However, this method of rebuilding has disadvantages associated with it as well. The primary issue with this method is that in an attempt to provide greatest value for money and appropriate population densities to replace the existing informal fabric, these communities were often replaced with medium and high-rise apartment blocks that were incompatible with the socio-economic realities of the low income resident, and lacked the opportunity for ground level commerce and socialisation to which they were accustomed. These rebuilt communities often increased the density only marginally over the informal communities they replaced, and the medium/high rise typology would ultimately prove to be the most difficult typology to maintain physically in the long-term. This method is also relatively expensive, as it requires the construction of temporary housing facilities to accommodate the residents while the construction is under way.

Upgrade

The final method available for improving informal inner city communities as an alternative to relocating or clearing is collaborative slum upgrading. Collaborative slum upgrading is a bottom-up, community based, participatory method of slum and poverty reduction through a process of selective upgrading of basic social services to improve the overall wellbeing of the residents of these at-risk communities. This collaborative effort promotes a self-sustaining approach to community building that seeks to develop a healthy, independent community without the community's needing to uproot or relocate. The first step often involves providing the community with basic infrastructure if it is unavailable or formalisation of illegal connections that may already exists. Public services, such as public sanitary facilities, clinics, training centres and so forth are developed within the community to further aid in the promotion of the well-being of the community members. It also involves developing existing networks and creating new programmes that create opportunities for residents, helping to improve their overall standard of living and simultaneously making them increasingly independent. Most importantly, this method of informal community improvement mobilises community members to take responsibility and ownership of their community and encourages them to become actively involved in the determination of the community's development. Accordingly, this method requires partnership and participation from various actors from different realms associated with community development, including professionals, government departments, community residents, local nongovernmental organisations and the private sector in order to succeed. [12]
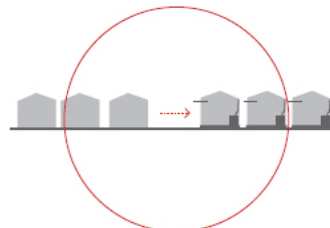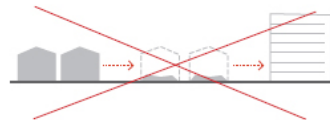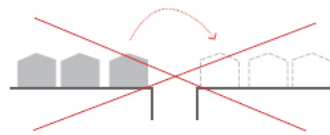
Fig. 2.02   RIGHT - Diagram of the various strategies for slum improvement: Resettle, Rebuild or Upgrade.

Evaluation of the Existing Housing Framework

Perhaps the largest challenge facing the lowest income earners and those who are closest to the poverty line is that the current housing framework in Jamaica for all intents and purposes excludes them from the housing equation completely. Under National Housing Trust policies, those at the bottom of the economic pyramid, those who have the lowest educational standards, lowest levels of employment, the least adequate housing stock and are at the greatest social risk have the least access to the formalised housing economy in Jamaica, a situation common in much of the developing world. The "Catch 22" is that without employment, equity, or other collateral those at the bottom of the economic pyramid cannot access the various loans structures that are available to the formally-employed general population. Additionally, the only financial model that exists in the current housing market framework in Jamaica is the mortgage loan model; Jamaica has not explored the viability of other strategies such as rental or co-op options.

Accordingly, the government-sponsored development institutions that are tasked with housing development work within this existing framework are providing housing stock that fits within the financial framework of the national policies, meaning that most of the housing that is being constructed is priced in the affordability range of the NHT Loan applicants - and that is at the lowest end of the price range of what is on the open market. The HAJ states clearly in its Mission Statement that to maintain financial sustainability, it aims to provide housing within the open market, a market that does not account for the lowest income earners.

Additionally, the integration of many of the Island's informal settlements into the urban fabric is greatly hampered by land tenure issues. In much of the older urban areas that have undergone a series of transformations over time, informal structures and settlements have encroached on vacant spaces and modified the original titled boundaries. As time passed and owners have abandoned land, died or moved abroad, the exact ownership of much of the land became difficult to verify. To complicate the tenure issues more, after a period of several years of occupation of a "captured" piece of land, squatters have a legal right to claim ownership of that land. Tenure issues continue to be a serious hindrance to development in the original downtown core.

However, it must be acknowledged that many of these issues have been identified by the urban planning agency, the UDC. There are a number of initiatives that the UDC is in the process of implementing targeting several of the issues affecting the most impoverished communities. However, there seems to be a disconnect between the agencies responsible for providing housing, such as the NHT and HAJ, and those that are explicitly concerned with improving social services or potential economic generation, such as the UDC. There is a great deal of room for greater collaboration among these various entities in order to develop a comprehensive national framework to begin to address the issues surrounding low income housing solutions in Jamaica. [13]

Existing Local Housing Strategy Policy and Agencies

Housing Schemes versus Sites and Services Solutions

The overall strategic policies designed to tackle the issue of the lack of low income housing stock in Jamaica can be broken into two main approaches, under which the various methods of slum improvement fall: the Sites and Services approach, and the Housing Scheme approach. The housing strategy that is probably most often used in Jamaica for the integration of informal communities into the urban fabric is one that promotes the construction of Housing Schemes. This strategy is used at all economic levels in the housing market in Jamaica, ranging from low income housing projects to upscale gated community developments. This strategy involves dividing the proposed site into lots, and developing repetitive housing typologies, locally unified by proximity and vernacular. In the many cases, the entire community will be separated from the rest of the urban fabric by barriers such as walls and fences, creating an internalised and introspective community, cut off from the larger social fabric of the surrounding urban context.

The other main method of planned development, primarily undertaken for low income communities, is the sites and services approach. This method focuses on integrating the infrastructural systems of a proposed low income community into the larger context of the formalised urban fabric. However, unlike the housing scheme strategy, this method is not concerned with the actual construction of the formal housing stock; instead, it relies on the larger national housing policy framework of Jamaica to provide assistance to the potential homeowner to develop his/her own housing and property, in a manner similar to the way housing has typically developed incrementally in lower income areas, particularly for lands occupied by squatters, but in a more formalised system. This strategy for low income housing is often advocated for use in financially-strapped developing nations such as Jamaica, as it reduces the cost incurred by the government in the provisions of low end housing solutions, ultimately making the housing more accessible. However, the largest disadvantage of this strategy as is currently implemented in Jamaica is that it is limited to providing relatively low density, low rise housing typologies, and ultimately is better suited to rural applications where lower densities can be accepted - although this solution leads to the development of bedroom communities outside the main economic zones that are then faced with high commuting and transportation costs for residents.

It is important to note that both these strategies are used in both urban and rural settings across Jamaica. However, of greater importance is an understanding of the overall context of the larger housing system in Jamaica, an understanding essential to developing new strategies to combat poverty in inner city communities. Key to understanding this context is a review of the various governmental agencies that play a role in the larger housing equation in Jamaica.

Government Agencies

National Housing Trust (NHT) •••

The National Housing Trust (NHT) of Jamaica is an institution set up in 1976 to build low income housing and act as a mortgage lender to the nation's population. The institution provides low interest rate mortgages to contributing members under a nationally mandated scheme that is intended to provide housing solutions to all sectors of the Jamaican population. In addition to providing low interest loans, the institution also builds various types of housing schemes to provide the necessary housing stock for loan applicants. Everyone that is employed in Jamaica is required to contribute to the NHT as part of the national tax structure, ensuring that the fund is always adequately financed. In return, after a short period of contribution, all working age citizens of Jamaica who have been contributing to the fund are entitled to a one-time, individual small loan of set amounts, depending on the intended use. The various loans allow first time home buyers to purchase real estate, purchase land and build a home, or to renovate an existing home if the contributor is already a home owner. The maximum individual loan amount that is accessible to a NHT contributor is currently 4.5 million Jamaican dollars (approximately CAD$ 52,000) per person to buy or build a home. Recently, since few housing solutions are available for the individual loan amount, particularly in urban areas, the NHT Act has been amended to allow an individual contributor to combine his/her loan with that of another, so that, in the case of married couples, they can combine their total loan amounts to double the original amount. [14]

Housing Agency of Jamaica (HAJ) •••••••••••••••••••••••••••••••••••••

The Housing Agency of Jamaica (HAJ) is another key player in the housing industry in the country. The agency is completely owned and controlled by the Government of Jamaica, and is the main government-sponsored developer of land and housing, falling under the portfolio of the Ministry of Water and Housing. The Housing Agency of Jamaica's main roles are the provision of housing solutions on the open market, mortgage services and the upgrading of informal settlements. The agency is the primarily the developer of housing solutions that fit under the financial framework of the National Housing Trust, and focuses on constructing housing schemes that are designed to be affordable to the loan recipients under this scheme. In addition to development of housing schemes across the Island, the institution also acts as a mortgage lender, helping to finance development with other partners in industry, and by offering supplementary loans under the NHT loan framework. The agency is also tasked with the improvement of informal settlements, which in broad terms, refers to its general efforts to resettle or rebuild informal communities into formal ones, or the implementation of infrastructural upgrades under a sites and services approach. [15]

National Land Agency (NLA)••

The National Land Agency (NLA) is the government body that is primarily responsible for issues of land ownership, tenure, legal affairs and general land information services in Jamaica. The agency falls under the portfolio of the Ministry of Water and Housing and is a combination of all the various land services into one main organisation, including mapping and surveying, land titles, land valuation and management of government properties. As tenure issues associated with land and housing are extremely important, the agency plays a key role in the planning and development of the urban landscape in Jamaica, and, critically, is able to shape and inform policy and decisions on matters relations to land usage. [16]

Urban Development Corporation (UDC)

The Urban Development Corporation (UDC) is the government institution tasked with creating the long term development plans and strategies for the urban landscape of Jamaica. The UDC was established at the end of the 1960's by the government, as a response to the increasing trend of rapid urbanisation and overpopulation in urban areas, and was primarily mandated to stimulate the growth of other urban centres outside Kingston in rural areas across the Island and the improvement of the urban fabric of the various metropolitan areas across the Island. The UDC has been involved in the transformation of many of Jamaica's most viable urban centres and strategic rural towns, and has contributed greatly to the improved coverage and quality of public infrastructure, and creation of new settlement patterns, new townships, the generation of creative shelter solutions, and several initiatives that have targeted low income, inner city communities, including the Uplift Jamaica Programme, and the Inner City Renewal Programme. Currently the UDC is spearheading a government initiative that formed the non-profit group, the Kingston City Centre Improvement Company (KCCIC), whose mandate is to facilitate urban renewal and redevelopment of the downtown area known as the Central Improvement District (CIB). This redevelopment involves the better integration and management of the market district, the upgrading of the central Sir William Grant Park, and the development of a downtown transport centre, all in an effort to spur further development in the downtown core and waterfront area, a mandate that was also part of one of the UDC's earlier development programmes. [17]

Kingston and St. Andrew Corporation (KSAC)

The Kingston and St. Andrew Corporation (KSAC) is the Parish Council representing the amalgamated parishes of Kingston and St. Andrew, across which Kingston is spread. Each of the 14 parishes of Jamaica is represented by a Parish Council that constitutes the local government structure. The KSAC is the political and civic administrative body representing the parishes of Kingston and St. Andrew. The affairs of the parish are managed by a full-time administrative staff responsible for policy implementation. The KSAC is politically responsible for policy formulation and the enforcement of policies relating to land ownership, construction, zoning and other related issues. [18]

Non-Governmental and Partnership Interventions

The Kingston Restoration Company

The Kingston Restoration Company was created during the 1980s with funds provided by USAID. It was an attempt to address the ills of downtown Kingston. It was a 10-year urban economic and physical development initiative designed to revitalise Kingston's downtown core and provide workspace for economic growth and job generation. The KRC worked in partnership with the UDC with USAID as the funding partner. The goal of the project was to reverse the negative economic trends and disinvestment that had been occurring since the 1970s. The rationale for focusing on inner city Kingston was:

- It had the highest unemployment rate
- Reversing its deterioration would encourage investment, and
- The area already had infrastructure systems in place and vacant building shells could be rehabilitated and put into productive economic use.

Subsequent to the completion of the USAID-funded project, in 2000 the KRC established the Kingston Restoration Fund under the name Urban Renewal Trust Fund as an extension of its operations. [19]

New Directions: Tenure, Ownership and Development

In the search for solutions and strategies to address the various social-economic problems presented by low income, inner city communities of Kingston, a series of strategies is needed to address the provision of desperately needed housing stock. Each component issue in this newly developed policy framework to provide the necessary housing solutions must be addressed individually; yet, ultimately, each component of the resulting solution is interdependent, as are many of the corresponding problems.

Generally speaking, there is great potential in enabling low income communities and community members to become more self-reliant, particularly in the wider national development of Jamaica. Additionally, the members of these communities can often contribute much to the process of their community's development - in terms of skills, time, ideas, resourcefulness, and the ability to save. Generally speaking, it is not the lack of skills that creates poverty amongst poor people; rather, it is often a result of the institutions and policies that surround them. As a result, there is a growing need and demand for market-based and transformative approaches to providing housing that leverage what is plentiful in these communities to create long-term and sustainable solutions.

Community Participation ••

Currently in Jamaica, more often than not, the process of providing housing and social solutions for low income communities involves top-down approaches, that typical involve limited engagement of the community to assess the real needs and desires of the actual community members. As a result of the "political handout system" of housing has dictated that the political will of the elected government has typically determined the type of housing solutions undertaken for low income communities. Accordingly, associated with these housing solutions are attitudes ranging from entitlement, to shame, to feeling disenfranchised.

At the core of any new strategies undertaken to combat the inadequacies of the low income housing sector in Jamaica is the undeniable necessity to involve the members of these at risk communities in the planning and decision making processes from the beginning. Social capital is one of the greatest assets of low income communities, and uniting community members can achieve a great deal. Importantly, this social capital allows micro-credit schemes to be successful, taking the place of more traditional forms of collateral. Additionally, since many of the issues that face these low income communities, such as land tenure, property rights issues or convincing service providers to engage communities, require political or multi-stakeholder solutions, social capital becomes important to create leverage in these negotiations.

Land Tenure Issues ••

Access to land is at the core of the issue of housing for low income households; many other issues are dependent on land ownership for development of the low income housing stock. For low income households who are illegally occupying land, land tenure issues have perhaps the greatest importance: not only does illegal occupation of land generate ongoing worry over legal rights and the possibility of eviction, but without the security of land ownership, inner city residents are often unwilling to invest in other features of a more permanent life, and without secure land tenure low income households are effectively unable to access services such as finance, water, electricity, or even sanitation. In many cases, current property rights policies make it difficult to ascertain exact legal ownership, even when families have lived for decades in a certain location.

The current housing framework in Jamaica makes it very difficult for low income earners to gain legal ownership of the land they currently occupy, because without formal employment, they cannot access the loan mechanisms to purchase the land even if the current ownership status is less ambiguous. Furthermore, in many cases, the high market value of much of the land that is occupied by squatter communities would also make the option of ownership under the NHT mortgage framework an virtual impossibility.

There are currently several strategies that may be employed to mitigate these issues in the informal communities of Jamaica. The first and perhaps most promising is a strategy that is currently being developed by the UDC, which seeks to make issues surrounding land tenure less problematic to the inner city resident, although it does not resolve issues of access to finance entirely. This approach advocates the formation of housing collectives within inner city communities among those citizens who are employed and may qualify for mortgages under the NHT mechanism. In turn, these residents would be enabled to purchase the land on which they reside collectively and build a multi-unit residential housing solution in which those residents would then live. These housing collectives would allow for several important things to happen: first, such an approach reduces the land and building costs to the individual by allowing for greater economies of scale; secondly, the organisation of community members into a housing collective would allow for collaboration amongst members to ensure that residents with similar housing needs are grouped together to ensure fairness, and allow conflicts that may arise in the process to be resolved through group and peer mediation, and finally, such a solution would facilitate greater power for the collective in negotiations with other actors in the equation.

Another strategy that is available to help begin to address the issues of land tenure is the possibility of the use of varying financial models in the creation low income housing solutions, such as rental units, rent-to-own or co-operative living solutions. These alternatives to the traditional models of financing low income housing ultimately may not solve the issues of land tenure that commonly face inner city residents, but these approaches may be useful in the easing of the strain of the current low income housing stock, by allowing those low income households that are currently excluded from the formal housing models, to have temporary solutions that would allow for a graduated advancement towards home ownership, and enable them to receive the benefits of secure shelter in the interim.

$ ·················• Access to Financing

Closely associated with the issues surrounding access to secure tenure is access to financing: under the model currently in place in Jamaica, access to finance is the other central issue facing the low income household in the process of home ownership. Although theoretically several potential sources of housing finance for low income families exist, government subsidies tend to be insufficient or inappropriate; mortgage markets tend not to serve those at the bottom of the economic pyramid; housing micro finance is an industry in its infancy in Jamaica, although it offers a great deal of potential, and informal financial solutions are generally inefficient.

Despite the relative infancy of the housing microfinance industry, it holds perhaps the greatest potential for enabling low income households to be included in the housing finance market. Although the industry has seen significant growth in recent years, the demand for these services far exceeds supply, as internationally, housing microfinance has approximately 50 million clients, a figure that is only approximately 5-10% of likely demand for such services. In addition, microfinance providers face challenges associated with growth, since they frequently face difficulty accessing medium and long-term funding; they are confronted by political and legal barriers and general confusion over their roles within the

larger housing industry. There is also high fragmentation within the industry with many microfinance providers, often with a limited client base.

Despite these challenges, housing microfinance may often be more appropriate for low income households. First, loans are smaller with short repayment periods, to better match the incomes, preferences and building habits of borrowers. Secondly, non-traditional collateral is often accepted - in other cases, no collateral is needed at all. The ability to repay loans is often assessed through standard microfinance techniques and borrowers are often helped to foster saving habits by participation in saving groups, or alternatively, lenders might require potential borrowers to establish a track record of repayment of smaller working capital loans, before giving borrowers larger housing-associated loans. Additionally, there also exists an opportunity to pair the access to micro-financing options with the potential income generating power of low income communities by the creation of livelihood opportunities that may exist outside of the traditional and formal markets.

Services

Similar to the low income household's difficulty in accessing finances is access to basic services, which is often closely related to the security of their land tenure. The willingness of low income households in informal communities to invest in more permanent infrastructure such as water, electricity or sanitation is inversely linked to the risk of being evicted. Despite this fact, when low income households are prepared to make the investment, in many cases service providers are hesitant or even unwilling to provide services for various legal and economic reasons: laws may prevent them from servicing houses without legal land titles, or there may not be enough critical mass in these communities to make the investment in the expensive infrastructures financially viable. Often in these inner city communities, the citizens are seen as undesirable by these service providers: they are "thieves" that make illegal connections, degrading infrastructures and robbing the companies of income. However, in many parts of the world, these informal communities have not been engaged by these service providers to find appropriate strategies and pricing solutions to regularise the poor with the existing service infrastructures.

Changing roles and relationships within this sector of the industry will ultimately rely on changing the attitudes of the public and private institutions that are charged with providing these services. Innovative strategies designed to involve both service providers and potential low income customers must be developed to address the needs and concerns of all parties involved. At the core of strategies to deliver better services to low income and informal communities is a general need to create the necessary critical mass and political will by collective community negotiations, a phenomenon which, in itself, is heavily reliant on the leverage of social capital that comes with truly bottom-up, community-based organisation and planning.

Construction Materials

Another key component of providing housing solutions for low income populations is the availability of and access to construction materials at a price that is not prohibitive. Much of the informal urban landscape in Jamaica is cobbled together in an ad hoc fashion, using whatever materials can be scavenged from various sources. The constant threat of eviction is closely related to the informal settlers' unwillingness to invest in more permanent construction options; the salvaged materials often provide an affordable option for constructing shelter that might eventually have to be abandoned. The materials that are typically associated with the construction and housing sectors are driven by market forces - as is much of the larger industry. These market forces do little to help the situation of these residents, as

material costs often include overhead costs which are passed on to the end consumer and inflation is a real concern. As the service providers who tend to be disinterested in providing basic services to these communities, there is a similar lack of interest in providing construction material options tailored to meet the very specific needs of these communities and their residents. Although it may not necessarily mean lower priced or lower quality, there is need for construction materials to be available to the residents of these communities in a way that considers their specific socio-economic needs. Additionally, in largely informal and unplanned communities, distribution networks are harder to establish by outside entities and there is a perceived security concern in the delivery of merchandise to inner city residents.

In numerous developing economies around the world, there are various strategies being undertaken by players in the construction industry that could be examples for Jamaica to begin to address the shortfall within the low income housing sector. These strategies seek to understand the intricacies of the socio-economic conditions of these low income communities, and, in turn, develop sensitive approaches to building sustainable markets for products in these neighbourhoods. Recognising the precarious economic realities of teh residents in the communities will often require companies in the supply chain to develop innovative and sensitive solutions to help engage customers in these communities. By adopting strategies similar to those used in the realm of microfinance to the construction materials industry, companies can access these markets by creating products that work within the limited means of these communities' residents, not by creating inferior products, but rather by creating flexible options for payment.

Additionally, unlike most innovations in the building construction industry that tend to be technological advancements, the solutions that ultimately allow for greater access to these low income markets are innovative business processes that address the socio-economic needs of these communities. The innovations that have been developed range from structured payment options that offer flexibility to residents, to saving schemes that help residents save money to buy construction materials, to the provision of technical assistance, and even to developing financing programmes. Additionally, the opportunity exists for companies to change the market dynamics and distribution models to engage these markets. Innovative strategies exist to use the leverage of larger players in the construction materials industry to the benefit of these low income communities by negotiating bulk discounts from suppliers of various construction materials and using market capital to guarantee prices to safeguard residents against inflation and employing the incremental delivery of materials to community residents so that securing materials is less problematic and easier to deal with.

Design and Construction Skills

There is much potential available to these low income communities through various strategies of self-help and self-reliance, as much of the housing stock in these informal urban communities is gradually assembled by the community member themselves; as a result, "sweat-equity" is one of the most important ways members of low income communities can directly invest in the provision of their own housing and improvement of their living environment. However, despite this general resourcefulness of the members of these communities, they often do not possess the necessary knowledge and skills to design and build a quality dwelling that will be structurally sound enough to provide protection against the various forces of nature experienced in Jamaica such as hurricanes and earthquakes, and have true economic value. However, the cost of engaging professional services in the construction of low income dwellings is prohibitive and is generally not undertaken in the informal sector.

Several opportunities currently exist to develop the fairly abundant resource of self reliant housing labour in these low income communities. An opportunity to support the

37

develoment of construction apprenticeship programmes. Under such a scheme, community members are facilitated in the construction of their own dwellings under the supervision of qualified professionals. One such programme is being developed for implementation in Jamaica with promising potential, is being developed under the guidance of the UDC in association with Jamaica's Human Employment and Resource Training Trust/National Training Agency (HEART Trust/ NTA). Participants would construct their housing under the national policy framework for housing, securing land tenure and financing through the typical means, but would be able to reduce building costs by self-building a professionally pre-designed unit typology. As the complexity of most housing that is self-built in Jamaica is fairly low, simple concrete block construction typologies are being developed that would allow community members to construct them easily and allow for residents to expand them in the future. Importantly, however, the collaboration with the training institution creates the opportunity to certify successful participants of the programme as being on the path to vocational qualification in the construction of these simple building forms, allowing participants to use their skills in the wider construction market of low income housing, and providing additional avenues for economic development.

Another opportunity to develop the level of competence in the design and construction of low income and informal housing, along the lines of the apprenticeship programmes, is the creation of housing collectives and support groups. These collectives would come together in members' free time to build houses, using collective knowledge, experience and labour resources to improve the quality of the informal housing stock greatly, increasing its real and perceived value, and dramatically reducing construction costs. This strategy builds on the principles of the self reliance and professional training used in the apprenticeship scheme, but further leverages the economic savings by using volunteer labour and experience, as well as maximising the value that professionals can deliver in a consultancy role in these communities.

Livelihood Opportunities ••

The ability of residents to access livelihood opportunities is the final necessary component of solutions for providing housing to low income communities, and is perhaps the most critical for the overall success of this type of system. There is a general realisation that providing housing "handouts" to low income community members does little to increase their overall income generation capacity and ultimately reinforces the inability of community residents to provide for themselves. Therefore, the creation of livelihood opportunities is particularly important in the development of truly sustainable and healthy low income communities, because this key component of the housing equation is required to sustain many of the other components, so that access to financial assistance and property ownership can be afforded by low income residents.

In these low income communities, where levels of formal education are the lowest of the general population of Jamaica, there are few options available in the formal job market; as a result, many are involved in informal and shadow economies including gang-related crime. In these circumstances, strategies that create opportunities to develop skills that will allow a toehold of access to formal education are vital to empowering all working-age members of the community. These low income communities have much to offer in undeveloped economic potential, not only through the development of individual livelihood opportunities for residents of these low income communities, but to become engines for economic development of the larger community, by creating a unique situation where government, non-government and private sector can all gain, while creating an economically self-sustaining community, and creating unique business opportunities that begin to blur the lines between the roles of not-for-profit and for-profit actors in the housing equation. Viable livelihood

opportunities are the key to crime reduction in the country. However, the economic opportunities have to be realistic, viable and potentially attractive to build the residents' self esteem and sense of self worth. [20]
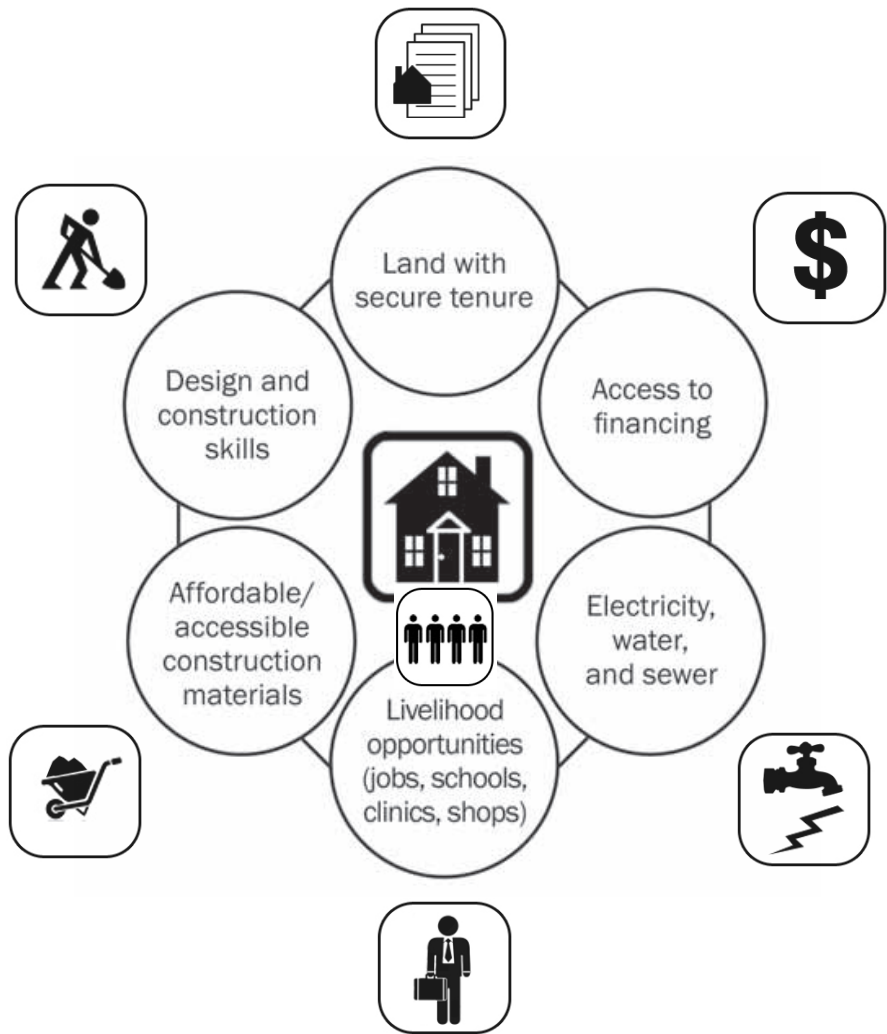
Fig. 2.03   RIGHT - Diagram of Housing Equation for providing low income community residents with affordable housing and the various components required.

Developing the Economic Component

Business in Development

Business has begun to assume a role in development that is more than mere social corporate responsibility; there is a growing realisation that doing profitable business with social impact is indeed possible, and this realisation is blurring the gap between conventional territories of development players and business. This convergence between development and business in the housing and urban development sectors has the potential to create significant social impact by improving the overall quality of life in these communities by improving health, wellbeing, livelihood opportunities and living conditions.

The potential offered by these low income communities internationally is staggering, as they represent such a large portion of the global population, and 98 percent of future population growth is projected to come from developing nations until 2025 . Currently in many developing countries the largest companies cater to 20 percent of the population; however, with an ever-increasing need to expand their traditional market base, companies are beginning to look for new ways to engage these emerging markets. Not only do businesses stand to benefit from increased market size and a socially responsible corporate image, their investments can serve as critical enablers of the infrastructure and institutions necessary to develop a capital intensive sector such as affordable housing worldwide.

Social Enterprise and Innovation

Another emerging trend that holds much promise for the economic development in these low income communities is that of social enterprises (or social entrepreneurship). A social enterprise is defined in Canada, the United Kingdom and other British Commonwealth countries as:

... social mission driven organizations which apply market-based strategies to achieve a social purpose. The movement includes both non-profits that use business models to pursue their mission and for-profits whose primary purposes are social. Their aim is to accomplish targets that are social and/or environmental as well as financial: is often referred to as the triple bottom line. Many commercial businesses would consider themselves to have social objectives, but social enterprises are distinctive because their social or environmental purpose remains central to their operation . [21]

As social enterprises tend sit on the boundary between non-profit and for-profit business models, the rules which govern them tend to vary with differing national policy for the governance of non-profit and non-governmental organisations (NGO's) in the countries in which they exist. However, despite these differences social enterprises tend to have a particular set of values and principles that dictate their general operation. In North America social enterprises are rather vaguely defined by two distinct characteristics: one is that they directly address social needs through their products and services or through the number of disadvantaged people they employ. The second characteristic is that they use earned revenue to pursue a double or triple bottom line (financial, social and environmental), as opposed to traditional non-profits that typically rely entirely on donations and government subsidies.

In Europe there is a more distinct set of criteria that defines a social enterprise. First, at the core of any social enterprise is an explicit community development intent that usually involves a large degree of citizen initiative, largely participatory in nature. Generally, one of the key objectives is to strengthen democracy at the local level through economic activity. Also, social enterprises are typically involved in the continuous production and sale of goods or

services, as opposed to traditional non-profits that tend to rely on philanthropic donations and grants to operate. As a result of the free market policies under which they operate, there is also a substantial amount of financial risk that ultimately relies on the members of the social enterprise for overall success. In many social enterprises there is a limited distribution of profits among members; profits tend to be reinvested in the social enterprise itself. On the positive side, however, because of the departure from traditional non-profit business models, the enterprises have greater autonomy, as they tend to be run by volunteer members and are free of management by public authorities and private companies. As a result, the decision-making process is based not on capital ownership, but on a system in which each member has a vote. Another unique feature of social enterprises is that there is a required minimum number of paid employees, although like traditional non-profits, they may involve a large amount of volunteer labour.

The potential benefit that social enterprises offer to marginalised low income communities in the developing world is still in its infancy, but the concept holds huge promise as one of the potential solutions to relieve poverty in these struggling communities. Social enterprises operate at the critical juncture between the private sector, non-governmental organisations and government bodies, providing the perfect opportunity to integrate livelihood opportunities into the larger housing equation in the future development of low income housing in marginalised communities. In Trench Town, with its deep cultural roots, there exists a massive untapped opportunity to develop a social enterprise that builds on the rich cultural history of the community in developing a social enterprise focused on the economic development of the cultural traditions in Trench Town as part of the community's housing challenges. [22]
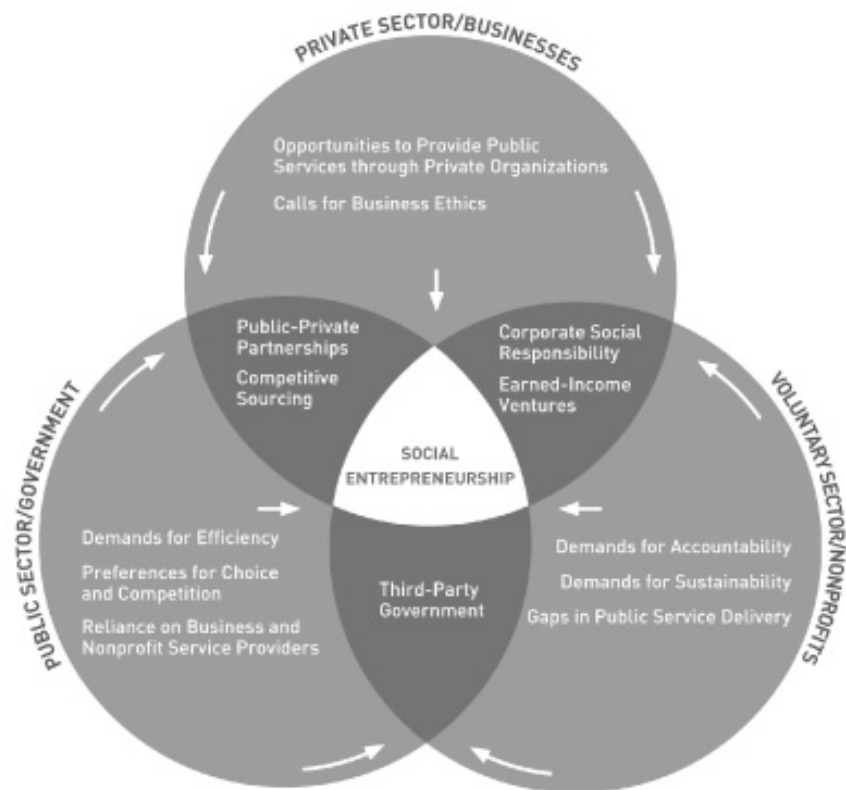
Fig. 2.04   RIGHT - Diagram of Social Enterprise
              partnerships, roles and actors.

Entertainment, Culture and Economics: Creating Something Out of Nothing

The history of Jamaica is rife with examples of the resilience that its people have exhibited over the past several hundred years. The British were the first to create great wealth with very little by turning the Island into one of its Empire's most productive colonies. However, with the advent of industrialisation, much of the world's wealth was created through manufacturing and production - the transformative process of creating goods from raw materials. The natural wealth of Jamaica has traditionally been used to the benefit of others outside the country.

Although the export of natural resources and agricultural products dominated the economy in the 19th and 20th centuries, currently, approximately 60% of Jamaica's economy is constituted of service industries. Unlike the more capital intensive production and manufacturing industries, service industries have flourished in Jamaica because of the lower resource base required and the ability to use labour, skills or knowledge as tradable commodities, often with the apparent ability to create something out of nothing. The two industries that have flourished particularly well in this service industry-based economic landscape are tourism and the entertainment industry. [23]

Tourism has played an important role in the economy of Jamaica for a long time, and at present is the largest foreign exchange earner for the nation. It is the largest non-production industry on the Island, and is a generally well-served and supported industry. The entertainment industry is the other service industry that has traditionally done well despite the negative economic climate, creating a significant economic value from an industry that is not particularly resource intensive. Culture and entertainment are at the core of the Jamaican lifestyle and permeate many other facets of daily life, and, importantly, are also closely associated with the tourism industry. As a result of this long history and tourism's ability to capitalise and maximise initial investment so well in Jamaica, there seems to be a real opportunity to utilise the social enterprise model to use tourism and entertainment as catalysts for economic development within low income communities.

In a resource scarce environment like Jamaica, where almost every aspect of life is dominated by the fragile and precarious state of the economic climate in the country, decision making and policy development are often dictated by fiscal considerations, and this reality is true in the low income development arena. The scale of the problem in Jamaica vastly out strips the supply of available allocated resources for the problem, as only a portion of the country's budget can be dedicated to the problem and international donors' involvement is relatively limited when viewed in the larger scale of the country's economic focus. As a result, the sustainability of development projects, particularly low income housing and community projects, is crucial in initial planning and development, so that the country can maximise the already limited resources it can spare to improve these communities. Social enterprise may be able to deliver the necessary financial stability and livelihood opportunities to develop the economic base of low income communities, by building on the existing social opportunities and skills in the community and creating various support industries. [24]

Fig. 2.05   RIGHT - Revelers participate in the annual staging of Jamaica Carnival, which draws crowds from around the world and is an important economic catalyst.

Fig. 2.06   RIGHT - Thousands of patrons in attendance of the annual staging of Reggae SumFest, billed as the largest and greatest Reggae show on Earth.

Fig. 2.07   RIGHT - View of the studio facilities at GeeJam boutique hotel and studio in Portland, Jamaica, which offers a pairing of tourism and culture products to international musicians looking to tap into the rich musical heritage in Jamaica.

PARTNERSHIP

Partners and Stakeholders

A key part of policy development for the advancement of low income housing in these inner city communities will require a fundamental shift in the core relationships that exist between and among the various stakeholders in the low income housing sector. Each player in the low income housing equation can make significant gains in the pursuit of various development goals; however, at the same time, careful negotiations are necessary to ensure that all parties involved collaborate to create a working framework that will create a truly sustainable low income housing model for Jamaica. Partnerships between the public and private sectors, industries and non-profit organisations will ultimately be necessary to find successful sustainable solutions to the challenges associated with low income communities.

The role of design professionals and urban planners in these negotiations often is that of a facilitator of the whole urban development process and the required negations between various players in the process. Design and planning professionals form the link between the typically "top-down" approaches of government, private and investment sectors, and the "bottom-up" approaches of grassroots, community-based organisations and non-governmental organisations, collaborating with and mediating both sides of the partnerships. The specific training of design professionals, particularly architects and urban planners, in understanding urban and environmental policy matters enables them to advise community members, help them voice their concerns to officials, and act as an intermediary between community members and other stakeholders.

Also uniquely, globalisation has the potential to act in the interests of low income communities, as opposed to its usual negative influence in this realm, by connecting information, technologies and resources on local, national and international levels in the fight against poverty in these communities. Critical to the better management of these often complex relationships is an understanding of the various actors in the equation and their roles.

Residents (Local and Surrounding Downtown Communities)

The residents of these low income communities are the primary partner in the process as they have the most to gain from the whole urban development process in these communities: they are subject to the problems that typically affect these communities; therefore, any benefits from improvements created will directly benefit to them. Accordingly, it is critical that community members become involved in the determination of the outcome of their future, and their community's future. The creation of social capital through the formation of community-based organisations is critical to the success and sustainability of development projects in low income communities. While individually community members have very little or no influence over the larger policies that affect decisions about development in their communities, acting as a group community members can create the necessary leverage to influence policy making and decisions. By uniting to achieve common goals, community members can also create the critical mass necessary to create the economy of scale needed to make various components of the low income housing equation affordable. It is, however, important to note that without engagement of all the stakeholder factions in the community simultaneously, there is a danger of creating multiple and fragmented community-based organisations within the same community; creating overlap or disjuncture in goals with the potential to waste resources. It is essential that the community develop a unified community organisation that generates grassroots leadership, encourages community initiative, is inclusive of all factions in the community, and speaks for the community as a whole.

Not only do the residents of these marginalised low-income communities have a great deal to gain from the development of their neighbourhood, but so, too, do the members of

surounding communities and the larger population in general. The negative socio-economic problems generated by these low income communities extend far beyond their physical boundaries, and have a great impact on the larger urban fabric of Kingston. The development of these low income communities vary rarely occurs in a vacuum, and ultimately, it engages and affects surrounding communities and their members directly. The engagement of surrounding communities as well as the community targeted for development can increase the number of beneficiaries with access to development projects and social services, and build relationships between communities in this fragmented landscape that have such complex social and political histories.

Government Agencies

The various government agencies involved in the provision of housing for the nation's population in Jamaica also have a large interest in success of low income projects and the low income housing sector as a whole. The maximisation of the benefits derived from the limited resources that the government is able to commit to the development of these low income neighbourhoods is crucial to the long term sustainability of the investments. However, the policies that are currently in place primarily use "top-down" management styles that are often prescriptive, ignoring – or missing - the on ground realities in these communities, compounding the negative effects in others, and wasting precious resources in combating problems that may not be central to issues the communities face. By creating meaningful partnership with other players in the sector, the government bodies can mitigate wasteful resource allocation and give communities the facilities and services that will encourage the greatest personal advancement.

Non-Government and Non-Profit Organisations

Non-governmental and non-profit organisations involved in poverty alleviation and the development of low income communities tend to engage the communities more directly, with a typically "bottom-up" approach to development and community planning. NGOs take the time to understand the needs of communities more intimately as part of their approach to development; however, these organisations tend to lack sufficient political capital on their own to effect larger, national level policy changes that may be necessary for implementing suitable strategies for development. Therefore, developing partnerships and closer working relationships between government bodies and NGOs/NPOs will create a unified effort, pairing the research and community involvement that NGOs/NPOs provide political power necessary to effect change based on the findings. Interestingly, many of the major development players in Jamaica divide their programme into silos of governance and poverty reduction that act independently in their approach to development for Jamaica.

Private Sector

The private sector can benefit greatly from being involved in partnerships for the provision of low income housing in marginalised inner city communities. In most third world countries, the private sector serves only a fraction of the population in any given market; the opportunity to engage these untapped low income markets can be of great benefit to the private sector, even in face of their largely profit-driven motives. By engaging community-based organisations in low income communities and the various governmental agencies responsible for policy framework development in meaningful partnerships, the private sector develop ways of creating and delivering products that are affordable and accessible to these traditionally difficult to reach markets. As many of the components within the overall housing equation are ultimately market-based, the private sector's role in the provision of housing can be the development of more affordable and relevant solutions and distribution

channels in these communities, development of strategies for opening up this market while contributing tremendous value to the overall process. The private sector industries that are primarily involved include financial institutions, the construction industry and services industries, all of which can contribute much in wider development strategies, while opening up its own market opportunities.

Professional Practice

The role that the professional practice can play in the development of the low income housing sector is an invaluable one, providing the intermediary link between and among the other actors in the process. The built environment and social environments tend to be intrinsically linked, and when architecture and informal community upgrading come together, better, healthier and more functional communities are possible. The role of architecture in informal settlement upgrading in the development of low income communities is not simply about improving the physical environment, but is also fundamentally concerned with the creation and development of interdependent networks that link various positions and organisations together to resolves issues associated with the context. As a practice, architecture can change perceptions about how space is viewed and used, exploring and proposing new approaches to design while developing the larger relationships and partnerships required to create a well-functioning housing market.

Design and urban planning professionals assume the important roles of initiators, mediators and facilitators in the complex negotiations that are necessary in the matrix of the various actors in the low income housing sector. Professionals in these industries possess the necessary skills, training and expertise to recognise and decode the complex social patterns that tend to be intrinsic to these types of communities, and can reorganise and align these social patterns within the built environment.

As these communities already represent such a large portion of the world population, these dense and largely informal settlements are part of the modern urban landscape, and cannot be excluded from its future development. These landscapes not only pose challenges to the design community, but offer great opportunities for professionals to discover, reveal, teach and inform other members of the wider professional community new ways and directions of practice, by exploring emerging conditions of the urban environment, building methods, materials and applications. The developing world provides opportunities for new directions for and thought about the process of urban renewal and development. Designers and planners are faced must go beyond the principles of design, form and aesthetics, to become the designers of accompanying policy and processes that enable the larger development of housing and social services. [25]

Fig. 2.08   RIGHT – Selected logos of government bodies, non-government organizations, private sector, community groups, professional practice and community members with the potential of working together to create better communities for the urban poor.

PRECEDENTS

International Strategies and Precedence

As an important part of the exploration of the current thoughts, ideas and directions in international housing solutions for low income communities and poverty reduction, it is necessary to begin to explore a range of existing architectural interventions and approaches, to begin to explore the successes and failures of the various international strategies to the associated problems that have been employed in different context and situations around the globe. Following is a selection of projects that have a similar focus or character in their intent from developing countries around the globe.

New Gourna, Egypt

The village of New Gourna was an urban planning and renewal project undertaken by the Egyptian Department of Antiquities in collaboration with Hassan Fathy, an architect who has become world renowned for his work in providing housing solutions for the poor and his subsequent writings about his experiences in the field. The project, which began in 1945, was to relocate the inhabitants of the village of Gourna, near Luxor in Egypt. The Department of Antiquities deemed the relocation necessary to stop the villagers from systematically robbing the ancient Egyptian graves in the hills surrounding the village. The project aimed to provide cost-effective housing for all of the village's original residents by working with them in a participatory style, using inexpensive building materials and traditional building methods.

Ultimately, the project was deemed a failure, because the village was never fully completed, and only about half of the portion that was completed was ever occupied. New Gourna has slowly begun to decay since then. Despite Fathy's best efforts to address the sensitivities of the rural culture with which he was dealing, he failed to address one of the foundation issues of the problems, a means of economic sustainability for the villagers themselves. By relocating the villagers away from the tombs which they robbed to make their living, the villagers could no longer provide for themselves and their families, causing an immediate backlash within the community from the project's inception; villagers' attempts to sabotage the project became a sub-text of Fathy's most famous book, Architecture for the Poor. This critical issue has been critical to inform the investigations of this thesis, illustrating the hypothesis that providing a sound economic base for communities that face extreme poverty must be a foundational concern to ensure the success and longevity of the project in the community.

However, despite the overall failings of the New Gourna project itself, the methods of community involvement and participation that Hassan Fathy pioneered in the process are invaluable in developing strategies for effective community building. Fathy's work in the community emphasises the importance of having transparent and solid relationships between people in the community and the various other stakeholders involved in the project, a strong sensitivity for the culture and lifestyles of the intended occupants, and honest analysis that confirms what it is that the community members really want. The residents must become active participants in the determination of their futures and have decision making roles throughout the process.

Hassan Fathy's work also highlights the importance of the role of the architect in the project, as s/he must act both as architect-designer, and architect-facilitator, working alongside residents to help them in the negotiations with other actors to assist them in getting what they actually need and want from a project of this type. [26]
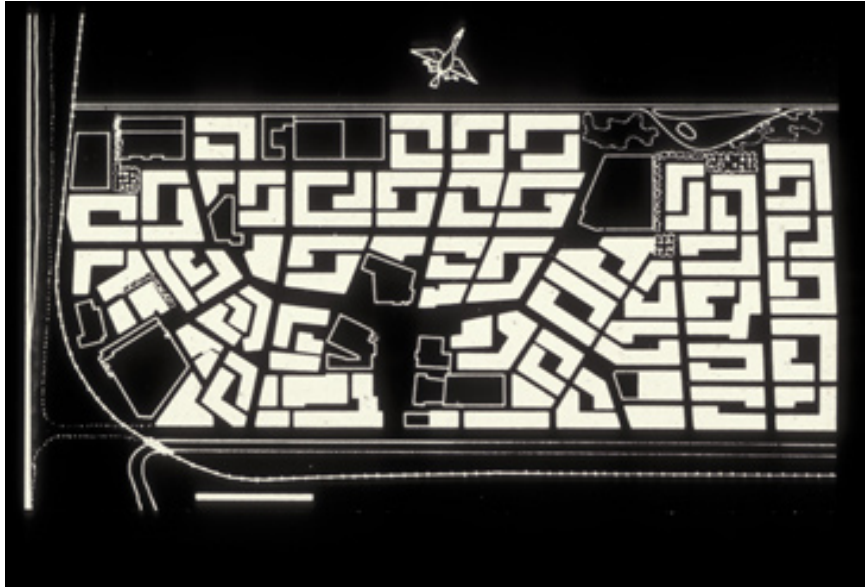
Fig. 2.09   RIGHT - Site plan of New Gourna Village Near Luxor, Egypt.
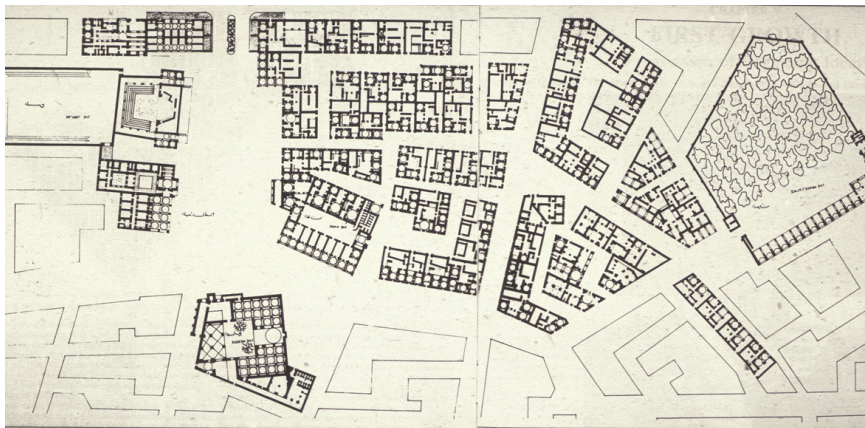
Fig. 2.10   RIGHT - Detailed site plan of New Gourna Village Near Luxor, Egypt.

Fig. 2.11   RIGHT - View of street in New Gourna Village, Near Luxor, Egypt, showing the traditional vernacular employed.

Favela-Barrio Project

The Favela-Barrio Project is an undertaking in the city of Rio de Janeiro, Brazil intended to combat the poverty that has become synonymous with the numerous shantytowns (favelas) that house approximately one-third of Rio's population in largely informal slum communities built on the steeply-sloped mountains that rise along the seacoast. These informal communities lack basic infrastructure and services as they have been constructed by residents outside of the formal housing system. The Brazilian government undertook the Favela-Barrio Project as an attempt to integrate these largely-ignored parts of the urban fabric into the formal infrastructural and planning networks of the city. Jorge Mario Jauregui Architects began working with the municipal government bodies of Rio de Janeiro to develop a series of projects within the numerous favela communities in the city to penetrate and revitalise these informal communities. Working with municipalities, local residents, and the various criminal networks that have territorialised much of the city, the Favela-Bairro Project is working to create small scale, community driven architectural interventions that are intended to help upgrade the local infrastructure and slowly integrate these communities into the formal urban fabric.

The project's name literally translates as the "Shantytown (favela) to Neighbourhood (barrio) Project," and it is an urban upgrading project designed to work within the already-existing tightly-knit community framework of Rio's sprawling favelas. Over the past decades, the team of architects from Jorge Mario Jauregui Architects has carried out a variety of projects in more than ten favela communities in Rio de Janeiro. The range of projects undertaken in each community has varied depending on the most urgently-needed upgrades identified through their engagement with the local residents, and has seen the construction of pedestrian paths, drainage systems, community centres, recreational facilities, and the implementation of job training programs and communal kitchens. The involvement of local residents and the success of various interventions are the means by which a positive perception of the projects is cultivated within these informal communities. The projects ultimately support and develop the sociological and economic status of the favela.

The participatory methods used in the community planning initiatives undertaken by the projects have fostered and promoted a communal environment, a stronger community identity and the local residents' sense of ownership. The project has supported the construction of communal social services like communal kitchens and laundry facilities, and public recreation spaces, and has provided basic infrastructural elements such as circulation paths and underground infrastructure, and has even incorporated informal networks into the formal systems by naming the streets and numbering properties.

This project is an exemplary model of urban slum upgrading in practice, and is one of the finest examples of the success of this methodology in providing cost-effective solutions to upgrading informal settlements. Perhaps the most important aspect of this project is that it is not concerned with the provision or direct upgrading of housing stock, but instead seeks to gauge the needs of individual communities and their members as a basis for providing sustainable, long term projects, that will cost-effectively improve the daily lives of residents. At its core, the project seeks to integrate the formally-planned urban fabric with the informal aspects of the cityscape, blurring the lines of segregation between rich and poor, while being sensitive to the cultural and political boundaries of such often volatile communities. In this context, architecture "demonstrates the power of urban design in realising social change and engaging marginalised people in the revitalisation of their own communities ." [27]

Fig. 2.12   RIGHT - View of community football pavilion in
              favela in Rio de Janerio constructed as part of the
              Favela-Bairro Project.

Fig. 2.13   RIGHT - View of community center in
              favela in Rio de Janerio constructed as part of the
              Favela-Bairro Project.

Fig. 2.14   RIGHT - View of pedestrian path, lighting and
              planting in favela in Rio de Janerio constructed as
              part of the Favela-Bairro Project.

Urban Think Tank (U-TT)

Alfredo Brillembourg is one of the co-founders and co-directors of the Urban Think Tank (U-TT), a Venezuelan architectural firm deeply involved in international efforts to improve the living conditions in slum communities in urban areas around the world. U-TT's work focuses on social and cultural responsibility in contemporary architecture, creating interventions that acknowledge and legitimise the potential of urban informality, allowing designers to adopt "informality" as a new paradigm. Alfredo Brillembourg began his work with informal communities in his native Venezuela, through his previous work with an NGO (Caracas Think-Tank), conducting research in barrios (informal settlements) of Caracas, but later teamed up with Co-director, Austrian Hubert Klumpner, to create the Urban Think-Tank. They soon began to make urban proposals for the city of Caracas while turning their practice into the architectural firm Urban Think-Tank in 1998. The U-TT began to design a series of urban interventions that seek to connect the informal with the formal city, enabling inhabitants to access services and infrastructure. After over a decade of development of its practice, U-TT has expanded its work from Venezuela to take on projects in informal communities around the world, transferring the knowledge and research developed over years of working in the field into creating design interventions around the globe in similarly affected urban communities. Working in Caracas, Sao Paulo, Rusaifah and Kibera, among other places, U-TT has been clear in its push to establish a practice that is 'working globally and acting locally'. The work of the firm includes a range of innovative solutions to providing services and infrastructure to residents in marginalised communities, which include a series of vertical gyms, vertical social/cultural centres, museums, cable car systems, walkways and music incubators, all located within the often dense and informal urban fabric of these impoverished communities of Latin America. The Urban Think-Tank has perhaps received the most attention and recognition for its work in creating the urban typology of the vertical community and social spaces, particularly the creation of vertical gyms, cultural centres and social incubators.

The Urban Think-Tank seeks to develop solutions for challenges faced by marginalised informal communities by developing an inventory of best practices. U-TT creates a framework for development, which it then hands over to the various municipalities responsible for a selected intervention location, and then welcomes re-adaptation from local community members, advocating a bottom-up grass roots planning approach to community development. Another important part of the methodology used by U-TT has been the establishment and development of a veritable "Toolbox" of best practices highlights, which is critical in the transfer of knowledge and supporting transitional analysis in research and urban practice. However, Brillembourg is quick to point out that, "...culture greatly modifies what type of technology or design we can attempt to make. Generally, we engage the community profoundly in discussions and meetings, and we bring this community development practice to each place, though often with different methods of implementation ." [28]

Another important aspect of The Urban Think-Tank's approaches to the reintegrating the informal with the formal city is the acknowledgement of the multiple dynamics of the informal, including income levels and employment, the value of real estate, tenure and legality; it is very important to link design to policy, and is testament to the significance of these factors in the larger housing equation. As a result, the firm spends much of its time and attention engaging and communicating with the various government entities in the process to communicate the power of design in bringing visibility and awareness. Of equal importance in U-TT's methodology of developing policy and process in the larger housing equation is the creation of simple and repeatable architectural elements and projects that helps convince elected officials, who are often only in office for a term of a few years, of the political value and viability of projects. In addition to engagement with politicians, U-TT engages with city planning and policy makers, because for projects to be successful and effective in these

Fig. 2.15   RIGHT - Aerial View of proposed U-TT project, a community center deep within informal community of Sao Paulo, Brazil with terraced landscaping providing seating for outdoor gathering space.

Fig. 2.16   RIGHT - External View of proposed community center deep within informal community of Sao Paulo, Brazil.

Fig. 2.17   RIGHT - External View of proposed U-TT Project, an Urban Music Factory in Caracas, Venezuela: showing the stacking of its program within the vertical facility.
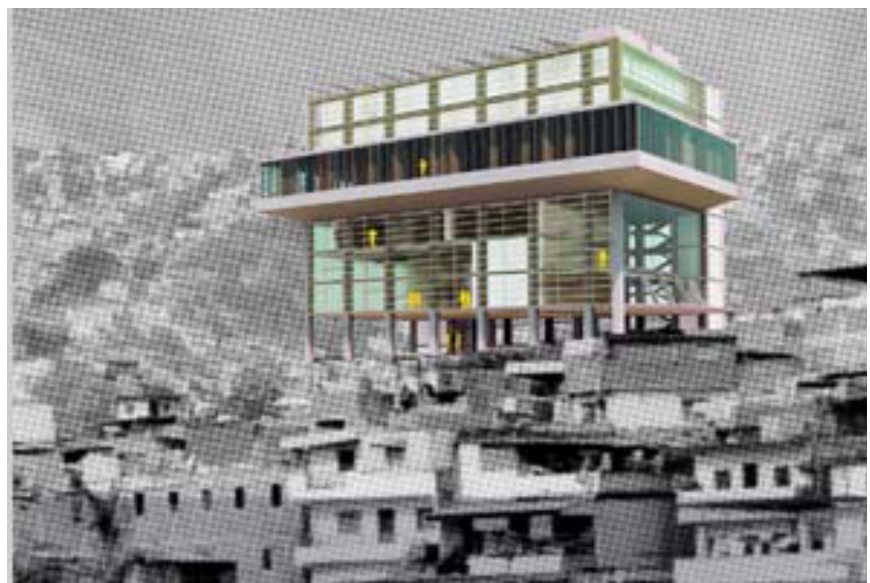
often polarised urban landscapes, they need to become integrated into the larger strategies for social inclusion, mobility, security, environmental protection and livelihood opportunities, if they are ultimately to become instrumental in the long term economic growth and sustainable development of these communities.

This model has been an important influence in the development of the strategies, approaches intentions and overall vision of the investigations of this thesis. The creation of varying scale, networked, architectural and social interventions in various informal communities throughout an urban environment, with the overall intention of providing services and improving infrastructural networks to provide livelihood opportunities is at the heart of the concepts in this thesis.

However, the approaches and strategies developed by The Urban Think-Tank are still relatively new in the larger architectural field and the search for solutions to the problems associated with informal urban settlements; as a result there is still some need for further evaluation of the long-term effects these interventions have on the communities in which they are developed.

That said, the creation of a "toolbox" of strategies derived from years of research in various informal communities around the world allows for easier transfer of knowledge, research and approaches that can be used in the development of a community such as Trench Town. Finally, and perhaps one of the most important aspects of this model is that it demonstrates and verifies that various types of formalised social and community programming can be introduced into these marginalised communities without their ultimately being reclaimed by the informal fabric in which they are introduced. The model requires that members of the communities in which these interventions are being introduced be an integral part of the planning process, so that they are able to identify the services and facilities that will most positively affect their daily lives, creating community ownership of these projects, and ensuring their long-term social and economic viability and value. [29]

Fig. 2.18   RIGHT - External View of proposed U-TT Project:
             a Vertical Gym Facility in Amman, Jordan.

Fig. 2.19   RIGHT - External View of proposed U-TT Project:
             a Youth Development Center, in Amman Jordan.

Fig. 2.20   RIGHT - External View of proposed U-TT Project:
             a Vertical Gym in Santa Cruz Del Este, Caracas,
             Venezuela.

55

Social Urbanism: Medellin

Kingston has a shared history with Medellin, Columbia - the city that was the centre of Pablo Escobar's cocaine empire in the 1980's. Much of the cocaine produced in the hills and jungles of the countryside surrounding Medellin would eventually make its way through Jamaica on the way to the lucrative markets in North America and Europe. As a result, both Medellin and Kingston have for decades been amongst the most dangerous cities in the world in terms of their per-capita murder rates and the effects that the illicit drug trade has had on the larger urban fabric of city, particularly in their slums. However, the city of Medellin has undergone a process of dramatic urban and social transformation since the end of the Pablo Escobar's reign of terror. Greatly inspired by the undertakings of the Favela-Bairro Project in Rio de Janeiro and similar socially-based architectural interventions already occurring the Columbian capital, Bogotá, in the 1990s the city of Medellin initiated a revolution and restructuring of civil society It began an important series of social and cultural projects in response to violence in the city, beginning the process of urban renewal in the core of the city's centre. Subsequently, in 2004, under a the political leadership of Mayor Sergio Fajardo, the city began to undertake a new wave of social and urban upgrading to "... implement structural changes integrally combined with educational, cultural and entrepreneurial programmes designed to 'change the skin' of various neighbourhoods located in the most critical areas of the city ." [30]

Medellin like many other Latin American cities faced the problems associated with rural to urban migration that led to the rapid growth of populations, ultimately leading to many informal communities springing up to shelter the growing number of urban poor. As a result, the city of 3.5 million inhabitants has been plagued by profound economic, social and physical segregation, where half of the population lives in extreme poverty on the slopes of the hills surrounding the city, while the middle and upper classes reside in the centre of the valley in which the formal city sits; the city today is defined by two opposing realities. Social urbanism was introduced as a tool to

...mitigate these serious problems of segregation and inequality, while acting to integrate, connect and coordinate the city through an instrument of physical and social inclusion. Architecture and urbanism were the primary tools for working with the community to implement a process for recovery of the city's neighbourhoods . [31]

These projects sought to create the best-quality designs and an improved relationship between the design and its context, combining large scale interventions such as transportation infrastructure and facilities with small scale interventions such as trails, pedestrian bridges and neighbourhood parks.

Medellin created new networks of public facilities for low income neighbourhoods by adding new programmes to strategically-located neighbourhoods throughout the urban landscape. To ensure the most suitable location for an intervention and define order of priorities, designs which arose from a deep understanding of the territory in both its broadest and most complex sense, and an understanding of the relationship between the natural, cultural and urban further informed the design of interventions. "From a social perspective, the goal was to employ processes and dynamics that emerge from the community and form different stakeholders, working to foster local participation and appropriation before, during and after the interventions ." These interventions were developed by a decentralised public institution that formed part of the organic structure of the city and which offered special dedicated multidisciplinary technical teams, with each project being managed individually by a project manager responsible for coordinating with various actors and institutions involved in the process.

Fig. 2.21   RIGHT - Aerial View of a school and community center built as part of the program of social urbanism undertaken in Medellin, Columbia.

Fig. 2.22   RIGHT - View of a pedestrian bridge within a largely informal community in one of many such infrastructures built as part of the program of social urbanism undertaken in Medellin, Columbia.

Fig. 2.23   RIGHT - View of a large pedestrian park built as part of the program of social urbanism undertaken in Medellin, Columbia.

Using a master development plan for the informal parts of the city, since 2004, Medellin has developed a wide range of architectural interventions and urban social projects at a variety of scales and in various areas of the city. The interventions include libraries, education facilities, social housing in at-risk areas, and a number of parks. At a local scale, Medellin constructed the best possible buildings in some of the city's poorest neighbourhoods, aiming for the symbolic value of architecture to act as a physical expression of the city's new public policies for social, education and culture. The zones which had once acted as the borders between segregated areas were activated as zones of integration between previously polar elements in the urban fabric, becoming more permeable and acting as urban landmarks and gathering spaces for the community. The initial phase of the program involved the development of five library parks throughout the city, which combined programming such as playgrounds, internet access, reading rooms and open space. The project also included the construction of 10 new schools and the upgrading of hundreds of others as part of an Open School Programme, with educational programs developed to activate and manage these new spaces, such as entrepreneurship, sustainability and arts programs. At a larger urban scale, integrated urban projects (IUP's) were undertaken in areas of Medellin with elevated levels of marginalisation and violence. These IUP's involved the creation and upgrading of pedestrian transportation networks and urban green spaces, in an attempt to connect communities better and provide the city with a network of public space that improved pedestrian mobility while allowing people to meet and move through a quality public realm. In Medellin, the focus has been on specific territories with singular architecture that has sought to improve public spaces and housing, and generate a new image of the city by providing new symbolic references.

As precedents, the social urbanism undertaken in the city of Medellin is directly applicable to the city of Kingston, as there are significant similarities in the nature of the socio-economic problems that have been faced by both cities, and accordingly, the solutions undertaken in Columbia are applicable to Jamaica. The introduction of large scale architectural and social interventions into the most volatile communities of Medellin further validates the proposals of this thesis to engage in some of the most impoverished communities in Kingston with social and cultural facilities can indeed help to spur wider development of these neighbourhoods. This thesis also demonstrates the potential value of creating singular architecture in a wider integral urban space in the city, particularly in marginalised communities, to provide residents with a sense of equality and a feeling of stewardship of their own city that ultimately change their perceptions of the larger city, generating ownership of new projects and creating a more habitable city in which to live. [32]
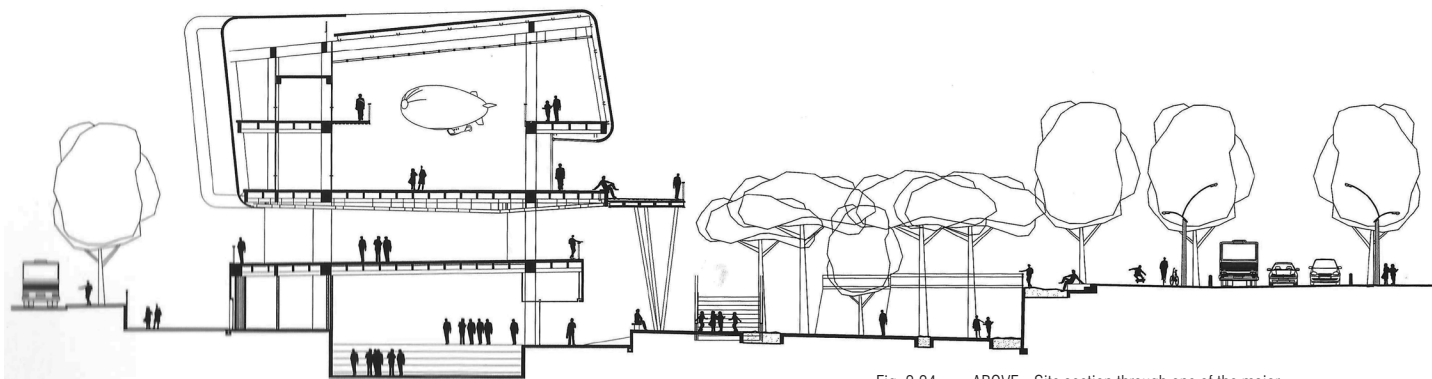
Fig. 2.24   ABOVE - Site section through one of the major exhibition halls at the Parque Explora, a science park in Medellin, Columbia. A variety of spaces and programming is stacked in a multi-story structure, at the periphery of several informal communities.

Fig. 2.25   RIGHT - Street Level View of "Parque Explora", a science park at the periphery of several informal communities in Medellin, Columbia. The Project features 4 large main exhibition spaces, the volumes of which sit atop the rest of the facility.

Fig. 2.26   RIGHT - Street Level View of "Parque Explora", showing the lower pedestrian courtyard between the main building and the street.

Elemental

A leading example of the role that design professionals are taking in the fight against poverty though practice and facilitation is demonstrated in the projects of independent Chilean firm, Elemental. The for-profit company operates with a 'social conscience' as one of its primary philosophies, working on projects to "capitalise on the city's capacity to create wealth and provide a shortcut to equity by improving quality of life without people having to wait for income redistribution ." The firm has formed important partnerships with Universidad Catolica de Chile (Catholic University of Chile) and the Chilean oil company COPEC, and in the process, the firm's principle Alejandro Aravena has received several international honours for his pioneering work at Elemental. An unusual combination of academic excellence, corporate vision and entrepreneurship has been instrumental in enabling Elemental to expand its scope in the city, allowing the firm to be engaged in upgrading of urban infrastructure, transportation networks, services and housing. To change the negative perception that social housing means a scarcity of economic and professional resources that limit the options of poor families, Elemental has used skilled professionals to work with the various social housing providers, to guarantee a positive value gain over time.

In 2003, Elemental's first project was a housing project in the northern Chilean city of Iquique involving the settling 93 families on the site where they had been squatting for nearly 30 years at the centre of the city, instead of relocating them to the periphery. The company first applied its design criteria and confirmed that its proposed methodology would guarantee value gain over time without changing existing policies or market conditions. In just five years, there was an overall increase in the value of houses and the neighbourhood; "People were able to double the area of their original homes (36 meters/387.5 square feet) at a cost of $1,000 each. Today, five years later, any house in the Elemental Iquique project is now valued at over $20,000 ". [33]

Elemental has developed several core strategies for its projects, recognising that the scale of the housing shortage is a global issue, and has become deeply committed to the international struggle to alleviate this lack of housing and the associated poverty. The firm is working on a 'scale and speed strategy' to share its experience and quality standards with those affected by poverty around the world.

Resolving the housing problems of the world's poor requires action on a massive scale that can only be achieved through worldwide cooperation and transfer of technology. Elemental is committed to developing projects with local builders and governments around the world, transmitting its experience through specific projects .

The other important part of Elemental's strategy addresses the use of prefabrication to increase the speed with which housing can be provided to the world's poor. Prefabricated systems have historically been criticised for their inability to adapt and be flexible in a variety of situations, however by prefabricating only a portion of low cost housing and allowing the owner to eventually expand using various alternatives, a degree of flexibility can be built in, while realising the cost savings of prefabrication. Additionally, prefabrication allows for strategic solutions for the more difficult and technical aspects of housing, creating standardisation and universal applications in the provision of services, as well as allowing a sort of aesthetic unity within housing units, which creates a local vernacular or style which helps to create and preserve value, further justifying and confirming the application of the process. The final but very important part of Elemental's strategies for its housing projects is its use of participatory methods to cultivate and encourage citizen participation. "Success was achieved by clearly identifying the restrictions and then working with families themselves in participative workshops, proving feasibility on a local level ."

The work and ideals of Elemental hold tremendous value as precedents for work in the realm of social and low income housing, which is demonstrated by the replication and transfer of ideas from the practice's original project in Iquique, to many other projects throughout Latin America and the wider world, and the numerous awards that they have received for their work. Many of the core strategies of Elemental are directly applicable to the proposed project in Trench town, including the creation of partnerships with other stakeholders, strategies of partial prefabrication of housing components, future self development of housing by residents and the overall role of design professionals as mediators and facilitators of the larger housing process. [34]

Fig. 2.27   RIGHT - Ground Level View of affordable housing units designed by the firm Elemental, in Chile. The Modular Units are arranged to allow for future expansion between units by residents.

Fig. 2.28   RIGHT - Subsequent Ground Level View of affordable housing units with expansion between original units by residents.

Microfinancing alternatives

This thesis is premised on residents in informal inner city communities being able to access money when they have never been able to join the formal financial system.

There are striking examples of successful microfinancing schemes outside the traditional banking/lending models operational in developing countries. The ACCION model, which is constructed on a group lending model, has been highly successful in Latin America where informal traders and the poor have had little option beyond the moneylender, who could charge the borrower up to 50% interest per day. In East Asia the Grameen Bank is another highly successful lending model targeted to rural communities. [35]

Microfinancing alternatives in Jamaica

Microfinancing was available to small borrowers in Jamaica on a very small scale as early as 1996. In 2002, Jamaica was reported as having 3 documented microfinancing institutions (MFIs) servicing more than 10,400 clients with loans averaging the equivalent of USD 346, and the default rate was very low. The IDB report does not describe the lending system used in these three MFIs. Very recently, traditional banking systems are attempting to access new markets by advertising non-traditional forms of lending; however, the terms and conditions of these loans are unknown. [36]

Grameen Bank

In the emerging field of microfinance, The Grameen Bank is the preeminent institution. It has changed the worlds of economic and international development by providing microloan services to low income individuals first in Bangladesh and then in other developing countries. Founded by Professor Muhammad Yunus, the Grameen Bank provides credit to the poor by "removing the need for collateral, [and is a] banking system based on mutual trust, accountability, participation and creativity." For far too long the poor have either been charged outrageous lending rates or excluded altogether from many of the formal markets of the world, in particular the economic markets, as the poor has been generally seen as 'un-bankable'. Professor Muhammad Yunus developed a set of strategies to allow the world's poor to access a financial system to enable them to achieve socio-economic development. The Grameen Bank uses credit as a cost effective tool to combat poverty and as a catalyst for larger socio-economic development. Professor Yunus determined that if financial resources were made available to the poor on terms and conditions that were appropriate and reasonable, "...these millions of small people with their millions of small pursuits can add up to the biggest development wonder". As of August 2011, the Grameen Bank had 2,565 branches, providing services to 8.35 million borrowers, 97 percent of whom are women.

Small and micro-loans provide are designed to help the borrowers access the credit necessary to undertake small and micro enterprises, creating economic stability for the borrower and his/her family. The amounts are small, and the repayment periods are short, to correspond with the economic reality of what the typical borrower can afford to pay back and when. As the borrower establishes a track record of repayment, the borrower's credit limit increases. Notably the Grameen Bank boasts an extremely low the rate of loan defaults when compared to traditional banking institutions.

Professor Yunus has received tremendous praise for his work in the development of the Grameen Bank, culminating with his receiving a Nobel Prize for his work in the field. However, Professor Yunus acknowledges that the process of developing the concepts and principles that today govern the lending practices of the Grameen Bank took the better part of

three decades. The process involved engaging borrowers directly and developing practices that were appropriate for their needs, creating a program that grew organically from the "ground-up", through an ongoing and repeated process of continuous fine tuning. Collaboration and negotiation with thousands of villagers, bankers, journalists, policy makers and other professionals were all part of the eventual success and viability of the program.

This model exemplifies the great potential and resourcefulness that exists in the often marginalised urban poor, and the simple power that credit can afford to these people. The vision of Professor Muhammad Yunus over thirty years ago to provide equality and equity to the poorest members of society has spawned a whole new sector of the financial industry that will ultimately become crucial to long-term development and sustainability of much of the world's population. This example underscores the importance that the economic component has in the success of development projects for the poor, lending support to the arguments put forward in this thesis that the creation of livelihood opportunities is key to the long-term health and sustainability of marginalised urban communities. The Grameen Bank again demonstrates the need for direct engagement with the end users of programmes, products, polices and spaces within the international development arena to ensure the success of efforts to reduce poverty. Finally, this thesis typifies the overall importance of credit in the development of the urban poor; although credit is a simple concept, if directed to all fields of development including design, it can start to build better communities. [37]

Microcredit Structure
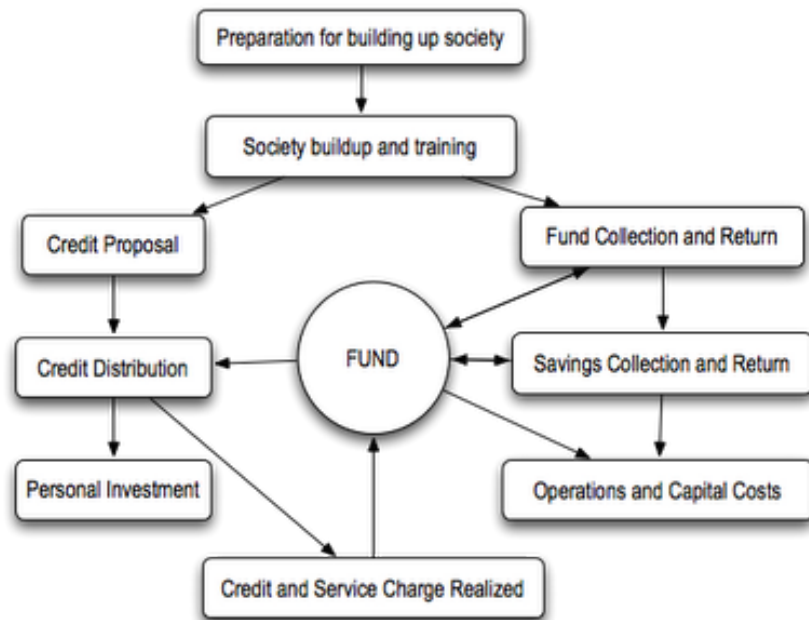
Fig. 2.29   RIGHT - Diagram of Typical model of Microcredit Structure.

3.0 > SITE ANALYSIS & CONTEXT

Location

Jamaica is located in the heart of the Caribbean Sea, 140 kilometres south of Cuba, and 190 kilometres west of Haiti.

Fig. 3.01   OPPOSITE - View of Coastal Bay and Caribbean
            Sea, on the northern coast of Jamaica
Fig. 3.02   RIGHT (TOP) - Political Map of Jamaica.
Fig. 3.03   RIGHT - Political Map of the Caribbean; location of
            Jamaica relative.

Fig. 3.04   LEFT - View and location of the Blue Mountains.

Fig. 3.05   LEFT - View and location of Cockpit Country.
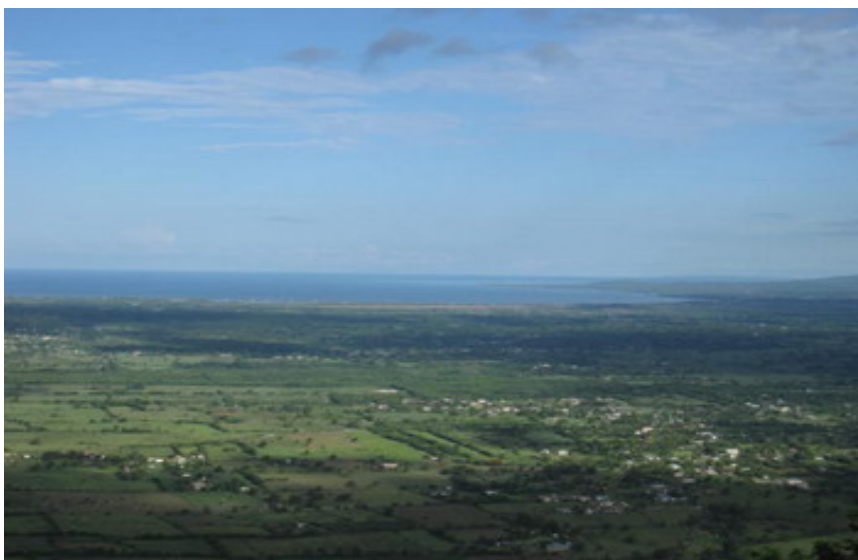
Fig. 3.06   LEFT - View and location of Coastal Plains.

Geography

Jamaica is the third largest Island in the Caribbean after Cuba and Hispaniola, and is the largest country in the Commonwealth Caribbean. At its largest dimension the Island is 235 kilometres long (east-to-west) and varies between 34 and 84 kilometres wide (north-to-south), with a cumulative land area of 10,911 square kilometres. The Island is also surrounded by several smaller, Islands, cays, banks and exposed reefs along its southern coast. Jamaica is divided in to fourteen parishes for purposes local government administration. The Island formed like the other Islands through the Caribbean Antilles, as a series of ancient volcanoes that emerged from the ocean floors millions of years ago, and during periods of submersion, thick layers of limestone were laid down over the old igneous and metamorphic rock. In many places, the limestone is thousands of feet thick. The country can be divided into three landform regions: the eastern mountains, the central valleys and plateaus, and the coastal plains.

The highest area in Jamaica is the eastern mountains, which are dominated by the Blue Mountains. This area of Jamaica was formed by a central ridge of metamorphic rock running northwest to southeast from which many long spurs jut to the north and south. For a distance of over three kilometres, the crest of the ridge exceeds 1,800 metres. The highest point is Blue Mountain Peak at 7,402 feet (2,256 m). The Blue Mountains rise to these elevations from the coastal plain in the space of about sixteen kilometres, producing one of the steepest general gradients in the world.

Another two thirds of the Island of Jamaica is covered in limestone plateaus, which extend from the western base of the eastern mountains across the rest of the western portion of Jamaica. The formations of these limestone plateaus can be most dramatically seen in the far western portions of Jamaica, in the region known as "Cockpit Country" where the terrain is pockmarked with steep sided hollows that may be as deep as 120 metres. Where the ridges between sinkholes in the plateau area have dissolved, flat-bottomed basins or valleys have been formed that are filled with some of the most productive soils on the Island.

The coastline of Jamaica is one of many contrasts. The northeast shore is severely eroded by the ocean. There are many small inlets in the rugged coastline, but no coastal plain of any extent. A narrow strip of plains along the northern coast offers calm seas and white sand beaches. Behind the beaches is a flat raised plain of uplifted coral reef. The southern coast has small stretches of plains lined by black sand beaches. These are backed by cliffs of limestone where the plateaus end. In many stretches with no coastal plain, the cliffs drop 300 meters straight to the sea. In the southwest, broad plains stretch inland for a number of kilometres. The Black River courses 70 kilometres through the largest of these plains. The swamplands of the Great Morass and the Upper Morass fill much of the plains. The western coastline contains the Island's finest beaches. [38]
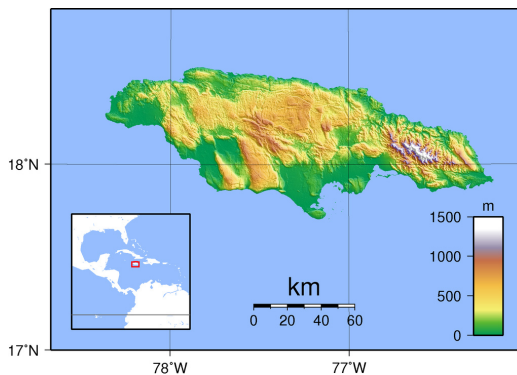
Fig. 3.07   RIGHT - Topographical Map of Jamaica.

JAMAICA
PRECIPITATION

Country capital
Parish capital
Parish border

Precipitation (mm/year)	(inch/year)
0	0
100	3.9
250	9.8
500	19.7
750	29.5
1250	49.2
2500	98.4

0   20 km

0   20 mi

N
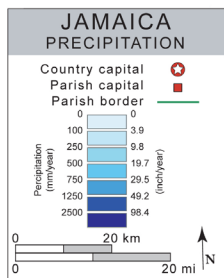
Fig. 3.08   ABOVE - Precipitation and Humidity Map of
Jamaica

JAMAICA
TEMPERATURE

Country capital
Parish capital
Parish border

°F	°C
85°	29.5°
80°	26.5°
75°	23.8°
70°	21.0°
65°	18.5°
60°	15.5°
55°	13.0°
50°	10.0°
45°	7.0°
40°	4.5°
35°	1.5°

Annual mean temperature

0   20 km

0   20 mi

N
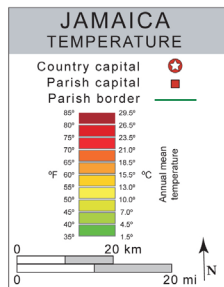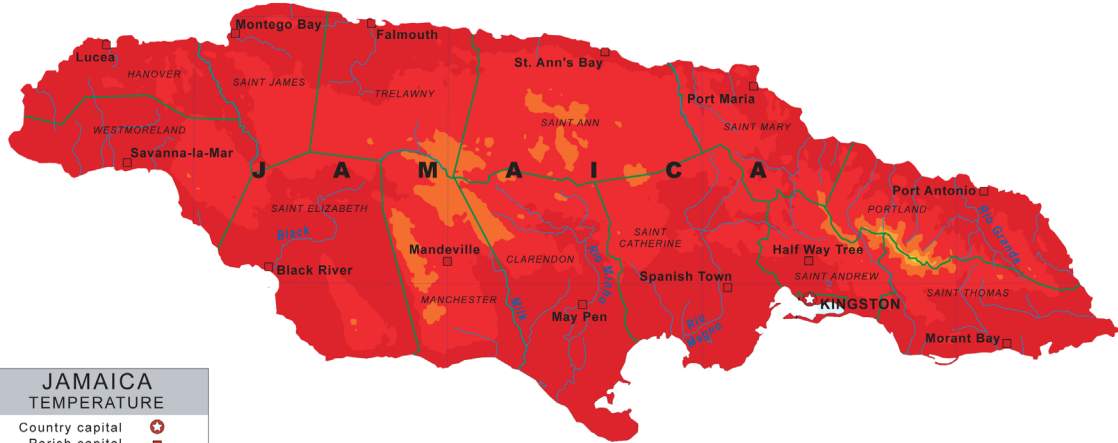
Fig. 3.10   ABOVE - Average Annual Temperature Map of
Jamaica

Climate

Jamaica falls in the Subtropical climatic zone of the earth and experiences a tropical marine climate; however, there are two predominant climate types in Jamaica: an upland Tropical climate prevails on the windward side of the mountains, while on the leeward side of the mountains, a semi-arid climate exists. Warm trade winds from the east and north east bring moderate rainfall throughout the year, and between May and October experience the highest amount of precipitation. This increase in rainfall coincides with the Atlantic hurricane season that runs between June and November. The average yearly rainfall is 1,960 mm (77.2inches) in total, while the northern and eastern sides of the mountains tend to receive significantly more rain, with totals as much as 5,080mm (200inches) annually.

Temperatures throughout the year are fairly constant in Jamaica, both in terms of diurnal and annual ranges. The average temperature in the lowlands is between 25˚C and 30˚C (78-86˚F); in the mountainous interior highlands, the average temperature is between 15˚C and 22˚C (59-72˚F), while at the peaks of the Blue Mountains temperatures often dip below 10˚C (50˚F).

Jamaica experiences the north eastern trade winds throughout the year, and experiences refreshing onshore breezes during the day and cooling offshore breezes at night. Since Jamaica lies in the Atlantic hurricane belt, the Island often faces threats from tropical cyclones and seasonal Atlantic hurricanes and their destructive winds and storm surges. Jamaica has experienced two direct hits (Gilbert in 1988 and Ivan in 2004) since the 1930s and a few close passes; accordingly there is always a threat from this potential disaster. [39]
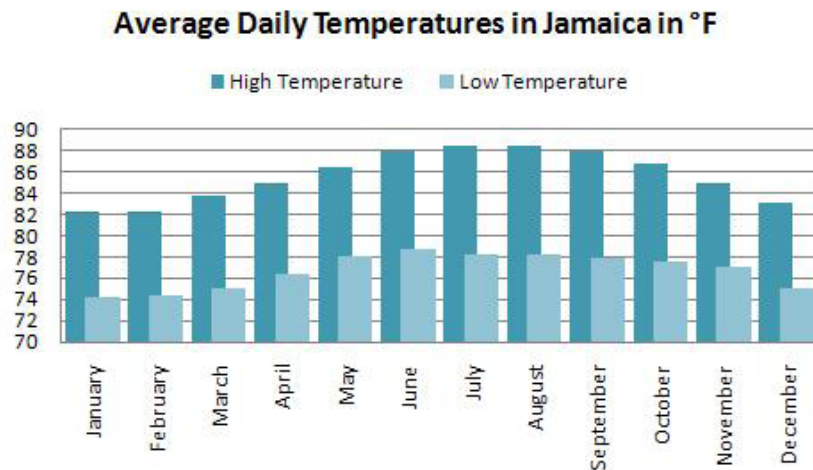
Fig. 3.11   ABOVE - Average Daily Temperatures in Jamaica.

LAND UTILIZATION

■	Rain forest	■	Marsh and swamp
■	Wet forest	■	Livestock
■	Dry scrub forest	■	Cultivated area, mainly plantation agriculture
		□	Subsistence farming; some rough pasture and "ruinate"*
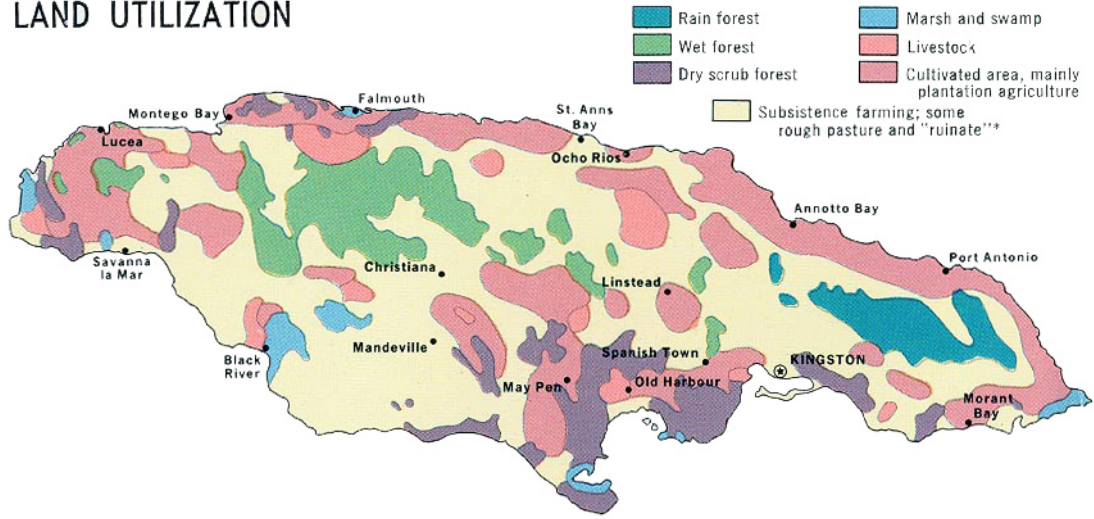
Fig. 3.12   ABOVE - Land Utilization Map of Jamaica

AGRICULTURE

MAJOR AREAS

■	Sugarcane
■	Bananas
■	Citrus
■	Coconuts
■	Coffee
■	Cocoa
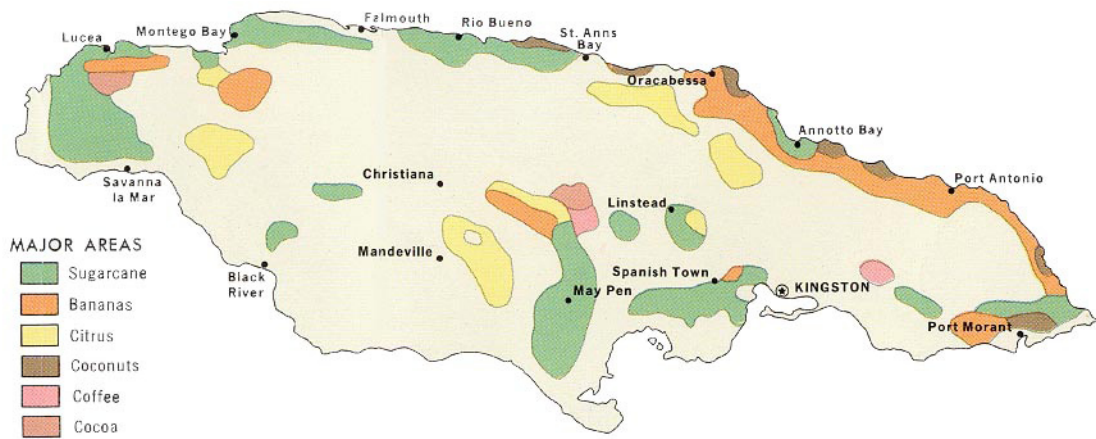
Fig. 3.13   ABOVE - Agricultural Regions Map of Jamaica

72

Vegetation and Wildlife

The vegetation found in Jamaica closely reflects the sub tropical climate found on the Island, and ranges from tropical rainforests in the hilly interiors and on the northern and eastern slopes of Blue Mountain foothills, to temperate pine forests in the higher altitudes of the Blue Mountains, to species that thrive in the arid semi-grass lands of the coastal plateaus. More than 3,000 species of plants, 27% of which grow nowhere else in the world grow in Jamaica.   Although much of Jamaica's indigenous vegetation has been removed to make way for cultivation, large pockets of untouched indigenous vegetation remain across the Island: approximately 17% of the total land mass of Jamaica is untouched wilderness. There is current research being conducted on Jamaica's The indigenous wildlife of the Island has been more greatly affected by human presence on the Island, as over the past millennia of human habitation on the Island, several of the native animal species have been completely wiped out. Only the coney (a hamster-like animal) remains in the wild. Alligators live in the swamps, the Milk River and the Black Morass., and there are 200 native species of birdlife in the hills and mountains of Jamaica. [40]

Agriculture

The clearance of land for cultivation began to accelerate greatly during the early years of British rule as plantations multiplied. Sugar and coffee were the most widely farmed crops at the time, eventually diversifying into bananas. With the abolition of slavery, many freed slaves still farmed to survive, and Jamaica has had a long history of a strong farming culture.

Today the main crops that are grown in the agricultural sector are sugarcane, coffee, bananas, citrus, yams, ackee, spices and local vegetables. While the cattle farming on the Island is predominately for milk production, small farmers rear goats and poultry. There are some commercial poultry farms, but the major producers tend to supplement their production with purchases from small producers.

In terms of overall land usage in Jamaica there is in total approximately 14% of the land which is arable land, while there is another 6% of land that is permanently planted with crops, while another 24% of the total land mass is dedicated to permanent pastures. [41]

MINING AND INDUSTRY

Sugar factory
Food processing plant
Soap and edible oils plant
Textiles plant

Tobacco factory
Alumina plant
Cement factory
Glass factory
Petroleum refinery

T Tourism

Montego Bay
Falmouth
Ocho Rios
Oracabessa
Negril
Savanna la Mar
Ewarton
Port Antonio
Mandeville
KINGSTON
Black River
Spanish Town
G
May Pen
Port Esquivel
Morant Bay
Port Kaiser
M

Principal bauxite deposit
G Gypsum deposit
M Marble deposit

Fig. 3.14   ABOVE - Mining and Industry Map of Jamaica

POPULATION

Lucea
Montego Bay
Falmouth
St. Anns Bay
HANOVER
SAINT JAMES
TRELAWNY
Ocho Rios
Port Maria
SAINT ANN
WESTMORELAND
SAINT MARY
Savanna la Mar
SAINT ELIZABETH
Christiana
Linstead
Port Antonio
CLARENDON
Chapelton
SAINT CATHERINE
Bog Walk
SAINT ANDREW
Mandeville
Spanish Town
PORTLAND
MANCHESTER
Half Way Tree
Black River
May Pen
KINGSTON
Old Harbour
SAINT THOMAS
Morant Bay

Persons per square mile
125 200 300 400 650 5000 40000
48 77 116 154 251 1931 15444
Persons per square kilometer

Fig. 3.15   ABOVE - Population Density Map of Jamaica

74

Economic Production Data

The Jamaican economy has become heavily based on service industries, as this segment of the economy now accounts for more than 60% of the total Gross Domestic Product (GDP) of Jamaica. The largest sources of foreign exchange for the country continue to be tourism, the bauxite and alumina industries and remittances from abroad, as remittances make up approximately 15% of Jamaica's GDP.

The economic growth of Jamaica faces many problems, including: a high crime rate, high levels of corruption, high levels of unemployment or underemployment, and a high debt-to-GDP ratio of about 120%, making Jamaica's debt burden on a per captia basis the fourth highest in the world.

The largest industries in Jamaica are tourism, bauxite and alumina, agro processing, light manufacturing, rum, cement, metal, paper, chemical products and telecommunications. [42]

Demographics and Population Distribution

According to a 2001 census, the vast majority of the population of Jamaica is of African descent (referring to those who mainly have origins in Africa). The Akan and Igbo of West Africa were the largest ethnic groups brought to Jamaica during the Transatlantic slave trade. Multiracial Jamaicans form the second largest racial group in Jamaica, many of whom have English and particularly Irish heritage, although many multiracial people simply self identify as "Jamaican". After multiracial Jamaicans, the next largest ethnic groups are those of Jamaicans with Indian and Chinese ancestry. The remaining percentage of the population consists of Jamaicans with Syrian, Lebanese, English, Scottish, Irish and German ancestry forming the smallest ethnic minorities in Jamaica, although they tend to still be very influential socially and economically.

The unemployment rate in 2010 was an estimated 12.9% of the total population while poverty was experienced by about 16.5% of the population in that same year, according to available census data .

The total population of Jamaica is approximately 2.8 million people, while the Jamaican diaspora is thought to be an additional 2.5 million strong. Approximately 580,000 people (2010) live in Kingston, the capital of Jamaica. [43]
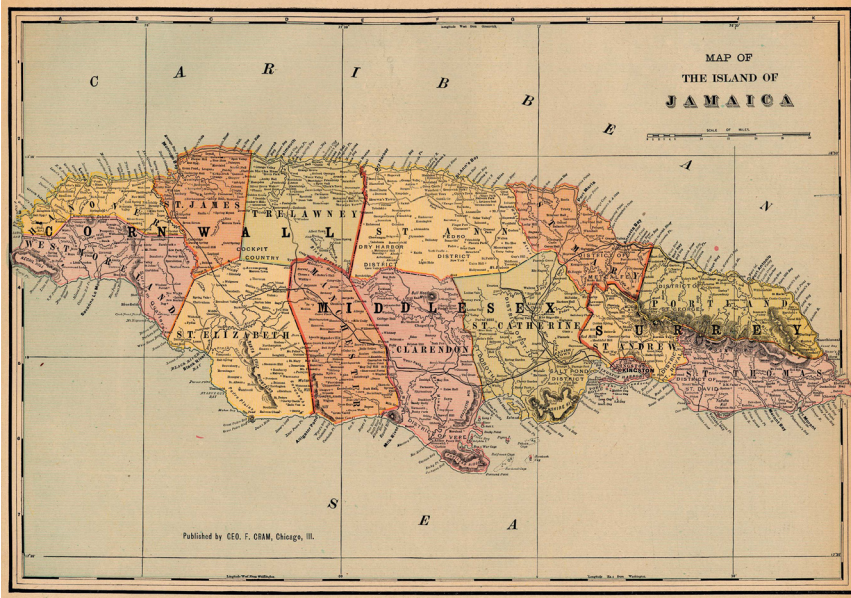
Fig. 3.16   LEFT - Early Political Map of Jamaica, circa 1901.
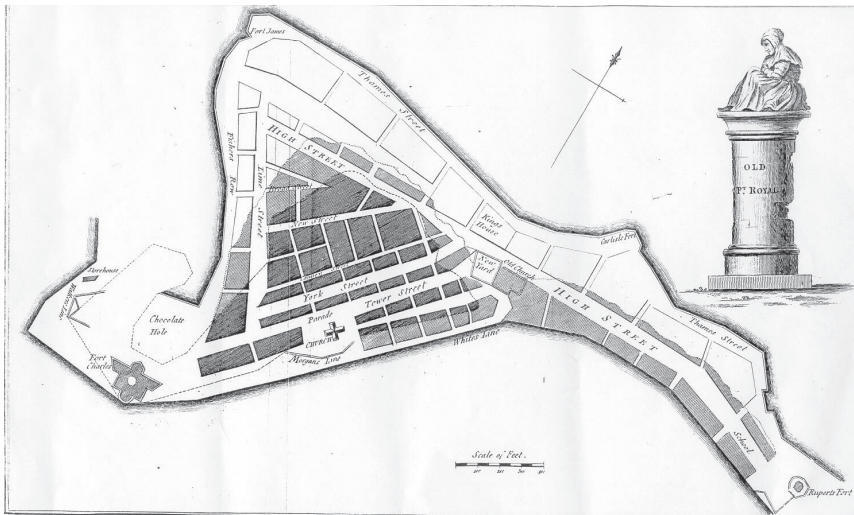
Fig. 3.17   LEFT - Street Map of Port Royal Jamaica, before
             the submersion of a large portion of the town
             during an earthquake in 1692.
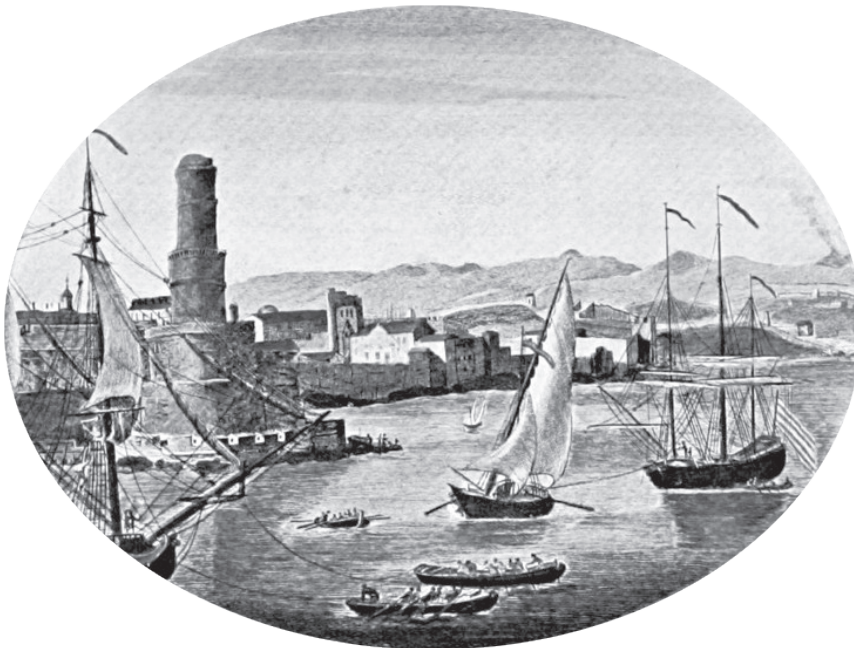
Fig. 3.18   LEFT - Artist's rendition of the town of Port Royal
             Jamaica, during its peak of importance and
             prosperity.

History

Located in the centre of the Caribbean Sea, Jamaica is the largest English speaking Island nation of the Caribbean. Christopher Columbus was the first European settler to make landfall on the Island; his arrival eventually led to Jamaica's becoming a colony of Spain for approximately 164 years, until the English drove the Spanish out, and brought the Island under the British Crown, where it remained until independence in 1962.

The Island of Jamaica was originally inhabited by the Arawak Indians, who remained undiscovered, until May 5th 1494, when Christopher Columbus came upon the Island during his second journey to the New World. However, the Spanish did not establish a colony until 1509, when settlers established the town of Seville, near St. Ann's Bay. During the rule of the Spanish, the Arawak were virtually eradicated on the Island. Eventually the Spanish relocated to Villa de la Vega, renamed Spanish Town by the British, which would act as their capital until the eventual loss of the Island to the British 164 years later. Spanish Town would also serve as the capital for the British until the establishment of Kingston as the capital in 1872. After several attacks by British-sponsored privateer attacks, the British finally conquered the Spanish in 1655, and despite several attempts at counter attacks, the Spanish never regained control of the Island, although they continued to have much territory in the region under their control.

Under the control of the English, the Island became a haven for privateers, buccaneers and pirates, as the British realised that by enlisting the help of the private mercenaries to plunder rival colonies and providing safe haven in Jamaica, the privateers and pirates, in turn, would ensure the Island's safety. The town of Port Royal, which lies on a large spit of land across the harbour from the modern city of Kingston today, became the main economic hub of the Island, and rapidly grew to cater to the growing pirate industry and the burgeoning slave trade. The town soon gained the reputation as the "wickedest place on earth", because of its large number of grog shops, gambling house and brothels. Port Royal was the capital for the English until the town's destruction in a catastrophic earthquake and resulting tsunami that saw a large portion of the town disappear into the sea. Following the destruction of Port Royal, Spanish Town again became the main settlement in Jamaica.

Under British rule, Jamaica soon became one of the most valuable colonies in the New World because of the sugar and coffee plantations managed by English landowners and farmed by African slaves. Jamaica lay on the route of the triangular Transatlantic slave trade from Britain to Africa and North America via the Caribbean colonies. The numbers of African slaves on the Island soon significantly outnumbered the white landowners (the "plantocracy"), as high as 20:1 by 1800. As a consequence, there were numerous slave rebellions and uprisings through the years, until 1831 when events climaxed in what would come to be known as the "Baptist War", led by Sam Sharpe, who would later be declared a national hero. Although the rebellion was suppressed by the plantocracy 10 days after its beginning, the two enquiries launched by the British Parliament into the loss of life and destruction of property during the uprising led to the eventual abolition of slavery throughout the British Empire in 1834. Despite the abolition of slavery, the newly-freed slaves found that they were still bound to their former owner's service, under what was known as the Apprenticeship System, and still faced many hardships in daily life. To compound challenges for the newly-freed black majority, by this time, the importance of the sugar crop was waning and the Island's plantations diversified into bananas as well.

In 1866, the Jamaican Legislature renounced all powers, and Jamaica officially became a Crown Colony, and soon after, in 1872, Kingston replaced Spanish Town as the capital, since the port city had far surpassed the old capital in terms of size and sophistication.

Britain returned some amount of self rule during the 1880's when residents were allowed to elect a nine person legislative council. As a Crown Colony, Jamaica saw the growth of the middle class and low-level public officials with limited power. However, world events of the 1930's and the Great Depression had a significant effect on the emergent middle and working classes of Jamaica that eventually led to another uprising in 1938. However, this time, the rebellion was by dock and sugar workers. Although the rebellion was suppressed, these events led to the eventual creation of an organised labour movement and a competitive political party system, two key steps to the nation's eventual independence.

In the mid-1940's, Jamaica gained some amount of local political control, as the country began to experiment with a competitive party system. The People's National Party (PNP) was formed in 1938, and the Jamaica Labour Party (JLP) was formed five years later in 1943, which allowed for the first elections to be held under universal adult suffrage in 1944. Jamaica soon became one of ten Caribbean United Kingdom nations that formed the Federation of the West Indies in 1958; however, Jamaicans voted to leave the group in 1961. A year later Jamaica would gain complete independence from Britain on August 2, 1962, although it has remained a member of the Commonwealth.

At the dawn of an independent Jamaica, Alexander Bustamante of the JLP emerged the country's first Prime Minister, just edging out Norman Washington Manley of the PNP, the only Premier of Jamaica; however, over the almost 50 years of its independence, political control has change hands frequently between the two political parties. In 1972 Michael Manley (son of Norman Washington Manley) became the first Prime Minister from the PNP, and against a backdrop of the cold war and an oil crisis, he began to explore socialist policy and develop a relationship with Cuba. During Manley's second election campaign there was a marked increase in violence, which eventually climaxed in the run-up to the 1980's election, which saw the JLP returning to power under Edward Seaga. Once elected, Seaga began to reverse to policies of the previous PNP administration, encouraging privatisation and developing closer ties with the United States. Manley regained power for the PNP in 1989 but resigned from office in 1992 because of poor health. P. J. Patterson of the PNP took over the Prime Minister's role. Patterson handed over to Jamaica's first female Prime Minister Portia Simpson Miller, in 2006. The PNP retained power until 2007, when the election returned the JLP to power under Bruce Golding.

Throughout recent history Jamaican emigration has been heavy. In the 19th and early 20th century there was a large amount of emigration to Central America, Cuba and the Dominican Republic as Jamaicans went in search of work on sugarcane and banana plantations. Subsequently, up until the 1950's the United Kingdom was the primary destination for emigration from Jamaica; however, following British restrictions placed on Jamaican immigration in 1962, in the latter part of the 20th century, large Jamaican communities have developed in North America, in particular in Toronto, Miami and New York. Remittances from Jamaicans abroad have historically made up an increasingly significant contribution to Jamaica's economy. [44]
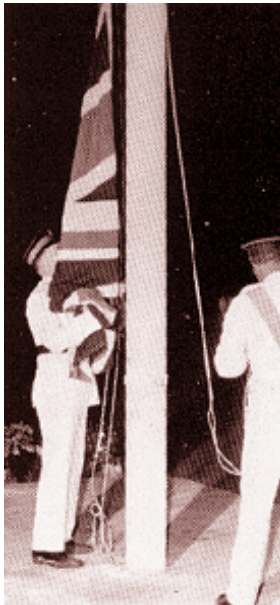
Fig. 3.19 TOP RIGHT - Artist's rendition of National Hero Sam Sharpe during a slave uprising in Jamaica against the Plantocracy.

Fig. 3.20 BOTTOM RIGHT - Jamaica's first Prime Minister, Alexander Bustamante and Later Prime Minister, Edward Seaga hold a certificate presented to Jamaica by Princess Margret at independence in 1962.

Fig. 3.21 ABOVE - The Union Jack is lowered at Jamaican independence in 1962.

Nuttall
Memorial Hospital

St Peter's College

Nursing
Home

Theatre

Health
Office

Club

St Hugh's High School

Mico College

Cemetery

Cemetery

Old Cemetery

Cemetery

Wolmers High School (Boys)

Sch (Girls)

Union Theological Seminary

Creche

Sch

Clinic

Infirmary

Theatre

Sch

TRENCH

Ch

College

King George VI Memorial Park

Altonville

Sch

Cem

WCA

Hall

Ch

Temple

Sch

Fire Sta

Ministry of Health

Health Centre

Pol Sta

Sch

Fire Station

Boys' Town

Animal Hospital

Sch

PO

May Pen Cemetery

Sch

Jamaica Public Service Co

Salvation Army

Kingston Public Hospital

Sch

Playing Field

TIVOLI GARDENS

Theatre

Railway Workshops

Western Purification Works

PWD

Cem

Mkt

Tabernacle Ch

Clinic

Gordon House

Sch

Hotel

Synagogue

Theatre

Masonic Temple

St George's College

Playing Field

Cathedral

Rum Warehouses

Railway Sports Club

Municipal Bus Terminal

Mkt

Hall

NORTH PARADE

Victoria Park

SOUTH PARADE

Mkt

Bank

Home

Theatre

Temple

Tabernacle Ch

Bus Depot

Kingston College

Bank

Bank

Bank

Bank

Kingston Railway Station

Abattoir

GPO

Bank

Bank

PO

Customs

Revenue

PWD

Bank

Bank

Ch

Bank

Jamaica Tourist Board

Ordnance Depot

PO

Victoria Craft Market

Hotel

Victoria Pier

DeCordova's Pier

Church St Pier

Lyons Wharf

Royal Mail Wharf

Hanover St Wharf

Marine Gardens Wharf

Power Station Wharf

Railway Pier No.1

Railway Pier No.2

Railway Pier No.3

Harbour Master's Pier

80

Location

The city of Kingston is the capital city of Jamaica and is the largest and most populous urban area on the Island. Kingston is located on the south-eastern coast of Jamaica on the northern side of a large natural harbour that borders the Liguanea plain. The southern edge of the harbour is protected by a long, narrow sand spit of land know as the Palisadoes, which connects the town of Port Royal and the major international airport, the Norman Manley International Airport, to the rest of the Island. The Liguanea plain on which Kingston is situated is surrounded by the foot hills of the Blue Mountains to the north and north-east, Long Mountain to the East and by Red Hills to the west.

Created in 1923, the Kingston and St. Andrew Corporation (KSAC) was an amalgamation of the two legislative bodies for the parishes of Kingston and St. Andrew, across which the city of Kingston had began to expand. There are two major urban centres within Kingston: the historic but troubled original downtown core and New Kingston. From these major cores, most urban development radiates outward, initially from the downtown core, and later from the New Kingston core.

Just across Hunts Bay to the west is the city of Portmore, St. Catherine, which is a dormitory town that primarily serves Kingston and Spanish Town. Portmore originated as a large scale affordable housing development in which thousands of precast concrete homes were constructed to alleviate a growing housing shortage in Kingston; it has subsequently grown rapidly in population to over 184,000 people. Although the city of Portmore is an entirely different government jurisdiction from Kingston, lying in the neighbouring parish of St. Catherine, it is important in the urban and developmental landscape of Kingston.

Portmore forms the first part of an urban and economic corridor extending westward from Kingston, which also includes Spanish Town and Old Harbour, and is the main transportation corridor between Kingston and much of Jamaica's agricultural land and the bauxite industry in the west of the Island. Kingston is also surrounded by smaller communities in the hills to the north such as Gordon Town, Irish Town, Red Hills, Stony Hill and Mavis Bank, and on the eastern coastal plains, such as Bull Bay and Harbour View. While these towns and communities are not officially in the jurisdiction of the KSAC, they are none the less closely related to Kingston, as many residents commute to the city for work.

Fig. 3.22   OPPOSITE - Map of the Downtown Kingston core and water front.

Fig. 3.23   RIGHT - Map of the neighborhoods of the Parishes of Kingston and St. Andrew, Jamaica.

Fig. 3.24   BELOW - Location Map of Kingston in Jamaica.

Legend

St. Andrew
1. Meadowbrook Estate
2. Forest Hills Garden
3. Three Oaks/Glendale
4. Oaklands
5. Kintyre
6. Hope Tavern
7. Elleston Flats/Mona Commons
8. Nannyville
9. Wilton Gardens/Rema

Kingston
10. Tivoli Gardens
11. West Down Town
12. Hannah Town/Craig Town
13. Fletchers Land
14. Kingston Gardens
15. Passmore Town
16. Newton Square
17. Norman Gardens
18. South Side

— Urban Fence
— Roads

Historical Development

After an earthquake in1692 devastated much of Port Royal, the British established a refugee camp for survivors of the earthquake on the site of what would later become the city of Kingston. Prior to the earthquake, much of the Island's economic activity occurred in Port Royal, and Kingston was primarily agricultural land. The town of Kingston did not start to grow until Port Royal suffered another fire in 1703.

Plans were drawn up by surveyor John Goffe for a gridded urban pattern that ran north to south and east to west with a large park and theatre in the centre. By 1716 the town had become the largest town and the centre of trade in the Island. The government began to sell plots of land within Kingston, under the conditionality that people bought no more land than they previously owned in Port Royal, and only plots close to the waterfront were sold. Subsequently, wealthy merchants began to move their residences further away from their businesses, inland to the relative countryside of the Liguanea plain, beginning the eventual expansion of the urban fabric and the gradual migration of wealth from the downtown core. By 1780 the population of Kingston was an estimated 11,000 people and the importance of the city as a commercial hub had eclipsed that of the then capital Spanish Town, and merchants began to petition for the relocation of the administrative capital of government to Kingston. At the end of the 18th century the city of Kingston was a bustling trading port town, with over 3,000 brick buildings, and had begun to take over many functions from Spanish Town, including agriculture, commerce, processing, and transportation hub, and eventually led to the Kingston becoming the capital in 1872.

In 1907, another earthquake devastated a large portion of Kingston, killing 800 people and destroying many of the historic brick buildings south of the central park, Parade. This wide-spread destruction would lead to the eventual rebuilding of much of the downtown core with concrete reinforced buildings, under strict 18 metre or three storey height restrictions.

The urban fabric would remain relatively unchanged until renewed international interest and prosperity befell Jamaica 1960's, coinciding with worldwide interest in reggae music and Jamaican culture, when renewed development efforts would see the construction of a 95-acre waterfront development project along the harbour front and several high rise buildings. The development caused an influx of stores, offices and businesses that led to the eventual development of the second business core of New Kingston with multiple high rise buildings and boulevards, close to the location of another important existing node within the city, Half-Way-Tree.

Since then, the urban pattern has expanded and increased in density as the population of Kingston has increased over the decades to occupy the vast majority of the Liguanea plain on which it was first established, and has begun to climb the surrounding hills as residential communities push ever further up the mountainsides. The city's wealth has gradually moved outwards as well, with the upscale communities being those that ascend into the hills above the city; while the downtown core south of an intangible line that runs across the city from the Half-Way-Tree Clock, tends to be occupied by those closer to the poverty line.

Within this much divided city, and beyond the original well-structured grid on which the city was first constructed, the city developed in a relatively organic and unplanned manner, lacking overall master planning for much of the city's development outside the original core grid. The city apparently developed through a series of fields and patches in the urban to-pography that were driven by existing territories and networks, physical topographies, erratic development patterns, and perhaps sheer intuition and other intangible forces. Additionally, the large number of informal communities that have developed alongside the city's overall
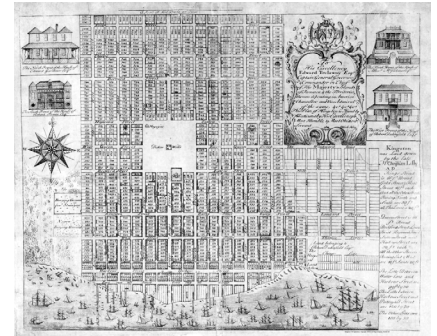
Fig. 3.25   ABOVE - Map of the original street grid of Kingston, Jamaica. (Circa 1745)

Fig. 3.26   ABOVE - Early Map of Kingston, Jamaica. (Circa 1897)

Fig. 3.26   ABOVE - Early Map of Kingston, Jamaica. (Circa 1915)

development have often impacted subsequent planned developments, as they have had to been informed by the existing urban fabric.

At a smaller community or neighbourhood scale, there is often evidence of more cohesive planning efforts, as each subsequent neighbourhood developed over time within the urban fabric; however, there is often disjuncture between adjacent communities with the city, forming a veritable patchwork urban topography across the city. This patch work has developed in such a way that a great variety of urban conditions may coexist in a very small area. For example, pockets of land between upscale neighbourhoods contain small pockets of marginalised inner city communities occupying "captured" vacant land. [45]
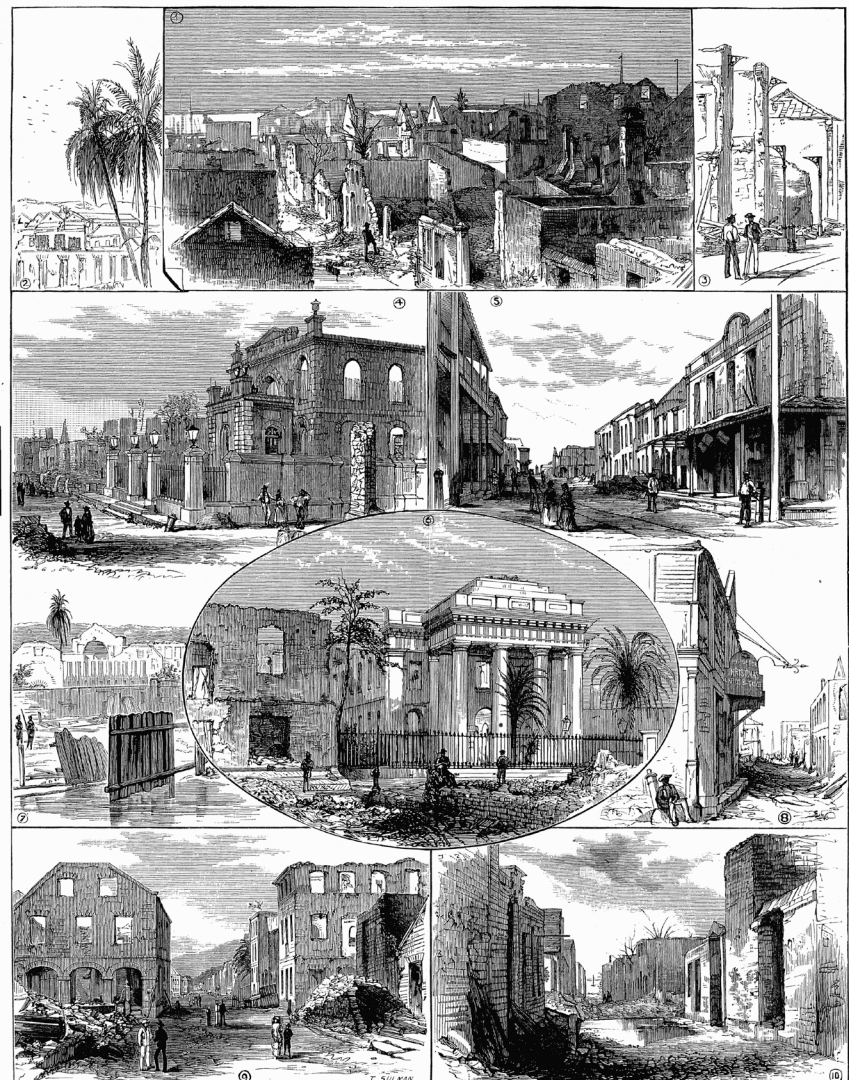
Fig. 3.27   RIGHT - Images depicting the destruction of buildings in Kingston during an earthquake in 1907.

83

Economic Hubs

There are several important economic hubs located throughout Kingston that also serve as nodes within the city's transportation networks. Much of the city's economic development has followed the establishment of the various communities along the main transportation routes that connect them. The linear development patterns they have generated have created a complex web of economic corridors and the intersections of these corridors have evolved into pockets of economic activity.

Downtown

The original economic hub of the city was generated from the commercial activity that once dominated the waterfront of the city, and eventually the original downtown core. Today, despite having declined from its prominence as the premier economic and business zone in Kingston, it still holds an important place in the economic landscape of the capital city. The vast majority of the city's original foot print within the downtown core is occupied by businesses, shops and office space. Along many of the north-south streets that lead away from the Sir William Grant Park at the centre of the original grid, there is an abundance of shops, wholesalers, and informal street side vendors that contribute to an active shopping district. Also, importantly, at the western edge of the central downtown core is Coronation Market, where much of the fresh produce that enters the city from the farms in the countryside is sold. The Roman Catholic and Anglican cathedrals are also in the downtown core. The original cultural heart of Kingston, the Ward Theatre, situated on one side of the William Grant Park in the heart of the downtown core, is the third theatre on its site (the first built in 1775) and the oldest performing arts theatre in Jamaica. It has recently declined in importance with the relocation of Jamaica's annual National Pantomime to the Little Theatre in New Kingston. Audience numbers have routinely fallen as people who live outside of downtown no longer want to travel downtown in the evening and the people in the community do not embrace it as their own.

During development efforts initiated in the 1960's the water front of the central core saw the development of several high rise towers that brought several large entities to a slim zone along the waterfront, among them, Air Jamaica, Scotiabank (The Bank of Nova Scotia), a high rise hotel and an apartment block with shopping attached. The waterfront core also contains the National Conference Centre (built as the home of the United Nations' Seabed Authority), the National Art Gallery and the High Court; Parliament is only a few blocks away, still within the downtown core.

Successive government administrations have had plans to develop the waterfront and downtown core further, but these have never come to fruition. However, at present, the UDC has revised plans for the long term development of the downtown core as part of a larger strategy for urban renewal of downtown Kingston. This concerted effort to redevelop downtown Kingston has seen investment from one of the largest corporate entities in Jamaica, Digicel, now committed to relocate its head office into a waterfront tower that is currently under construction.

The downtown core is bustling with activity of all sorts during the daylight hours while businesses, shops and wholesale outlets are open. However, after dark, where there are no residential communities filling available interstitial spaces amidst the existing commercial spaces, the downtown business district is a veritable ghost town.

As the original downtown core of Kingston declined over the years, it was supplanted by new economic hubs within the urban fabric. With the expansion of the city of Kingston away

from the waterfront, and the wealthy began to move further inland, and their travelling distance to the downtown core increased. As the harbour lost its importance in the central business activity, it was no longer the spatial centre of the city. Accordingly, new economic hubs increased in significance.

Cross Roads

The area known as Cross Roads developed around the intersection of several major roads; one of these intersecting roads was one of the main road leading northward out of the original downtown core; another led to the other developing economic hub of Half-Way-Tree; another to the city's military base, and another to the suburbs to the east of the city. From this convoluted intersection of four major roads, major interests radiate outwards, including the largest movie theatre in Kingston (patronised by all levels of the Kingston's society), a major private hospital, one of the country's major military bases, and the Kingston Parish Church. As is the case with most of the prominent economic hubs within the city and across the Island, Cross Roads also is one of the main transportation nodes within the city.

Half-Way-Tree

Simultaneous with the development of Cross Roads as a business district was the emergence of the area of Half-Way-Tree as perhaps the most important central node within the developing city. Located relatively close to the area of Cross Roads, the two regions have developed side by side, and share major direct circulation linkages. Half-Way-Tree, like Cross Roads, developed around an intersection. Originally, Half-Way-Tree was said to have been the site of a large cotton tree that existed prior to English Occupation in 1655, and that came to represent midpoint between an encampments at in the foothills at Greenwich, St. Andrews and a fort at Spanish Town. Today, Half-Way-Tree is the capital of the Parish of St. Andrew, and is the central economic and transportation node within the city of Kingston.
The intersection that denotes the theoretical centre of Half-Way-Tree is perhaps one of the most heavily trafficked intersections in the city as three major roads that bisect the city in different directions converge at Half-Way-Tree. This corner is marked by a clock tower and park, and adjacent to the main square is the largest transportation centre in the city, the Half-Way-Tree Transportation Centre. Additionally, Half-Way-Tree acts as the unofficial marker along an invisible, almost intangible line signifying the divide between the "Uptown" and "Downtown", as well as beginning one end of the largest upscale shopping districts in the city that extend into the Constant Spring area.

New Kingston

The decline of the importance of downtown Kingston as a an economic hub, and increasing concerns about the general decay and volatility of the inner city communities that had begun to encircle the original downtown core led to the development of a new economic district located more centrally but with close proximity to the other economic nodes that were developing across Kingston. An area of land that had once been occupied by a race track, and that lay almost equidistant between from the nodes of Cross Roads and Half-Way-Tree, was redeveloped into a business district, arranged in block and gridded boulevards. New Kingston became the most prominent and sought after commercial real estate within the city, and soon several high rise office towers and hotels were constructed, quickly becoming a more up market business district with many international companies, banks and insurers taking up residence in the area, quickly propelling it to become the leading business district in the city. Additionally, unlike the economic activities of the original downtown core that had become primarily daytime commercial activities, New Kingston has become the home of much of the night life the city has to offer, with clubs, bars, restaurants, hotels and other vari-

ous entertainment attractions that have encouraged the emergence of nightlife in this part of the city, catering greatly to middle and upper classes Jamaican of society and foreigners.

Liguanea

As a result of the growing middle class in Jamaica, particularly in Kingston, with the combination of the establishment of tertiary institutions like Mona Campus of the University of the West Indies and the College of Arts, Science and Technology (CAST – now The university of Technology, Jamaica), several relatively large middle class communities developed on the Liguanea plain surrounding the UWI and CAST campuses. Communities such as Mona, Mona Heights, and Hope Pastures were a few of the several communities that attracted a mostly middle class population to the area and encouraged the development of the economic hub of Liguanea, which has become one of the more prominent economic zones catering to the surrounding mix of communities. The majority of the businesses are retail, wholesale and service industries. Importantly, Liguanea saw the establishment of the first and largest covered indoor shopping mall in the city, containing shops, movie theatres and restaurants.

Manor Park

In a development pattern similar to that of Liguanea, Manor Park developed as an economic hub catering to, and supported by, the surrounding communities; however, although the surrounding communities are amongst the most affluent in Kingston, Manor Park is a relatively small commercial pocket, nestled at the foot of the hills in which upscale neighbourhoods such as Cherry Gardens, Norbrook, Stony Hill, and Smokey Vale are situated. However, as well as catering to the surrounding upscale communities, Manor Park has also developed as an important economic node, as it is the primary transportation node for those entering or leaving Kingston by bus or taxi: it is the direct connection to the Junction route across the interior of Jamaica, and connects northern sections of the Island with Kingston through the hilly interior, travelling along the Constant Spring commercial corridor, and eventually terminating in Half-Way-Tree.

Constant Spring

The area of Constant Spring has emerged as another important economic hub within the city of Kingston, although it is more of a linear element rather than a nuclear hub, as the area has developed along an important arterial road within the city by the same name. Constant Spring Road, along which the zone has developed, runs between the major economic hub of Half-Way-Tree north to the economic hub of Manor Park at the foot of the hills that contain several of the most affluent neighbourhoods in Kingston. This direct connection between the central hubs of Half-Way-Tree and Manor Park has likely spurred much of the development along this corridor in the city.

New Port West

This zone is primarily a commercial and light industrial zone, with several manufacturing facilities serving local industry close to the harbour. Also, importantly, the area encompassed by this zone includes the flourishing container port facility, the petroleum refinery and storage facility, and the Kingston Free Zone, where foreign companies have established light industries.

Fig. 3.28   ABOVE - Map of Important economic zones and
transportation networks in Kingston, Jamaica.

Transportation Networks

Air, Sea and Rail •••

Kingston is served by two airports, the Norman Manley International airport, situated across the Kingston Harbour on the same spit of land that is home to the town of Port Royal, and Tinson Pen Aerodrome, located west of the downtown core, nestled between an industrial zone, the port zone and an inner city community.

At present, Kingston does not have any facility to allow passengers from cruise ships to disembark; the only port facility caters exclusively to sea cargo, an industry that enjoyed steady growth and expansion since the mid-1990s. The container port facilities have continued to undergo steady expansion because of Jamaica's central location in the Caribbean, proximity to the Panama Canal and natural deep water harbour.

Currently, there is no operating rail system serving the city of Kingston, though the decaying infrastructure of the previously operating train system that operated under British rule still exists, including, importantly, the site and buildings of the original rail station and the railway tracks leading west out of the city on the western edge of the downtown core,. Recently, a portion of the passenger rail service has been resurrected, and is serving a rural portion of the former route. There are plans to resurrect the Kingston section of the line, providing passenger service to the residential communities west of the city.

Public Transportation ••

The public transportation networks of Kingston are dominated by several forms of passenger bus systems. The main public transport system is the government-run Jamaica Urban Transit Company (JUTC), which operates a fleet of large buses in Jamaica's major urban centres with limited rural connections. The buses operated by the JUTC are large 50-passenger buses, a portion of which are articulated in either two or three cab combinations, increasing capacity up to approximately 120 people. Because of their large size, these buses operate along the major arterial roads of the Island's larger urban centres and do not penetrate into smaller communities with relatively wide roads.

A network of smaller and privately-owned and operated, 30 passenger Toyota "Coaster" buses act as a secondary bus service in the major transportation nodes of the city, as well as serving as the major public transportation method for intercity travel between various towns and cities across the Island. Because of their relatively compact size in comparison to the buses operated by the JUTC, the buses are able to serve smaller communities more directly, and traverse smaller secondary roads that link smaller rural communities across the Jamaican countryside.

Taxis •••

Two major categories of taxis comprise another vital component of the transportation networks used by Kingston residents. The first category is the traditional "charter taxi", which a passenger accesses either by calling a taxi company to request collection or by flagging down an empty taxi on the road. The passenger pays a prescribed or negotiated fee (as taxis are unmetered) for transportation between points A and Point B. The charter taxi system caters mostly to the higher income brackets of Kingston, although the prices are not so high that they are completely out of the reach of lower income earners. The second type of taxi service is known locally as the "robot taxi". This type of taxi travels and forth along prescribed and popular transportation routes, picking up and dropping of passengers, who

pay a flat fee similar to but slightly higher than that of a bus, or a fee determined by the distance travelled along the route. The greater manoeuvrability of the smaller vehicles means taxis can access roads too narrow for even the smaller coaster bus to negotiate. The robot taxis are least regulated and policed, and are often quite dangerous as a result.

Personal Motor Vehicles

Kingston and the surrounding cities enjoy a relatively high rate of car ownership, though the number of cars owned in a community is often reflective of income bracket of that community. Car ownership has increased greatly over the period since Independence; however, the urban road networks, have struggled to keep pace with the ever-expanding volume of personal motor vehicles on the relatively disjointed urban road network. As a result of this inadequate road network, during rush hours in the morning and evening, traffic can become gridlocked. During heavy rains, the roads become flooded because of inadequate drainage. In the inner city communities, private car ownership is uncommon, since the economic realities of many residents put car ownership beyond their means. Vehicles owned in these communities are the source of the owner's livelihood, serving as a taxi for other community residents, or as the means to transport goods, or tools and supplies.

Motorcycles

There are two types of motorcycles in use in Kingston and other urban areas: scooters and small motorcycles used by low income wage earners, university and college students and young professionals of modest means to get to their places of work or study, and high powered motorcycles ridden for "show" as status symbols by young men who operate at the periphery of the economy in the don's entourage.

Bicycles

The bicycle is another important method of personal transportation, especially in the inner city, as car ownership is often not an available option. Although there is also a cost issue associated with a bicycle for someone coming from an inner city background, the benefits that may be derived often make them cost effective solution for residents. The bicycle offers an opportunity for an inner city resident beyond mere transportation, as it can be used to transport goods to market or can be incorporated into an informal business in other innovative ways, such as the conversion into a mobile retail unit, or modification to allow the pedal mechanism to power a knife sharpener, or the mobile sound system.

Walking

Walking is the most accessible and affordable mode of transportation available to the lower income workers in the Kingston's inner city communities. Walking may serve as one leg of an intermodal journey between two points, as many parts of the dense inner city urban fabric are inaccessible by any other mode of transportation, because of the informal, unplanned and often restrictive networks that criss-cross the urban fabric.
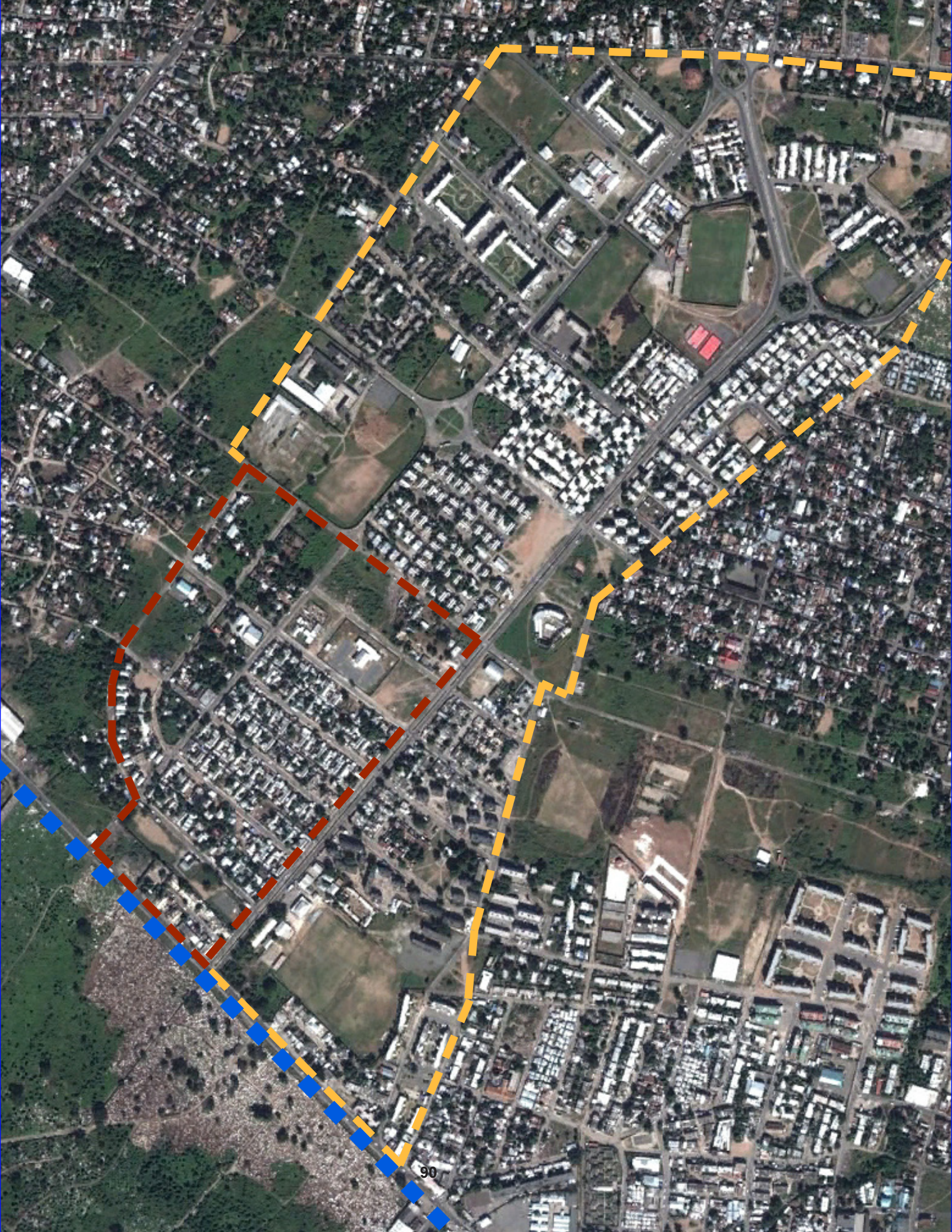
90

Location

The residential community of Trench Town lies just west of the original gridded downtown core of Kingston, along the northern side of the main arterial road leading westward out of the city of Kingston, Spanish Town Road, which, as the name suggests, originally linked the city centre with the neighbouring city of Spanish Town. The area that is officially the original foot print of the community of Trench Town lies just 1,500 meters inland from the harbour and extends north-easterly inland just under 2 kilometres, to within a fairly close proximity of the economic hubs of Cross Roads and New Kingston.

Fig. 3.29   OPPOSITE - Satellite Image of the Trench Town and its environs.

Fig. 3.30   RIGHT - Satellite Image of the Trench Town and its location within the larger Downtown Kingston Area.

Historical Development

The community of Trench Town derived its name from an Irish immigrant family named Trench, who owned 400 acres of land called Trench Pen, which they used to raise livestock in colonial times. The Trench family abandoned the land in the late 19th century. There is a common myth that Trench Town got its name from the open gullies that crisscross the neighbourhood; however, this is untrue. Trench Town comprises the communities of Wilton Gardens (Rema), Federal Gardens, Arnett Gardens (Jungle), Havana and Buckers.

Between the 1930's and the end of the Second World War, the economy of Jamaica was experiencing relative economic growth, that led to a large migration of the largely black population who were the descendants of freed West African slaves from the rural areas of the Island to the rapidly expanding and urbanising capital city of Kingston in search of new opportunities. As the influx of rural migrants increased in Kingston, many new arrivals to the city began to occupy what available land there was in the city, including the land originally owned by the Trench family, A large informal squatter community developed on the land that would become Trench Town, as it lay just outside the developing city core and the market district, on the main thoroughfare between the country side and the city, and soon became the first stop of many rural migrants to the city. The community was made of mostly small shacks, crudely built with whatever found materials could be scavenged or secured through various means.

In the 1940s, the government began developing housing solutions for the masses of low income people in the city; Trench Town was one such development, named for the community's location in Trench Pen. The development had areas separated for recreation, commerce and dwellings, with residential areas divided into "yards" with communal sanitary conveniences and kitchen facilities. In these close confines the creativity blossomed, producing some of Jamaica's most talented musicians and artists. Sadly the conditions of living have not improved much since the 1940s. The community is desperately impoverished, overcrowded and in dire need of infrastructure development and maintenance.

In 1951, Hurricane Charlie heavily affected the Island, devastating many of the informal communities that had developed across the city, in particular the Trench Pen. Recognising the need to house the now displaced squatter communities and the need begin to provide housing for the every growing influx of rural migrants to the capital; the English Crown developed the Trench Town as a model township project, under a newly formed Central Housing Authority (CHA).

The CHA developed an approximately a 200-acre area of Trench Pen into Trench Town, as a new township project that developed an entire planned community featuring owner-occupied and rental social housing properties types, schools, youth clubs, a health clinic, a fire station and a theatre. Importantly, the whole township was developed around a Master plan for the new community that organised the land into a hierarchical gridded system of streets and drainage gullies aligned around Collie Smith Drive, the main circulation path running perpendicular to the existing main thoroughfare of Spanish Town Road in a predominantly north-easterly main orientation towards the vicinity of the Cross Roads area, with the various programmes and services distributed across the master planned area. The overall master planning of the Trench Town development area ensured that the required infrastructure such as sewage, water supply and electricity was available since inception of the community.

The housing development was not designed to occupy the entire designated area immediately, but was planned to allow various subsequent housing projects to be built within the master plan for the area as time progressed. The first area of the township that was

deveoped into housing was the section of the land that lies at the southernmost edge of the land designated for the community, which became to be known as Federal Gardens.

The subsequent housing projects have formed almost autonomous communities within the overall designated township area and have been given their own names, such as Arnett Gardens, Wilton Gardens (Rema), Havana and others. The original section of housing in Federal Gardens today is the section of the overall community that is still called Trench Town, though the later communities are technically part of Trench Town. As such, reference to Trench Town today generally is to the original section known as Federal Gardens, as is the case in this thesis. [46]

Fig. 3.31   BELOW - Diagram of the original Master Plan of the Greater Trench Town area.

Fig. 3.32   TOP RIGHT - Aerial Image of original informal settlements that occupied the Trench Town site, in a largely unorganised patterning and high density.

Fig. 3.33   BOTTOM RIGHT - Image of the poorly constructed squatter settlements that originally occupied the Trench Town site.
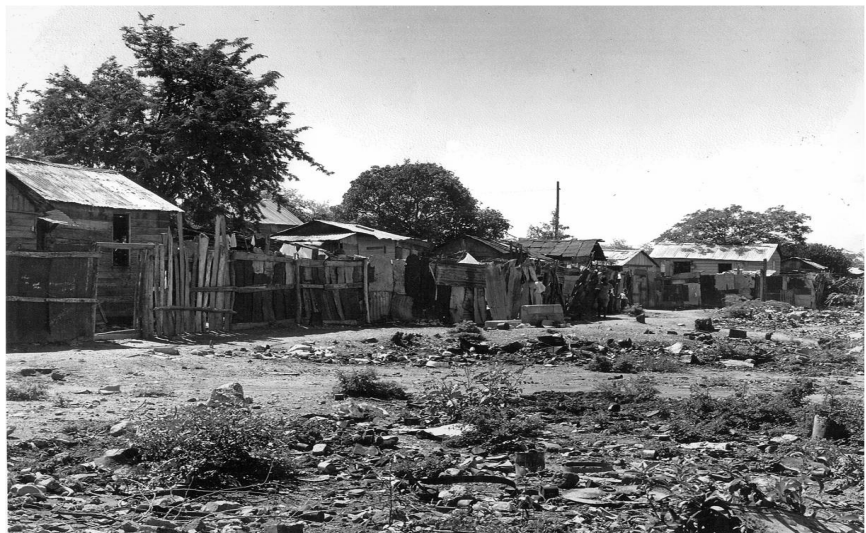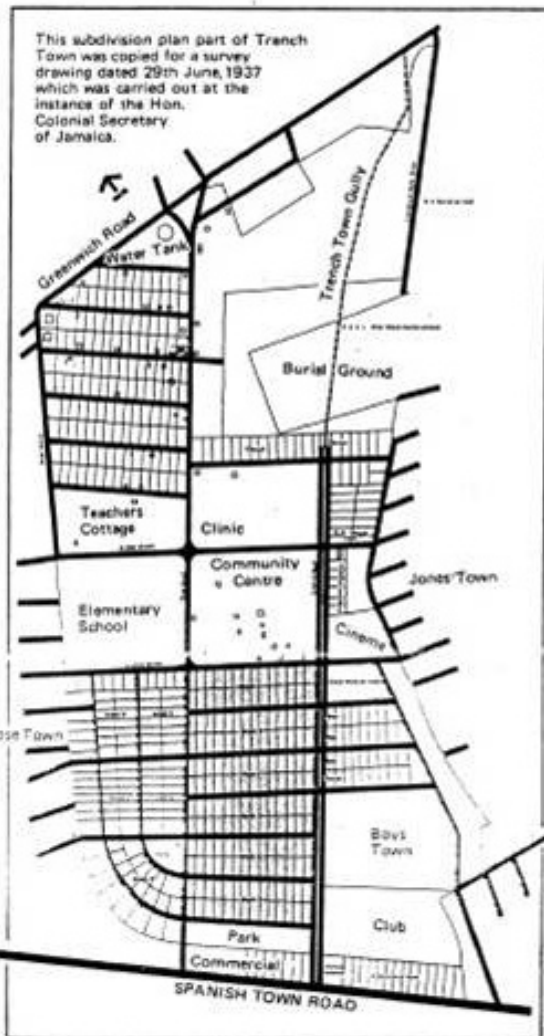
Federal Gardens: The Original Trench Town Tenement Yards

The original section of the Trench Town, Federal Gardens, was designed by the English firm of Shankland Cox, who was contracted by the Crown to develop the first housing component for the township, and would develop a series of housing types. The series of housing typologies developed by Shankland Cox featured four distinct housing types that were mixed within the original development to provide a variety of rental and ownership options, as well as providing spatial configurations that catered to the needs of different members of the community. Most importantly among the various typologies was a social housing model of communal tenement yards that would later become to be known as the "Government Yards of Trench Town". The four different typologies were all constructed of 'knog', a traditional, labour-intensive construction method that used timber framing, filled with stone rubble or brick, covered in a layer of wire mesh, which was then plastered over. The housing was of a British Caribbean Vernacular, with hipped roofs and wide verandas. The various housing typologies were: [47]

Type A: (U-Shape):

These were blocks of one and two-room apartments with common sanitary and cooking facilities. There was a veranda running the length of the block, and at one end of the court there was a small separate building which contained a toilet, and washing and cooking facilities. There were 123 blocks of this type, potentially providing 984 one-room dwellings. In fact, there were 36 two-room units, and a lockable door between some of the rooms that allowed for this conversion to be done. This type was the most common typology, forming the vast majority of what was developed in the community, and was the typology that was referred to as the Tenement Yard or Government Yard', due to the communal courtyard that was created between pairs of these blocks.

Rent originally was: J$D 0.33 per week, per room.

Type B: (H-Shape):

These were blocks of two-room flats, self contained, with their own facilities. These blocks were grouped together on ground that was used communally by all residents of the blocks. There were originally 7 blocks like these making 56 flats.

Rent originally was: J$D 1.60 per week.

Type C: (S-Shape):

These were blocks of four two-room flats, each with its own kitchen but shared toilet facilities, one between two apartments. The blocks were grouped together in groups of 3, and set in a common yard. There were 48 dwellings of this type originally.

Rent originally was: J$D 1.50 per week per room.

Type D: (T-Shape):

These were two-room terrace houses, self-contained with their own kitchen and toilet facilities. There were originally 30 of these dwellings.

Rent originally was: J$D 1.20 per week.
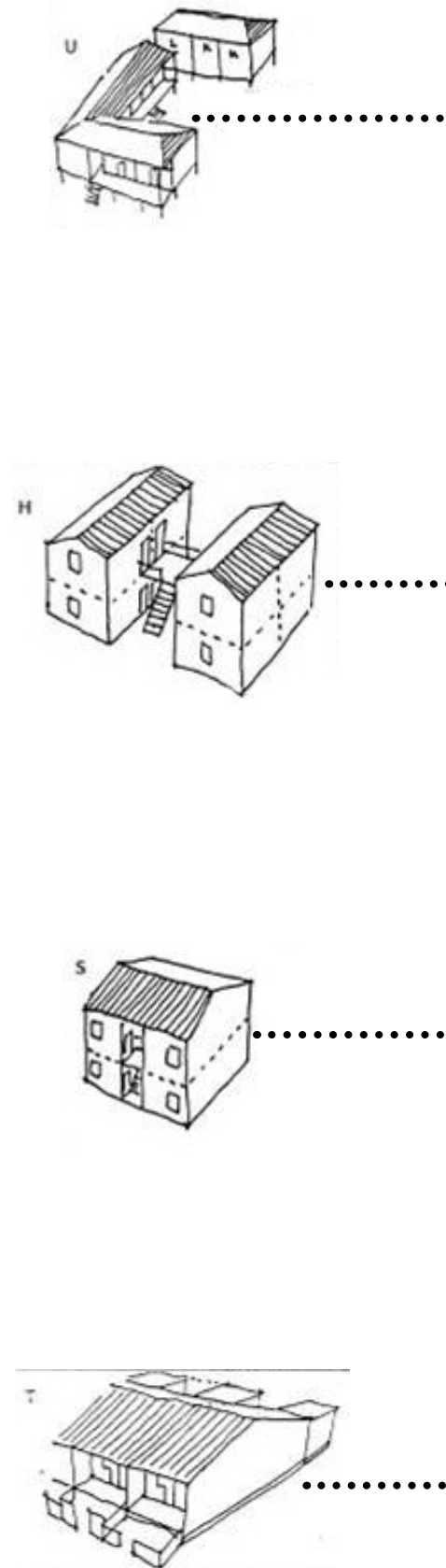
Fig. 3.34   ABOVE & RIGHT - Diagram of the various housing typologies of Federal Gardens, and their location within Trench Town.

SEMI-PERMANENT BUILDINGS

SEMI-PERMANENT BUILDINGS

SEMI-PERMANENT BUILDINGS

SEMI-PERMANENT BUILDINGS

TOBIAS STREET

FIRST STREET

SECOND STREET

THIRD STREET

WEST ROAD

FOURTH STREET

FIFTH STREET

SIXTH STREET

SEVENTH STREET

FOURTH STREET

FIFTH STREET

CENTRAL ROAD

LOWER FIRST STREET

LOWER SECOND STREET

SPANISH TOWN ROAD

CENTRAL ROAD
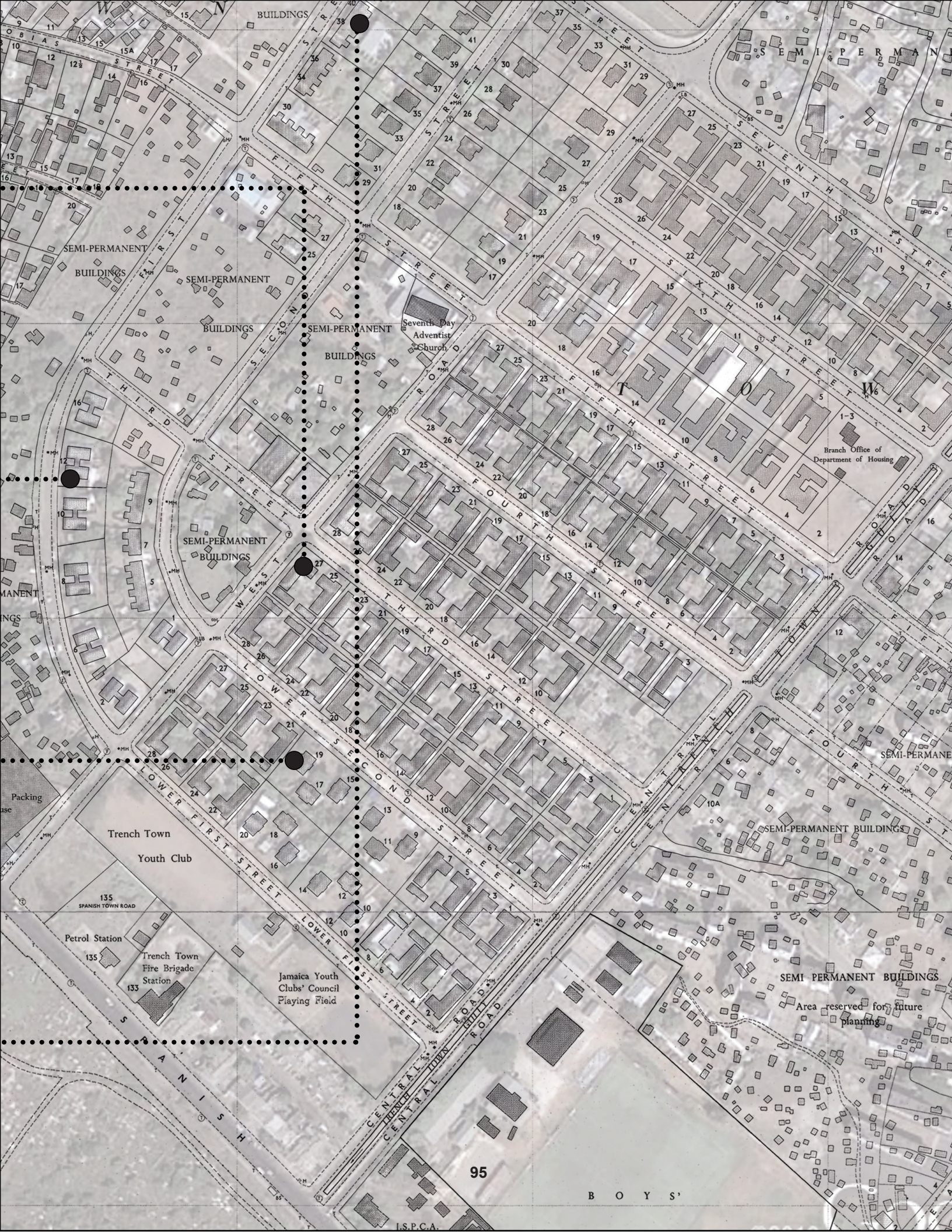
Seventh Day Adventist Church

Branch Office of Department of Housing

T O W N

Trench Town Youth Club

135
SPANISH TOWN ROAD

Petrol Station

135

Packing House

Trench Town Fire Brigade Station

133

Jamaica Youth Clubs' Council Playing Field

SEMI-PERMANENT BUILDINGS

SEMI-PERMANENT BUILDINGS

SEMI PERMANENT BUILDINGS

Area reserved for future planning

95

BOYS'

I.S.P.C.A.

Successive Housing Projects

As successive government administrations have developed various other sections of the original Trench Town Township over the decades since first government yards were built, there have been experiments with several other building typologies and urban forms, creating a veritable timeline of political landscape of Kingston juxtaposed against whatever the prevailing thought in social housing concepts were at that given period of time.

The squatter settlements that had once again in-filled the blocks of the township master plan that had not been developed during the construction of Federal Gardens were slowly removed or relocated, and the blocks rebuilt and redeveloped over the decades into new smaller pocket communities within the larger scheme. Within the overall Master Plan of Trench Town, communities such as Arnett Gardens (Jungle), Wilton Gardens (Rema), Havana, Buckers and others have been developed, each with its own identity, sense of cohesion, leadership structure and political alliance.

The overall Trench Town Township Project reflects political influences over the decades through the various "garrison" communities and political strongholds that have developed since independence. Looking at aerial photographs of the community as it has developed over the years shows the progression in overall densification of the Trench Pen lands. It is important to note the general shift in scale and density of the projects in the series of photographs, moving from the single storey low rises of the original development, to mid-rise apartment blocks on an increasing urban landscape. This shift in urban scale also saw the reduction of natural green space, and its replacement by an ever increasing amount of concrete 'hardscape' between the emerging tower blocks that were increasingly detaching residents from nature and the ground plane. The midrise tower block has come to represent the most common typology used today in the construction of low income housing in an attempt to provide adequate density in these neighbourhoods.

1961

Fig. 3.35   LEFT - Early Aerial Photograph of the Trench Town area several years after completion (Circa 1961)

Fig. 3.36-41 RIGHT - Early Aerial Photographs of the Trench Town at various intervals between 1963 and 1992, showing the development of the larger Trench Town area into various subsequent low income housing projects.

1963

1969

1971

1976

1982

1992

Neighbourhood Typologies and Community Connections

The remaining areas of land surrounding the area that became Trench Town, that were once part of the lands of Trench Pen and had not been included as part of the Trench Town township development, eventually developed in a less structured way into other residential communities of varying socio-economic success and development alongside the continued growth of the Trench Town.

Rose Town

The community of Rose Town lies just to the northwest of the Trench Town township site, bordering the area along Upper First Street and Greenwich Street. The community developed in a largely unplanned fashion typical of many squatter communities, with a mostly random distribution of small, informal structures or squatters have converted and taken over the dilapidated structures of what was a middleclass neighbourhood many decades ago, also creating a fairly organic road network within the area as a result. There is a slim yet relatively large area relatively of fairly vegetated land that separates the two communities for the most part.

Jones Town

On the South-eastern edge of the original Trench Town Township site is the neighbouring community of Trenchtown. Like Rose town, Jones Town developed alongside Trench Town while Trench Town was a fairly vibrant lower to middle income community, however unlike Rose town, the community developed within a somewhat more structured infrastructural grid, with a fairly gridded urban pattern. However, like many of the surrounding communities, the eventual migration of the middle class to other communities in Kingston has led to the infiltration of many squatters, that has lead to an overall increase in the density of the blocks, as the existing lots were subdivided amongst the squatter communities, and informal structures began to in fill interstitial spaces.

Arnett Gardens, Wilton Gardens, Havana, Bunkers, etc.

The northern sections of the original Trench Town Township development area have over time been developed into other residential communities overtime and with successive governments, creating communities such as Arnett Gardens, Wilton Gardens, Havana, and Bunkers. These communities have developed separate and apart from Trench Town, despite being in what was the original Trench Town Township area, and have each developed their own individual identity within the urban fabric.

Tivoli Gardens

Although not directly adjacent to Trench Town, the general proximity of the community of Tivoli Gardens is still somewhat important in the context of Trench Town, though mostly because of the close political alliance that they shared, as Tivoli Gardens is the largest and first of all 'garrison communities' in Jamaica, with a the same allegiance to the JLP. As the large area of land just south of Trench Town and across Spanish Town Road is occupied by the May Pen Cemetery, the community of Tivoli Gardens is the closest and functionally only community on the southern edge of Trench Town, just southeast of Trench Town along Spanish Town Road, and is adjacent to the market district and the central downtown core.

Fig. 3.42   RIGHT - Map of Trench Town and surrounding communities and connections.

WHITFIELD TOWN

ARNETT GARDENS

ROSE TOWN

TRENCH TOWN

TRENCH TOWN

Creche

Clinic

Ch

Ch

Old Cemetery

Cemetery

Cemetery

JONES TOWN

Sch

Theatre

YWCA

Project Site

Federal Gardens

Ch

Sch

Fire Station

Boys' Town

Animal Hospital

MAY PEN CEMETERY

DEHNAHM TOWN

Spanish Town Road

PO

Sch

Sch

Ministry of Health

Pol Sta

May   Pen   Cemetery

Playing Field

Railway Workshops

Western Purification Works

TIVOLI GARDENS

Sch

Ch

Kingston Public Hospital

Tabernacle Ch

Sch

Salv

99

Cem

Mkt

Mkt

Ch

Hants Bay Power Station

WEST QUEEN STREET

Downtown Core
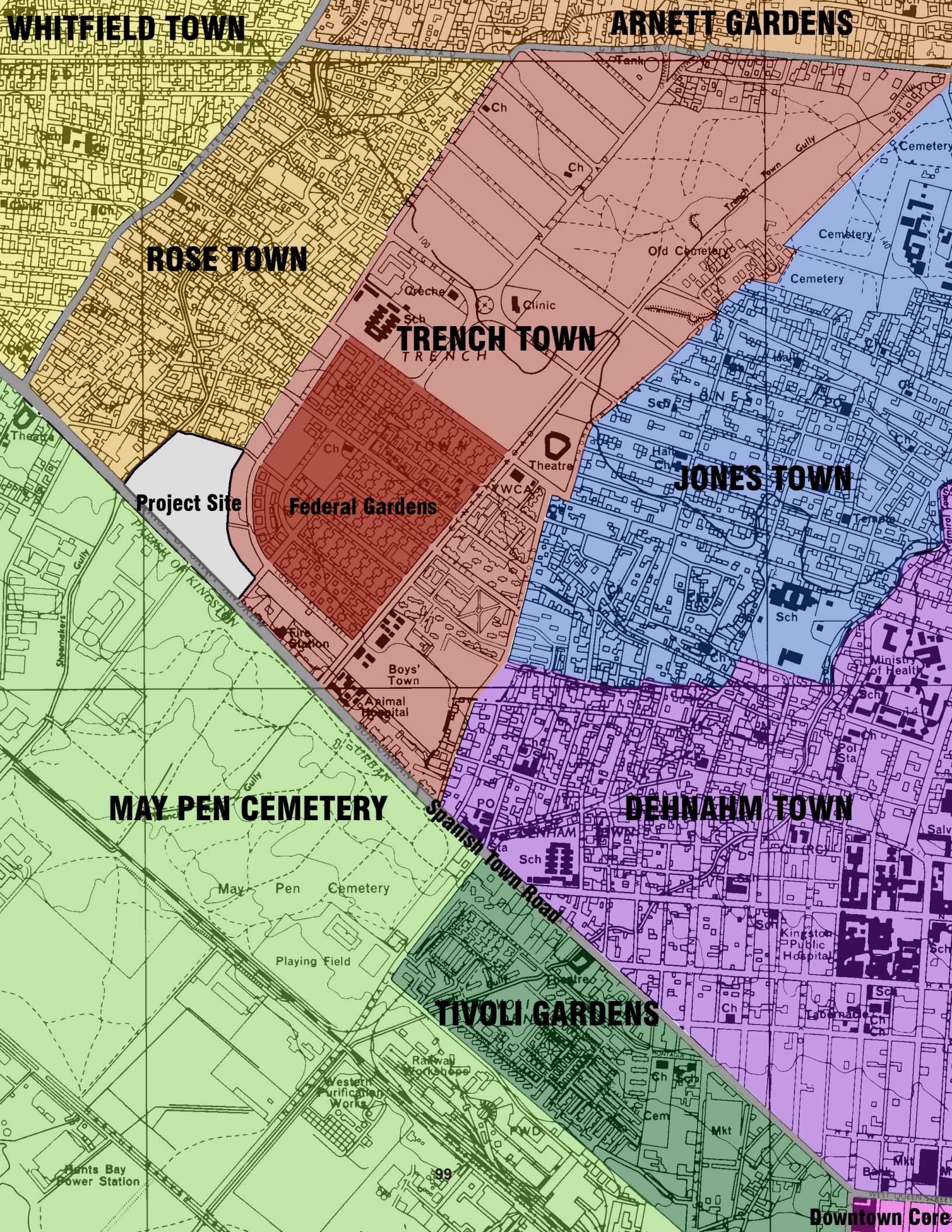
Political Histories and Divisions

Like many other inner city communities in Kingston during the turbulent period of political violence that began to emerge in the 1970's, Trench Town became deeply entrenched in the landscape of political territorialities, and the destructive results these forces had on various communities across the Island.

Federal Gardens, the part of the original township that today is generally still referred to as Trench Town, has traditionally been aligned to the JLP political party for much of its history. However, several of the other communities that developed in the township were developed by under successive PNP administrations and consequently have been affiliated with the PNP, most notable of which is Arnett Gardens to the north, one of the most notorious PNP strong holds in Kingston. Trench Town, with its JLP alignment and Spanish town road location quickly developed a strong relationship with the neighbouring JLP stronghold of Tivoli Gardens, often supporting each other during times of political violence with rival PNP communities in the area.

The development of rival politically aligned communities in such close proximity to each other eventually led to the political violence, which was already affecting many inner city communities of Kingston, beginning to emerge between these communities. As a result the of the armed battles that began to occur between these rival communities, the two blocks of Federal gardens between 5th and 7th Streets which were furthest North and closest to the PNP factions, were eventually abandoned and the structures eventually raised as this became the front line of the battlefield.

Today, after a long and damaging history of political violence and influence in the area, the community as a whole has rejected the violence of the political patronage of Dons, and the rivalry between the surrounding PNP communities is practically a thing of the past, and as a result the community is one of the more peaceful of the inner city communities of Kingston.[48]
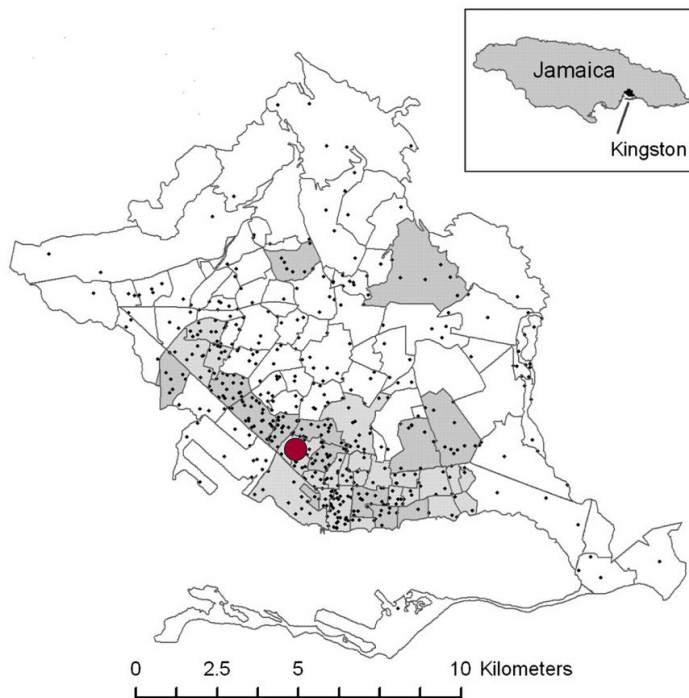
Fig. 3.43   LEFT - Map of Trench Town within the larger context of Kingston's political constituencies and locations of murders (2007). (Note: constituencies highlighted in grey are traditional political strongholds.)

Fig. 3.44   RIGHT - Aerial View of Trench Town (Looking South), showing the vacant land between Fifth and Seventh Streets as seen in 2005, due to years of political violence with the neighboring communities to the North.

Fig. 3.45   RIGHT - View North along Upper First Street that has historically acted as a No-man's Land between Trench Town and Rose Town.

Trench Town Today: Community Profile

Over half a century has passed since the initial development of the Federal Gardens portion of Trench Town, and since then, there has been a very limited amount of investment into the maintenance and overall upgrading of the community. As a result of these decades of veritable neglect, the community that was once a model amongst others in Kingston for its master planning and distribution of infrastructure and services has begun to reflect the urban decay that is present in most other urban areas of the downtown core, but particularly in these residential areas. The slow march of time has claimed much of the infrastructure, and the steady increase in population and demand has meant that many of the original services, like the sewage and water distribution systems, are not functioning optimally - or at all, in some cases.

Additionally, The 'knog' construction technique that was used for the construction of the buildings of the Federal Gardens portion of Trench Town has a tendency to absorb water, especially from the top of the walls when the roof protecting it is damaged, a fact that causes the walls to degrade quickly unless there is a significant amount of maintenance to ensure their long-term viability. However, this labour-intensive maintenance of the structures would have been costly, and without the financial resources to maintain them, many of these structures have fallen into various stages of disrepair, in the worst cases being completely razed to the ground.

There are several different areas of Trench Town proper that have varying characteristics and typologies, that are worth exploring to understand fully the context and special elements of the community.

Collie Smith Drive

The main vehicular circulation spine of Trench Town is Collie Smith Drive, a two-lane road separated by a large drainage gully running between them, which extends perpendicularly from Spanish Town Road at the south, north-easterly in the general direction of Cross Roads. This is the road most heavily used by vehicular traffic in the community, but it is also used by pedestrian traffic as this road is the main artery for most of the communities in the area, and also serves smaller buses and taxis travelling through the neighbourhoods.

First Street to Seventh Street

The seven streets that run perpendicular to Collie Smith Drive within the community of Trench town are the main residential streets of Federal Gardens. The vast majority of the originally constructed housing was aligned along these seven streets. The street numbers begin at Spanish Town Road, and ascend as they move away. However the structures that once occupied the blocks between 5th and 7th Streets have been completely razed. These secondary streets, although they are two lanes wide, were narrower and predominantly see pedestrian traffic today, although they are not completely unused by vehicular traffic.

Upper First and Second Street

The two lower streets that run off of Collie Smith Drive, First and Second Streets, veer to the north as they lead away from the main road, and begin to run parallel to it, enclosing the north-western edges of the community, containing circulation and creating an internalised flow called Upper First and Second Streets. The density of this portion of the neighbourhood is much lower, as there are fewer formal structures in this area.

Spanish Town Road and the May Pen Cemetery

The southern boundary of the community of Trench Town is the main arterial road of Spanish Town Road. Across Spanish Town Road from Trench Town is a large open green space that contains the May Pen Cemetery, the largest cemetery in Kingston. The lower portion of the community towards this edge is mostly separated by underutilized and overgrown vacant land parcels that separate much of Trench Town from direct connection with this edge of the community and the road; as a result, the community metaphorically turns its back to this major artery and appears to be somewhat inwardly focused, which is in contrast to many other communities along this main artery that tend to engage very directly with this space, particularly with economic interests and activities.

Fig. 3.46   RIGHT – View Northeast along First Street towards Collie Smith Drive.

Fig. 3.47   FAR RIGHT – View West along First Street.

Fig. 3.48   RIGHT – View North along Upper First Street.

Fig. 3.49   FAR RIGHT – View West along Spanish Town Road.

Fig. 3.50   RIGHT - Trench Town Community Statistical Data.

Trench Town Community Statistical Profile:

Total Population:	7,005 Approx. (2001 Census)
Population Density:	221 persons/ acre
Poverty Rate:	167.4 /1000 persons (16.7%) (Parish Rate)
Unemployment Rate:	214.1 /1000 persons (21.4%) (Parish Rate)
Education Rate:	N/A

Cultural Importance

Soon after its establishment, during the 1960's, Trench Town underwent a cultural awakening, quickly giving rise to a range of iconic figures, and the neighbourhood soon became known as "The Hollywood of Jamaica". There are perhaps few other places on earth that have created such a disproportionately high number of luminaries per acre who rose to some sort of prominence on the international stage.

Arguably the most important socio-cultural activity that is associated with Trench Town is the music industry. Trench Town has been home to dozens of personalities from the world-famous Jamaican music scene including Bunny Wailer, Peter Tosh, Leroy Sibbles, Alton Ellis, Dean Frasier, the Abbysinians, and, perhaps most notably, international reggae icon Bob Marley, who makes several references to the community in his music.

Perhaps most important in considering the musical significance of the community is that Trench Town was the birthplace of two of the musically genres that helped put Jamaica on the international music map and eventually influenced many other genres: reggae and rock steady.

As well as having an important place in the history of Jamaican music, Trench Town is also of great cultural significance, because it was also one of the birthplaces of the Rastafarian faith that developed alongside the Pan-African ideas being touted by the newly created Jamaican music, reggae, and its most important ambassador, Bob Marley, one of the faith's leading proponents while he was alive. Alongside the strong musical clout the developing neighbourhood possessed, it also began to produce luminary figures in the world of sports, culture, academia and politics, adding to the already strong socio-cultural importance of the neighbourhood.

The exact reason why this small community in Kingston has been able to produce so many iconic and luminary figures in various fields, and particularly in the music, may never be fully explained, but there are several aspects of the built environment that have been suggested as reasons for the overall success of the neighbourhood and community on a larger scale, especially in comparison to successive inner city and low income housing projects. [49]

Fig. 3.51   FAR LEFT - Photo of Trench Town personality Bob Marley.

Fig. 3.52   TOP LEFT - Photo of Trench Town personality Peter Tosh.

Fig. 3.53   BOTTOM LEFT - Photo of Trench Town personality Bunny Wailer.

Factors for Success

Local Jamaican architect Christopher Whyms-Stone, who has been involved heavily in several community based projects in the area, has suggested that perhaps one of the most important factors in the relative success of the Trench Town community as a whole is that the overall scale of the project's various housing typologies were of a familiar size and context to the largely black, rural migrant population, and the direct connection of the majority of the units with the ground provided the best possible environment within the tough urban conditions. The connection to the ground plane and the ability to access the communal courtyards were important in the cultural context of the rural migrant, who was accustomed to spending much of his/her time outside in nature, conducting much of the daily routine in an outdoor setting. This environment was in stark contrast to those created in many of the later low income housing projects, which shifted to the use of a medium rise apartment block typology to increase density; resulting in the residents' connection to the ground plane and the ability to perform household activities and socialise outdoors being severely restricted, often to a small area on the landing of the stairs outside the apartment units.

Additionally, Whyms-Stone suggests that the combination of original structure of the payment model instituted that gave options to either rent or own the units, the variation in housing typologies and the different spatial configurations available in the various residential units gave ample flexibility to provide residents with the choice of truly affordable units based on their actual needs and family structure, ensuring the long term sustainability of the community and its various amenities. This economic model for low cost housing differs significantly from the system that has come to replace it - a model that has seen the one of two scenarios typically playing out: one where new low income housing units are given for free to low income residents, opening many avenues for corruption, favouritism, bias, and political tribalism, or the alternative where units are designed and constructed to be sold at the lowest possible mortgage-based price under the National Housing Trust scheme, usually making them inaccessible to many of the unemployed or semi-employed members of the community.

The communal aspects of the original Trench Town Government Yards also fostered an environment of support and community among the residents of the Yards, allowing for the development of local support networks, helping to lessen the effects of poverty on the residents. The communal kitchens, toilets and social spaces meant that the collective responsibility to maintain the spaces pressured people into treating the physical environment respectfully, and lessened the overall maintenance costs, and, by pooling resources to do household activities collectively, the cost of living for the individual and/or individual family was reduced as well.

It may have been any combination of the previous factors that led to the high concentration of talent that came out of this small neighbourhood in Kingston, but ultimately, it may also have been the sense of community pride and community ownership that developed amongst residents that led to the rapid development of the cultural importance of the neighbourhood in the urban landscape of Kingston.

Tourism, the Trench Town Brand and Economic Development

Tourism already plays an important role in the modern community of Trench Town, although the cultural tourism market as a whole in Jamaica is severely under-developed. However, the economic contribution that tourism already makes to the Jamaican economy can be further exploited in Trench Town to benefit the community and its residents.

The name 'Trench Town' already has significant brand power, as there are perhaps few other neighbourhoods in Jamaica that are recognisable around the world from Canada and the USA to Tokyo to Berlin and beyond to the thousands, or perhaps millions, of international reggae fans. Although the development of the tourism product on offer in Trench Town is still in its relative infancy, there are still many devoted hardcore reggae fans who make the almost spiritual pilgrimage to the home of both reggae music and its leading ambassador - Bob Marley, often braving the somewhat mythologized danger that is rumoured to accompany visits to the supposedly dangerous inner city community on one of the organised tours available to this Mecca of reggae.

Currently, the only genuine tourism product on offer in Trench Town is the Trench Town Culture Yard, which is the refurbished Government Yard and structures on the property where Bob Marley spent his days in Trench Town. This National Heritage site has, for the most part, reinstated the conditions of the built environment on the property to reflect those that would have been present at the time of Bob Marley's residence in the community, allowing tourists to get a glimpse of the daily life and environment that inspired much of his iconic works, while allowing them the chance to interact with some of the original community members that lived in the community at the same time and knew the legend himself. However, un-fortunately, there total numbers of visitors each year to the community and the Trench Town Culture Yard is still quite low .

The posthumous media rights empire that has been created by the Marley Family after Bob Marley's death serves as one of the most powerful examples and precedents of what the brand power associated with reggae iconography can accomplish. The marketing of Bob Marley as a brand has gone far beyond his extensive musical catalogue of dozens of albums and the numerous offspring capitalising on the talent and name that they inherited to create successful music careers of their own. The branding empire has been extended to include clothing, footwear, accessories, books, art, images, creative arts, candles, smoking para-phernalia, beverages and even coffee. This global marketing empire based on the Marley name collectively nets the extended family millions of dollars annually, and exemplifies the potency that a strongly recognised brand associated with reggae and Jamaican culture can offer, and is one of the strongest arguments for the opportunities that the already-recognis-able brand of Trench Town could offer to the overall economic development of the communi-ty by fully capitalising of the potential of the tourism product, and by using the Trench Town brand to market authentic Trench Town products and talent. The concept of the proposed project in this thesis has originated in and been informed by these considerations. [50]
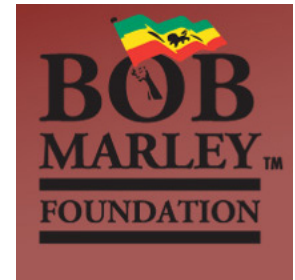
Fig. 3.54   ABOVE - Diagram of a selection of Logo's representing the marketing brand that has been developed around Trench Town luminary, Bob Marley.

Fig. 3.55   RIGHT - Image of the restored Trench Town Government Yard that was once home to Bob Marley, which has been turned into a tourism product.

Fig. 3.56   RIGHT - Image of Reggae Artist Capelton performing to a large crowd during a Reggae Festival in Germany.

Fig. 3.57   RIGHT - Image of performer on stage at an annual Reggae Festival in Trench Town.

Location

The selected site for the proposed design intervention for this project is a piece of mostly vacant land at the lower end of the original Trench Town area along Spanish Town Road, between the community and the neighbouring community of Rose Town to the north west. The selected site is approximately 12.2 acres into total area, and is approximately 310 meters in its largest dimension, along Spanish Town Road, and projects inward from the road about 220 meters at its maximum dimension in that direction.

The vast majority of the selected project site is vacant of any urban form, although there are a few formal and informal structures on the site. Along the edge that is subtended by Spanish Town Road to the south of the site there is a fairly large block of buildings of a industrial typology that currently contain private manufacturing and industrial enterprises towards the north western corner of the site, while at the edge of the curved edge of the project site contained by First Street, there are several informal structures, mostly small, poorly constructed dwellings and informal businesses.

Fig. 3.58   OPPOSITE - Aerial Photo of proposed project site within Trench Town area.

Fig. 3.59   RIGHT - Map of proposed project site within Trench Town area.

Site Topography

The selected site for the proposed design intervention features a fairly even topography, with little variation in attitude across the site and a general slope of less that 2% towards the south west, the general direction of the Kinston Harbour.

Site Drainage and Flood Prone Areas

There are several important considerations related to site drainage that are worth recognising in the analysis of the selected site. First, since the community lies only a few metres above sea level, the water table is fairly high underneath the site. In addition, Shoemakers Gully, one of the main drainage gullies in this part of Kingston, runs along the north western edge of the site, between the communities of Trench Town and Rose Town. During times of heavy rainfall or tropical cyclones, this water course must cope with huge amounts of water travelling down from the hills above, and is often susceptible to flooding. Lower sections closer to the outlet to the sea are particularly susceptible to flooding; such is the case in Trench Town, which is relatively close to the Kingston Harbour. Here, flooding is more likely, because the rate of flow of the water decreases as it enters the sea and the gully system receives the cumulative volume of water from the entire length of the gully descending from the hills above.

Vegetation

The site is almost completely overgrown, with unmaintained shrubs and bushes covering the vast majority of the site, with pockets of grass and individual trees scatted randomly throughout. Along the curved edge of the site that is contained by First Street. However, there is a fairly dense band of relatively well-developed trees that follow the curve of the site along that edge, with pockets of intentional cultivation and gardening mixed in.

Site Links and Community

The site for the design intervention has been selected for several reasons, but most importantly because of the range of circulatory links and neighbouring communities to which it provides access. The site's location along one of the most important main arterial roads within urban fabric of Kingston is the most important feature on which the project anticipates it can capitalise, as this edge will hopefully allow the better integration of the community into the large fabric of the downtown core and city at large, as well as facilitating access by the widest possible market to support the proposed economic components of the project. With its proposed location between formally-planned community of Trench Town and the largely informal community of Rose Town, this site becomes the nexus of three different urban conditions: the decaying semi-formal community, the mostly informal community and the transverse circulatory spine, and provides a significant opportunity to explore how the proposed project might strengthen links between these two similar, yet different communities in this area of under development and high potential.

Fig. 3.60   RIGHT - Diagram of proposed Site area and
             context.

Fig. 3.61-3 FOLLOWING PAGES - Images of proposed project
             site:
             1. Looking East along Spanish Town Road.
             2. Looking West along Spanish Town Road.
             3. Looking West Across the site.
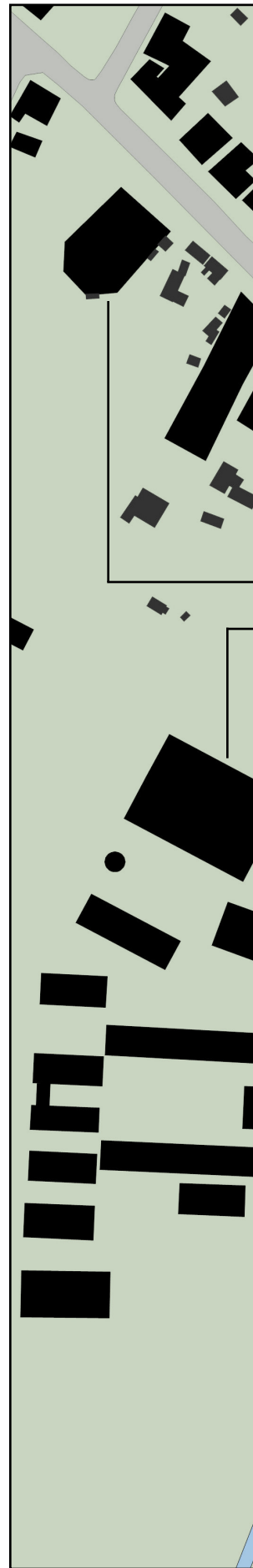
Rose Town

Historic Magestic Theater (Disused)

Kingston Technical High School

Proposed Site for Trench Town
Creative Labs Complex

Federal
Gardens

Horizon Adult Remand Center

Trench Town Reading Center

Trench Town Fire Station

May Pen Cemetery

4.0 > DESIGN INTERVENTION

This thesis has so far explored the trends and relationships between globalisation and poverty, and how these forces have affected the economic and urban landscape of Jamaica. It has also explored the various strategies available in this increasingly globalised world to address the closely-linked realms of poverty and inner city urban environments which typically accompany this social phenomenon; lastly it has explored the context of the proposed project site at various scales and through various filters. This section of the thesis now begins to integrate and apply these various components to the selected site, within the relevant context of the globalising marketplace and its effects in order to derive a set of key design guiding principles that will ultimately provide the framework for the design, which, when implemented, will encourage community development through economic and cultural incubators, social interaction and overall security of the proposed intervention site community.

In order to gain a truly contextualised view of the project site and environment, the design principles have been derived using two general methods in parallel: the conduct of research into social housing, community and urban design methods and international thought within the realm, in combination with direct field research in the community and with its key actors using one-on-one interviews, site visits, and general involvement in the community. This specifically-tailored approach has strengthened the design of the proposed project. The research into the specific contextualised conditions associated with the project has included the conduct of a key informant survey, use of the information gathered to indentify and analyse the needs and opportunities within the community, and ultimately deriving the key designing principles and strategies from the complementary research into prevailing thought in the arenas of social housing and community development.

The first part of this chapter explores the guiding design principles, and the various influences that helped inform them. The second part of this chapter presents an overall vision and concept of the proposed scheme, as informed by these principles. The third part then presents components of an overall urban design strategy for the immediate area of the selected project site, exploring the various components of the overall proposed urban design for the project site as a unified set of components, developing strategies for each area using the design principles laid out at the beginning of the chapter. Finally, the thesis explores the various proposed components of the project more intimately and at greater detail, to identify the individual design elements and the specific role each might play within the overall proposed concept. The designs proposed provide an example of what urban design areas and buildings might look like.

Fig. 4.01   OPPOSITE - View along Upper First Street.

KEY INFORMANT SURVEY DATA

A key informant survey with actors involved with and in the community and representing different interests from various realms was first conducted to obtain a general sense of the situation on the ground in the community and communities such as these in general. The survey was administered to key informants from various private and public institutions that are involved in various aspects of the provision of housing stock for low income communities in general, Non-Governmental Organisations involved in development work in these communities, and actors that are involved in the community of Trench Town directly through various community based organisations. In total, 16 key informants were interviewed, representing the many and various stakeholders from different interest groups.

The key informant interviews and survey focused on a series of questions primarily intended to identify the main areas of concern within the community and the greatest opportunities for development. The interviews were recorded and the data were compiled into a matrix identifying the range of responses and quantifying the outlined suggestions to each question, in order to identify the most common trends, and anomalies.

Fig. 4.02   RIGHT (TOP) - Analysis of Develpment
             Opportunities Criteria

Fig. 4.03   RIGHT (BOTTOM) - Analysis of Opportunities for
             Economic Development.

ANALYSIS OF DEVELOPMENT OPPORTUNITIES CRITERIA

	EXISTING	HIGH	MEDIUM	LOW
		LEVEL OF NEED		
BASIC INFRASTRUCTURE	●		●	
ECONOMIC INFRASTRUCTURE	●	●		
HOUSING	●	●		
SERVICES	●		●	
COMMUNITY SERVICES	●	●		
CULTURAL INFRASTRUCTURE	●	●		
AGRICULTURE	●		●	
EDUCATION	●		●	
HEALTH & SANITATION	●	●		
SOCIAL SERVICES	●	●		

ANALYSIS OF OPPORTUNITIES FOR ECONOMIC DEVELOPMENT

	EXISTING	HIGH	MEDIUM	LOW
		LEVEL OF NEED		
GENERAL ENTREPRENEURSHIP	●	●		
MUSIC INDUSTRY	●	●		
ARTS INDUSTRY	●	●		
PERFORMANCE & DANCE	●		●	
MEDIA & TECHNOLOGY	●	●		
TEXTILES	●	●		
AGRICULTURE	●		●	
SPORTS	●			●
SKILLED CRAFTS	●		●	
LOCAL CONSTRUCTION (SIMPLE)	●	●		
TOURISM PRODUCTS	●	●		
LIGHT MANUFACTURING	●		●	

FACILITY DESIGN VISION AND CONCEPT

The term tenement often has negative connotations when used in the realm of urban development and housing; however, the intention of the proposed design in this thesis is that the communal aspects of the tenement yards that were the original model for housing with in Trench Town be re-explored and re-introduced to reignite the community and foster economic development that is so desperately needed in the local community. The proposed model of development explores the creation of an incubator facility will develop the community through its rich cultural history by creating a mixed-use space that creates a sustainable live-to-work community in order to encourage a dynamic communal environment that will foster growth within the community.

The Trench Town Creative Labs (TTCL) facility is envisioned as a multi-disciplinary space that will build on the rich cultural history and iconic brand that is already synonymous with Trench Town, by expanding the economic base of the community and community members. The design strategy involves creating a series of distinct zones within the boundaries of the selected project site, to create a series of separate yet unified programmatic areas that support the related functions of the neighbouring zones. The major zones created in the proposed scheme are the Circulation Zones, Economic & Production Zone, the Housing & Community Zone, the Agricultural Zone and the Central Entertainment & Performance Zone. The programming of the architectural interventions in each zone relate directly to the relevant functions of each zone.

The Economic & Production Zone is one of the key components and is comprised of a series of five similar, yet unique, two story structures that house the core programming of this aspect of the project. The five Hubs that sit along the edge of the site that runs adjacent to the main artery of Spanish Town Road provide the ideal location for the economic component of the proposed project, creating the needed livelihood opportunities needed to support the larger low income housing equation. The project seeks to create a community sustained by productive cultural arts; the various support industries and various tourism products. Additionally, the supporting industries that are commonly found in many low income communities that form a large amount of the informal economies and help sustain these marginalised communities are also encouraged to thrive through the provision of several options for productive opportunities. The five aspects of the cultural arts that have been identified as the most potent avenues for creating viable commercial industries, and support industries are Music, Art, Performance Arts, Media Arts and Textiles and Fashion, each branch of the creative arts being assigned to the programming of one of the five Hubs. Dependant on the branch of the creative arts that is associated with that specific Hub, it is configured to suit the needs of the selected industry and program. The inclusion of the three other zones of the project provide even greater viability and sustainability through urban agriculture, entertainment opportunities and further integration into the existing transportation networks of Kingston.

The other key component of the proposed architectural intervention for the Trench Town Creative Labs is the housing aspect of the project. The housing and community zone of the project seek to provide affordable low income housing and public services to the residents of the new community and the residential component of the project works within the strategies outlined previously with in this thesis, creating a variety of ownership and rental models, creating a variety of economic and financing opportunities to bring low income residents into the large formal housing model, and creating a social enterprise that links the provision of livelihood opportunities with the provision of housing access.
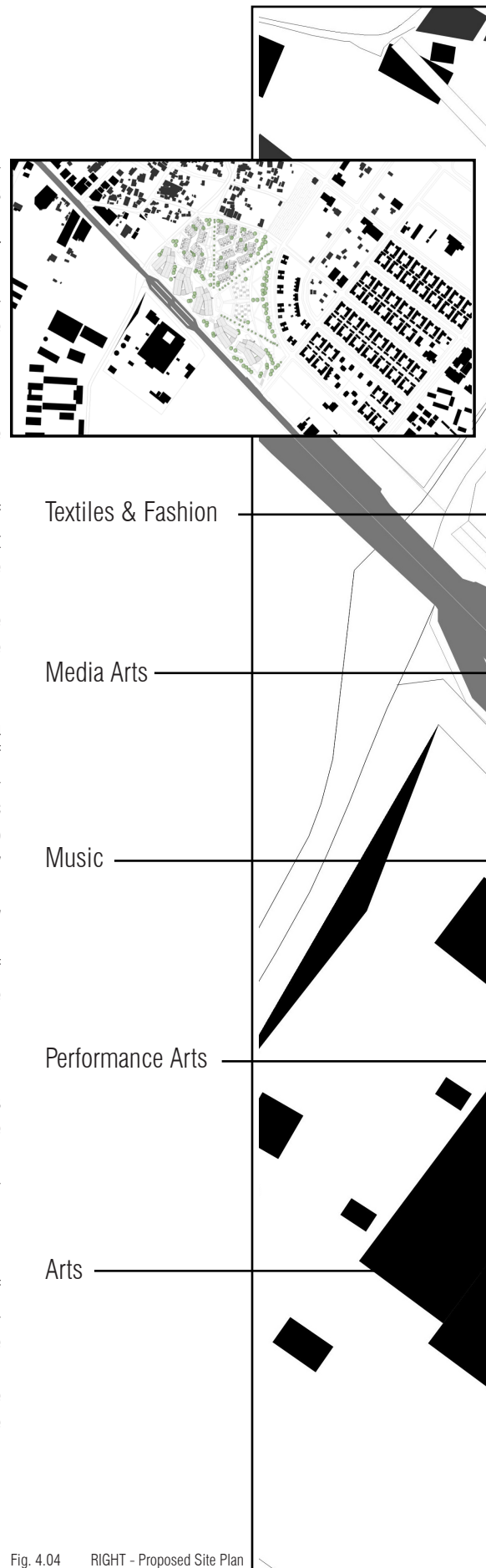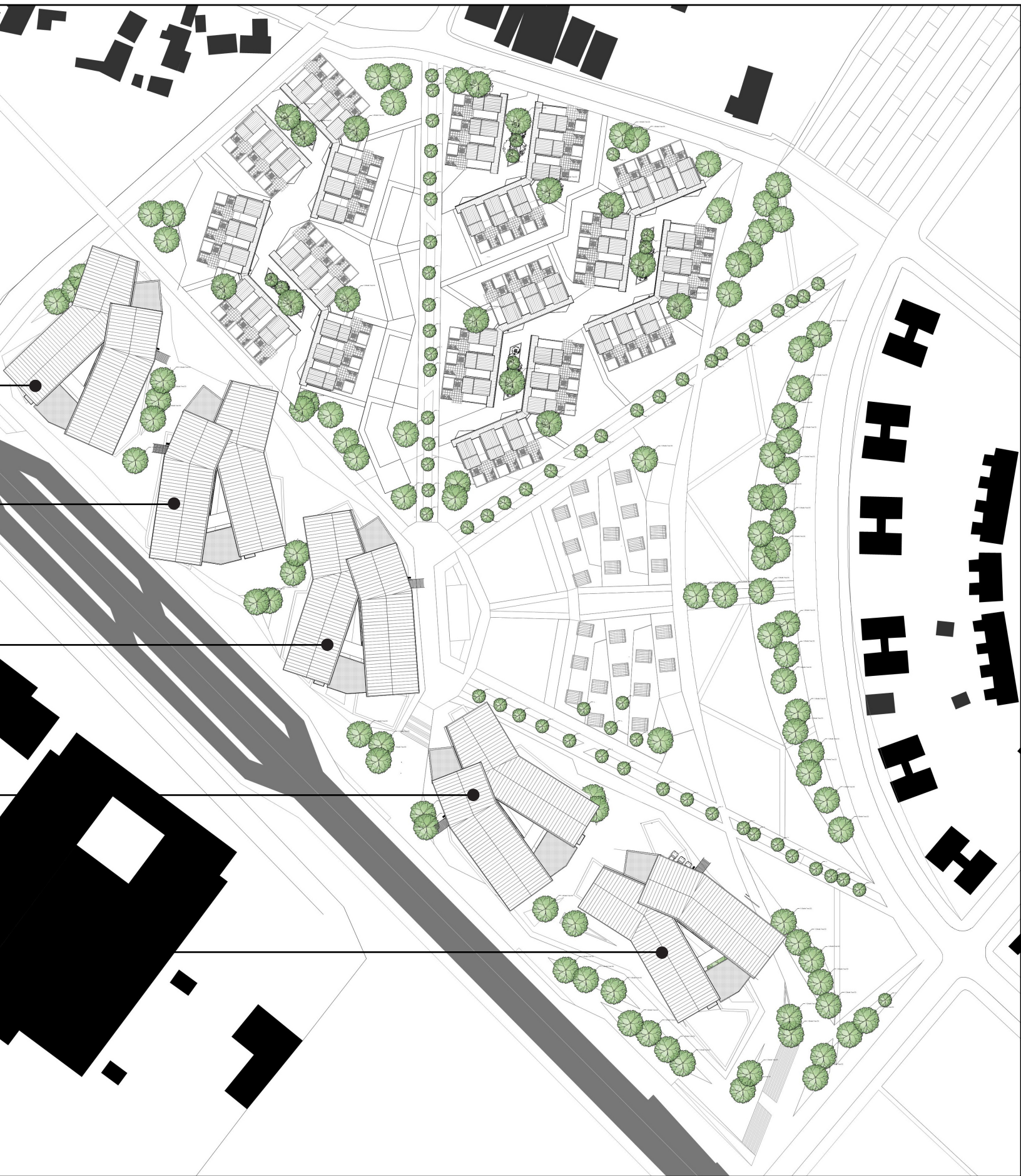

Textiles & Fashion

Media Arts

Music

Performance Arts

Arts

Fig. 4.04   RIGHT - Proposed Site Plan

PROGRAMMATIC VISION

Zoning

The initial step in the designing the Trench Town Creative Labs disaggregates the overall programmatic composition of the proposed facility, creating several distinct yet integrated zones that will create the basis for the relationships between and among the various components of the project. The project site has been broken into four separate yet interdependent zones: Circulation and Connection Zone, Economic & Production Zone, Housing & Community Zone, Central Entertainment Zone and Agricultural Zone.

Circulation and Connection Zone

The Circulation Zone within the site is a network of existing and newly-created vehicular and pedestrian routes that will enhance the current traffic patterns, and create connectivity at the various edges of the site. The main component of this network zone is created by the main vehicular streets that subtend the site to the south, Spanish Town Road – which is a major circulatory path within the downtown section of Kingston running from centre of downtown to the east, and connecting to the major arteries out of Kingston to the West. This major artery is the primary vehicular circulation path related to the site, since there is a relatively high volume of traffic using this route to access the central core of the city, and it is also the main access route to several surrounding communities.

The southern edge of the site contained by the major vehicular circulation path, Spanish Town Road, provides the best opportunity to provide a central connection for vehicular and pedestrian traffic. The creation of a transportation node to serve the site and the surrounding communities makes sense, as this road is the only one directly accessible from the community that is serviced by the public transportation network of buses; currently, no public transportation vehicles travel directly through the community.

Spanish Town Road is already an important economic link for the city of Kingston, as it is one of the most direct links for the majority of farmers bringing produce from farms in the West of Jamaica to sell in the downtown market district, which is less than two kilometres further east along the road. Further west, Spanish Town Road is an economic artery for the city as it is predominantly commercial and industrial properties, and one of major connection paths for New Port West's, free trade zone, the 1980's government initiative to create tax free commercial production zones intended to provide employment opportunities for the surrounding communities.

To take advantage of the mostly vehicular nature of this edge of the site, the proposed transportation node would integrate with the existing bus network and create a terminal along the existing route to provide greater access to the community and facilities for those in communities not directly adjacent to the site, in order to create access the economic aspects of the project for the widest possible population.

The other component of the Circulation and Connection Zone is the creation of viable pedestrian paths that will energise and sustain the community aspects of the project. The other smaller secondary roads that border the site are fully functional roads, providing vehicular access to the community; however, as the vast majority of residents do not have access to personal vehicles, the vehicular traffic loads on these roads is minimal, and they serve predominantly as pedestrian paths. Accordingly, the emphasis along these edges is to integrate these pedestrian paths into a network for pedestrian circulation within and across the site, linking various important nodes within the site and creating pedestrian connections across the site. These paths will become the circulatory link between and among the various surrounding communities.

Fig. 4.05   RIGHT - The Circulation Zones & Hub Lower Level

122

Economic & Production Zone ●●

As one of the major goals of the project is to create a sustainable economic substructure necessary to ensure the viability of a community such as the one in question, the creation of the Economic and Production Zone is the heart of the project. This zone is envisioned as containing all of the programmatic elements of the project that support of the local economy. At the core of this economic zone will be the individual Creative Labs, focusing on specific aspects of cultural production in the facility: the Music Lab, the Creative Arts Lab, the Performance Lab, the Media Arts Lab and the Textiles & Fashion Lab. On the lower level of the economic incubators is located the market place, which provides a variety of commercial spaces, that like the housing in the project is modular, flexible and adaptable.

Housing & Community Zone ●●

The Community Zone is the designation for all programmatic elements of the facility that relate directly to the housing, the social and living concerns of the local residents, and all public spaces and services. The main component of the program for the Community Zone is 54 adaptable housing units, dispersed in clusters around a series of 5 communal court-yards, which in turn are connected to each other and the rest of the site through a series of pedestrian paths that form greened ribbons traversing the site. The other important compo-nent of the Community & Housing Zone is the communal services pavilion that runs from the northern periphery of the site to the center, between the two banks of housing that are located on either side. The pavilion contains all community services and communal aspects of the site programming, serving residents of the new units as well as members of the more marginalized members of surrounding communities, encouraging use of the facilities by allowing easy access to the northern end.

Agricultural Zone ●●●

The Agricultural Zone is the fourth zone within the proposed conceptualization, and is one that provides an important link between the Economic and Production Zone and the Com-munity Zone, by serving both. The overall size of the selected site and the availability of unoccupied land suitable to support small scale urban agriculture adjacent to the site offer the possibility to integrate urban agriculture into the project. The inclusion of urban agri-culture is helpful to the development of the community on several different levels, as urban agriculture allows for more economically sustainable models of community development to be employed. The agricultural zone is further broken down into 3 different component parts. The first part is agricultural plots that are to be developed in the unused space between the housing units, providing each unit with a relatively close private garden. The second part is a large curved section of the site that has been designated for larger communal or private gardening plots. And the final part is two strips of land that extend out from the site, that offer opportunities to extend the urban agriculture out into the wide surrounding communities.

Entertainment & Performance Zone ●●●

The fifth and final zone of the proposed project is the Central Entertainment & Performance Zone, as Culture and entertainment play an important role in many inner city communities, both for pleasure and as an economic catalyst. This space is located toward the center of the site, surrounded by the other zones. The Central Entertainment space is a large open air space that is sunken within the site, creating a central stage area overlooked by much of the site, and a series of terraced levels that form a large open air amphitheatre space overlook-ing the stage, with is closely connected to the Music hub adjacent.

Fig. 4.06   RIGHT - The Community, Economic Production
and Agricultural Zone.

THE CREATIVE LABS

The core component of the Economic & Production Zone of the proposed Trench Town Creative Labs complex are the 5 Incubator labs which run adjacent to Spanish Town Road, to capitalize on the relatively heavy traffic along this edge. The programming and special configuration of each of the Incubator Hubs is determined by which one of the overall streams of the arts is designated for that particular unit, either Music, Performance Arts, Creative Arts, Media Arts or Textiles & Fashion. This new facility, essentially a cultural education factory, is a vital catalyst in this area, expanding cultural programs into the surrounding low-income communities while beginning to form a new network that serves the residents from all levels of society. Commercial spaces are also introduced on the first level as an economic vehicle that activates the street level. The new landscape generates the opportunity to transform the space into a productive zone and public space through social design, a process of analyzing the conditions of rapid growth and improving marginalized settlements through social infrastructure.

Each of the Incubator Hubs is a two storey structure, with the majority of the buildings mass elevated a storey above the ground, creating a series of two covered colonnades on the lower level around a lower greened court in the center. Contained within the upper level of the bulk of the buildings mass is the major programming of the specific arts production and education facilities. By elevating the bulk of the program it is hoped that a greater level of security for the facilities can be attained by creating open visual connections to the rest of the site at ground level, making access to the building outside of controllable points difficult and by creating a range of programmatic uses for the Hubs on two levels that increase round the clock use by community members. Also by elevating the building mass it has been able to create a very flexible covered space at ground level, ideal for the creation of the market place of the project, allowing potential vendors to tap into the large volume of traffic along the Spanish town road edge, while also allowing connections to the rest of the community across the site.

In plan, each of the Incubator Hubs is arranged in two wings that contain the majority of the programming on the first floor. The two wings form pair outwardly reflexive volumes which converge towards the centers of each, and create an angular courtyard between them. Suspended at the end of the internal courtyard space between the two wings of the structures is a volume that contains the preeminent creative space within each of the incubator hubs. Running along the internal edges of both wings is the main circulation zone, linking the various programming together, while providing a covered open air circulation space allowing for natural light and ventilation to be used extensively. Off the main horizontal circulation spaces of the Hubs are a variety spaces ranging in size and scale, providing a range of space solutions dependant on the needs of the specific industry and educational and production processes. Additionally, the configuration of the structure allows for the super structure to be built initially, potentially building only one wing at a time, and the infilling programming and spaces as time progresses in a phased manner, and creates the ability for the overall programming of the spaces to be reconfigured as demands change. Each hub would contain a range of productive spaces ranging from small, to medium, to large, as well as reception area, waiting and lounge area, meeting rooms, class rooms, lecture rooms and performance spaces or rehearsal or practical studios, giving users a variety of working options, whether individually or collectively.

The proposed structural system is a steel I-beam frame to provide the major structure, with a cast concrete decking providing the horizontal plane of the first floor of the structure. The service core of the building that contains the washrooms and stair core, extends the two stories vertically is proposed as a cast concrete structure, or equally suitable precast concrete panels. The rest of the building envelope would then encase the steel structure with a variety of cladding products and options, which would be variable dependant on cost and other maintenance considerations. The Roof structure as proposed is a pair of gently shedding butterfly roofs comprised of steel trusses as the major support members and standing seam metal roofing as the skin. The roofs slope to gutters along the inner edge that allow for a large amount of rain water to be harvested and stored in cisterns below each of the structures.

Fig. 4.07   ABOVE - External View of Typical Creative Hub
            unit.
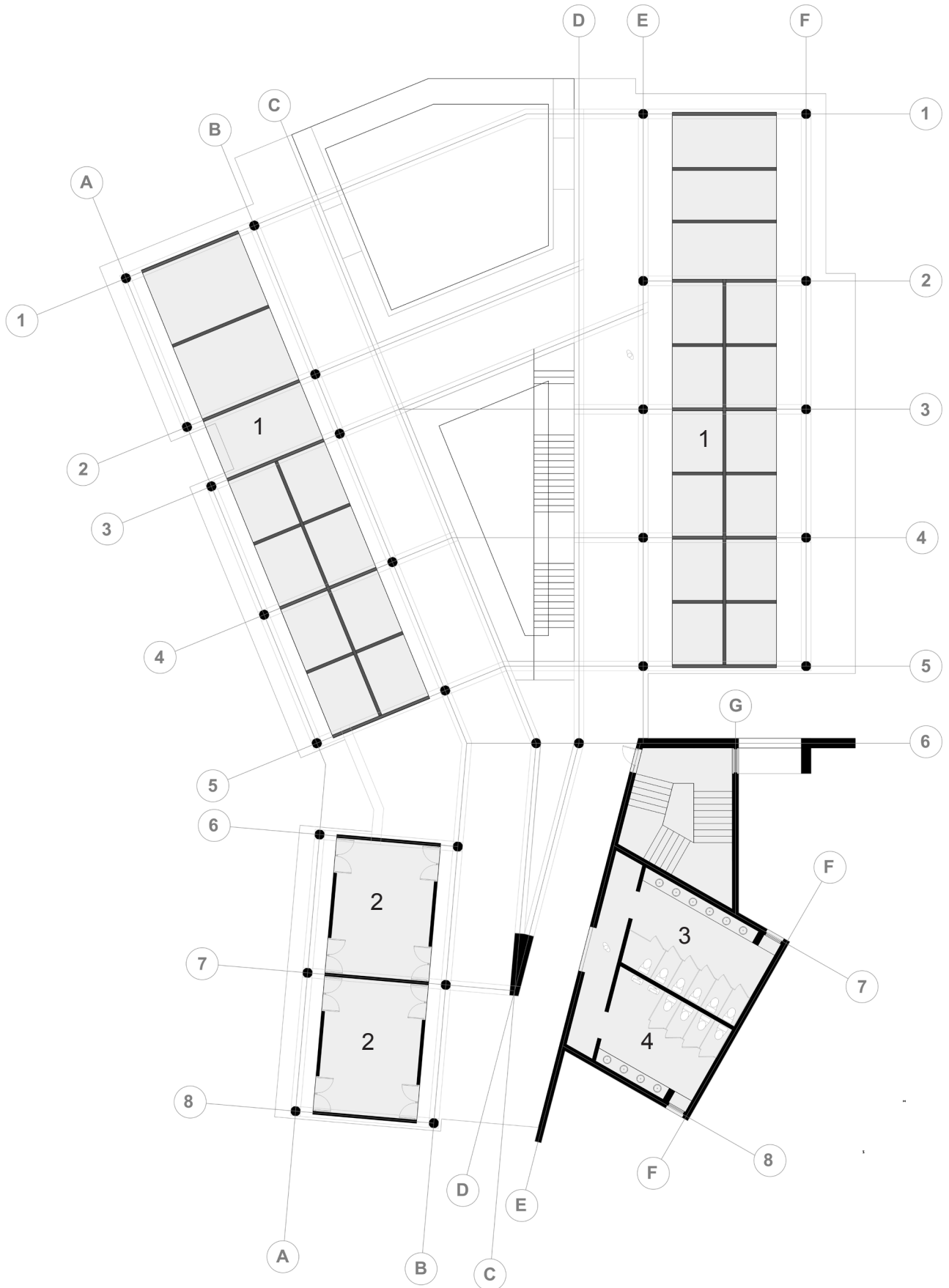
Fig. 4.08   ABOVE & OPPOSITE - Ground Floor (Above) and
First Floor (right) Plans of Typical Creative hub
layout, shown configured as a music creative hub.
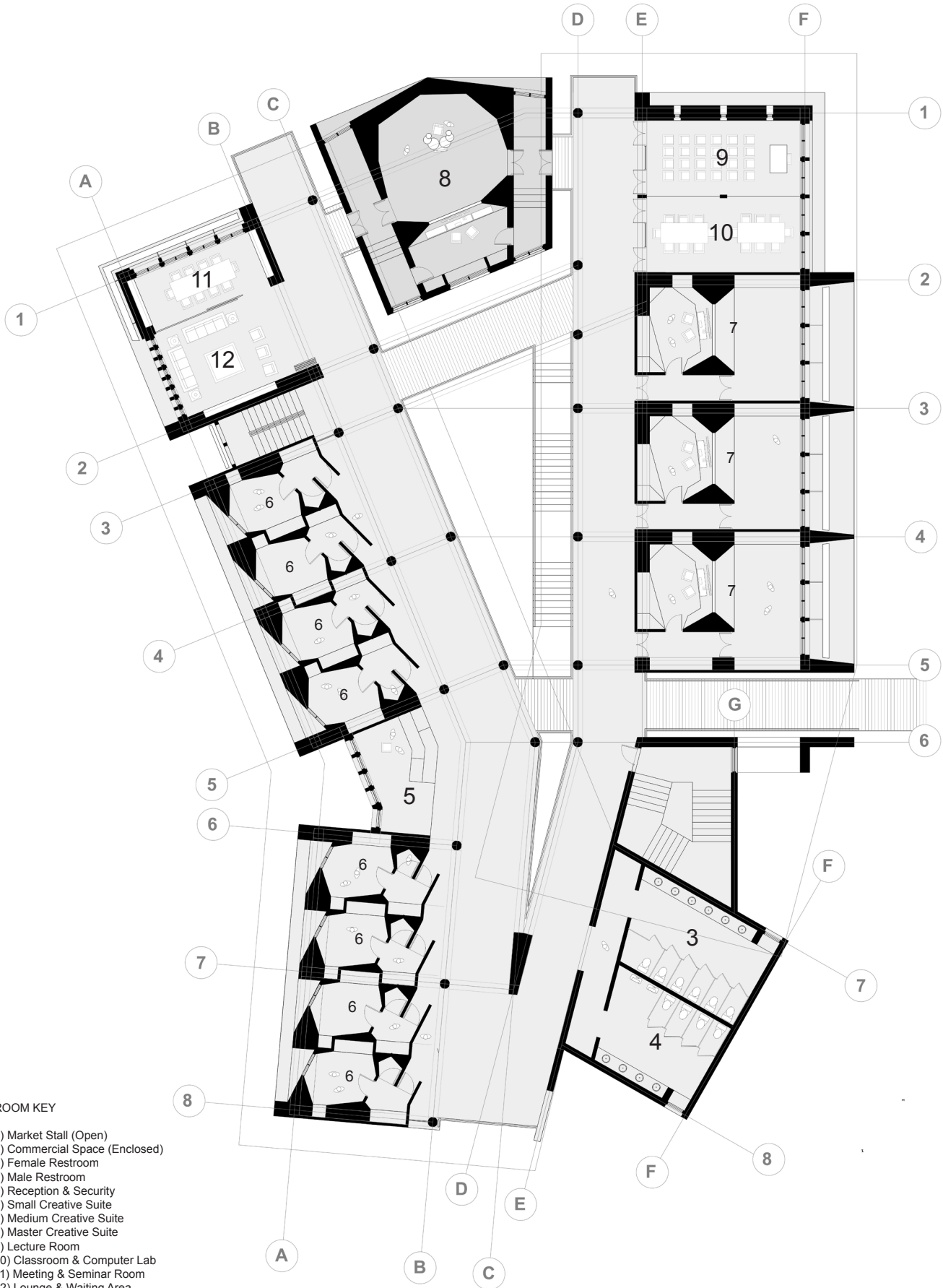
ROOM KEY

1) Market Stall (Open)
2) Commercial Space (Enclosed)
3) Female Restroom
4) Male Restroom
5) Reception & Security
6) Small Creative Suite
7) Medium Creative Suite
8) Master Creative Suite
9) Lecture Room
10) Classroom & Computer Lab
11) Meeting & Seminar Room
12) Lounge & Waiting Area
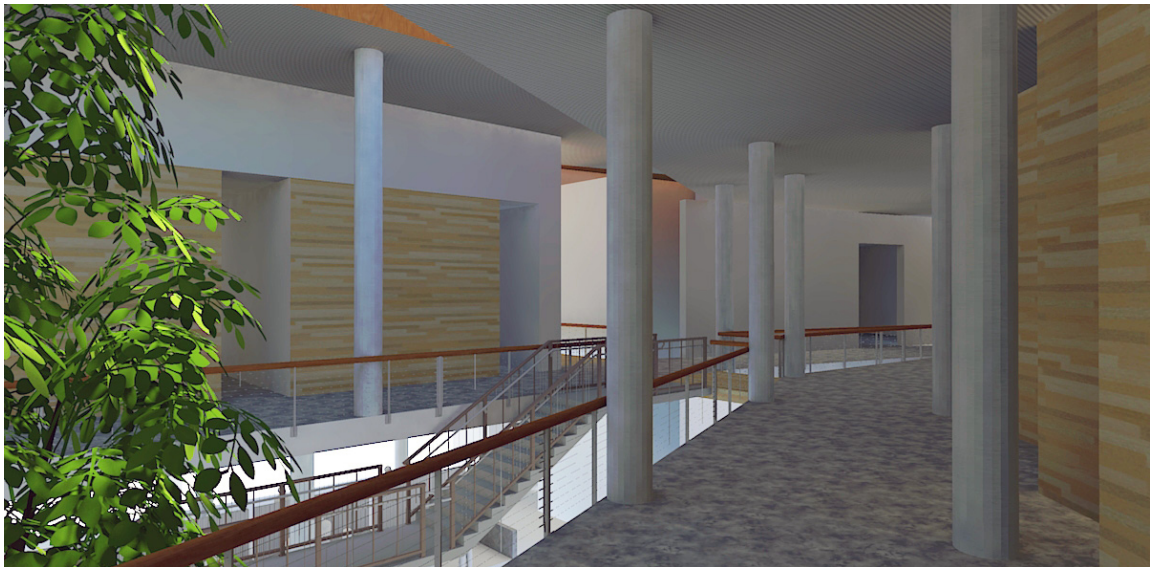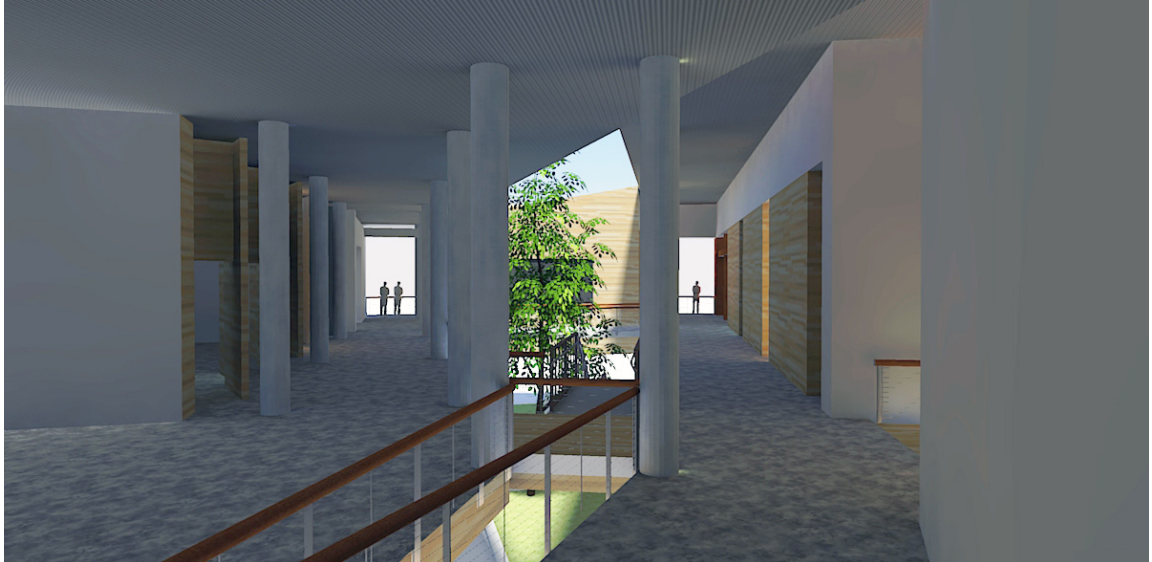
Fig. 4.09-11   OPPOSITE - External Views of typical Creative Hub
unit.

Fig. 4.12-13   ABOVE - Internal Views of typical Creative Hub
unit.

HOUSING

Program

The other major component of the proposed design intervention is the provision of affordable housing solutions to compliment the creation of livelihood opportunities. In the proposed design the housing has been developed on the pioneering model of affordable housing championed by Chilean Architectural firm and think-tank, Elemental. Like with the Elemental projects, the proposed design creates a model of owner expanded housing that adapts to the changing needs of the occupants, and grows as their needs demand. However, unlike the elemental projects that have one set of units on the ground floor and another set stacked vertically, it has been decided to keep the units un-stacked, in an attempt to make sure that each unit has access to the ground plane, outdoor green space and garden, a vital space within the realm of the low income resident. The units in the project are staggered in a way that there is a void for further expansion of the unit between the neighboring unit and the original foot print.

The project features 54 starter units, arranged in five clusters that center around communal courtyards to the front of the units, while to the rear each unit has a small courtyard space which is enclosed to the rear by a small workshop or commercial space that opens to the rear of the property. Each side of the clusters of housing features a row of units connected by an open verandah that acts to create and outdoor room to the front communal space as well as providing covered circulation through much of the this part of the site. The communal courtyard is seen not just as a transitional and circulatory space, but as a critical social space within the community, give people a shared space to gather and meet as well as creating a vested interest in the maintenance and development of their cluster through social responsibility. At the center of each cluster courtyard is a large planting area that is intended to provide green space as well as large canopy shade trees. Each of the cluster courtyards is then connected to the rest of the housing zone and programming by a series of greened pathways that form ribbons of circulation across the site
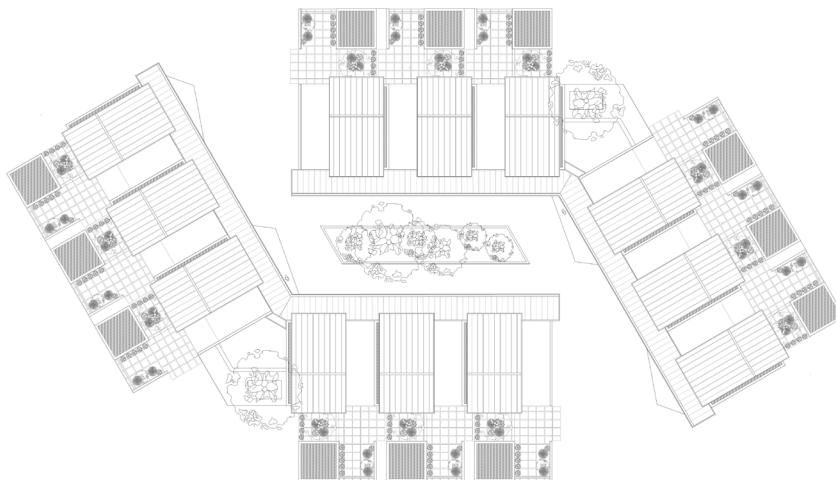
Fig. 4.14   LEFT - Plan View of adaptable housing cluster.

Fig. 4.15   ABOVE - View of internal courtyard between
adaptable housing units.

Fig. 4.16   ABOVE - Aerial View of adaptable housing cluster.

HOUSING

Expansion

Each housing unit is constructed of typical concrete masonry construction methods, sitting upon a concrete plinth within which contains a small cistern for the collection of rain water harvested from the roof. The roof of the initial structure features a small "butterfly" roof which slopes to a drainage gutter to the center and may be harvested from there in to the below ground cistern in the foundation. Each of the units starts of as approx 500 square feet spread across the lower and upper floors, with a 100 square foot work shop space to the rear of each property. The lower level of the initial housing unit contains a living and eating space, and small kitchenette that opens to the private courtyard to the rear. On the upper level of the initial unit there is a single bedroom and bathroom.

As time progresses and the owners attain the necessary means to begin to expand the housing unit, the frame work for expansion is largely laid out for the future development. The units can initially be expanded laterally into the adjacent void for each unit on either the lower or upper levels, eventually occupying both spaces. Even further expansion of the housing sees unit beginning to push outwards in the rear on the upper floor initially, and then allowing for further enclosure on the lower level. The housing unit which started off as a 500square foot one bedroom dwelling is easily expandable to a 1500 square foot three bedroom home.

The simplicity and modular nature of the housing model employed is designed to reduce the cost of the housing by various means. Firstly and most importantly, the use of sweat equity for expansion of the units allows for lower initial investment in construction, while providing a home that is for the long term development of the family. Also the use of sweat equity allows for persons who become certified in simple construction methods through various partner programs, can then begin to hire out their services to others in the expansion process of their homes. Additionally, the housing model employed also offers the opportunity to create a hybrid between the site and services and housing scheme approaches to solutions for affordable housing, where only a portion of the infrastructure deemed most necessary is constructed as part of the initial loan structure, leaving the owner to infill the subsequent parts as their financial situation allows. The housing equation is further tuned in favor of the housing occupants as the units have the provisions to grow produce in private agriculture plots and the inclusion of a small commercial or workshop space connect to each unit allows for the establishment of a micro enterprise connected directly to the dwelling.
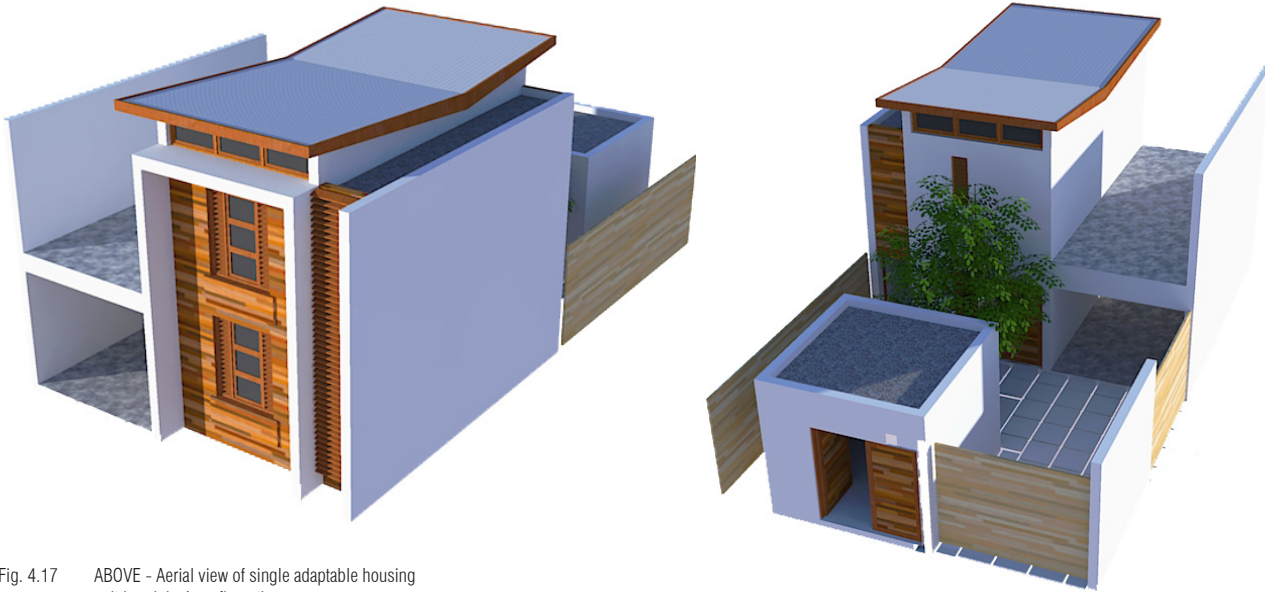
Fig. 4.17   ABOVE - Aerial view of single adaptable housing
             unit in original configuration.

FIRST FLOOR: STAGE 1   FIRST FLOOR: STAGE 2   FIRST FLOOR: STAGE 3

GROUND FLOOR: STAGE 1   GROUND FLOOR: STAGE 2   GROUND FLOOR: STAGE 3

Fig. 4.18   ABOVE - Floor plans of single adaptable housing
             unit, and stages of progressive expansion of
   existing units by owners.

135

COMMUNITY SERVICES PAVILION

Immersed in the center of the Community Zone is the Community Services Pavilion. Contained within the single story colonnade structure, are a series of programmatic elements designed to help facilitate the greater development of the community, through social services that maybe currently inadequate or not available at all, as well as providing space for the administrative services associated with ensuring the management of the entire Trench Town Creative Labs complex and its various components.

The program of this structure allows for administrators and field workers to facilitate the long term development of the community by creating a venue to stage workshops, meetings and run the social programs associated with providing adequate housing and livelihood opportunities in a social enterprise environment. Additionally, there exists a need to create the administrative spaces to house micro finance and housing collective offices. In terms of the administrative aspects of the programming of the Community Services pavilion, the program includes office spaces, class rooms, meeting rooms, a community policing post, and a small clinic. The program of the building also includes a series of communal facilities, including restrooms, shower facilities, a communal kitchen and communal laundry. These communal facilities help bridge the gap of those who may not be able to afford certain aspects of the needs of daily life individually, but instead the shared cost of food production, laundry or access to sanitation facilities can greatly improve the quality of life for low-income inner-city community residents.

The form of the building is comprised of four individual masses connected by a continuous roof structure, supported by columns to the exterior creating a covered external walkway along the length of the pavilion. Between the four masses the open spaces allow for cross circulation between the main pedestrian path adjacent and the housing on the other side of the pavilion. The building runs from the northern periphery to the center of the site, with the four volumes being slightly offset on an angle from a straight datum, creating a reflexive and angular form in plan, that snakes along parallel to the one of the main pedestrian paths that leads to the Central Entertainment & Performance space in the middle of the site.
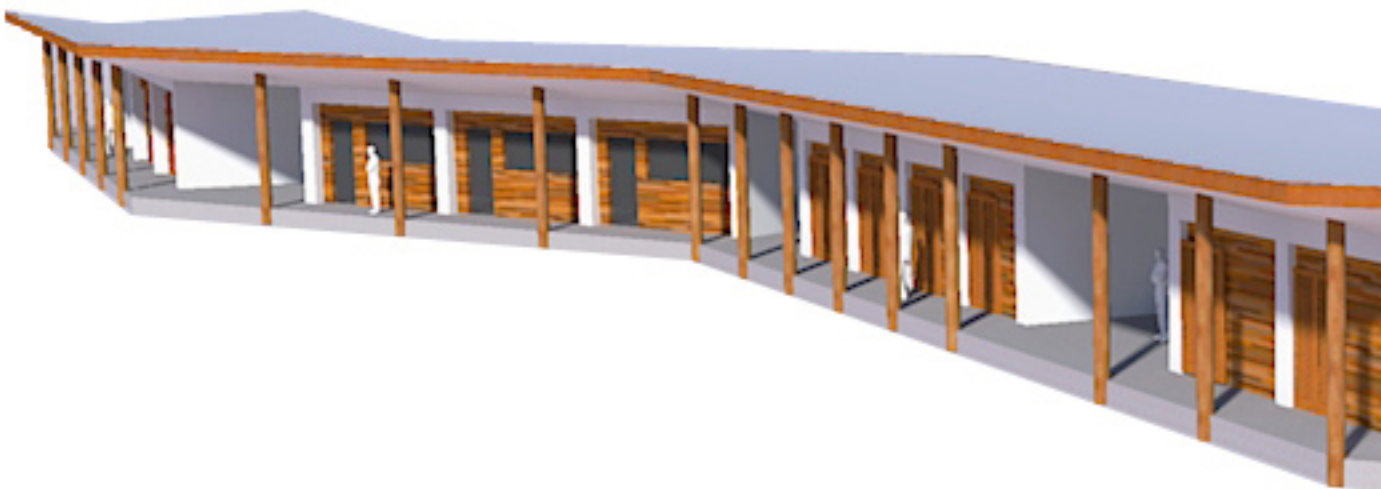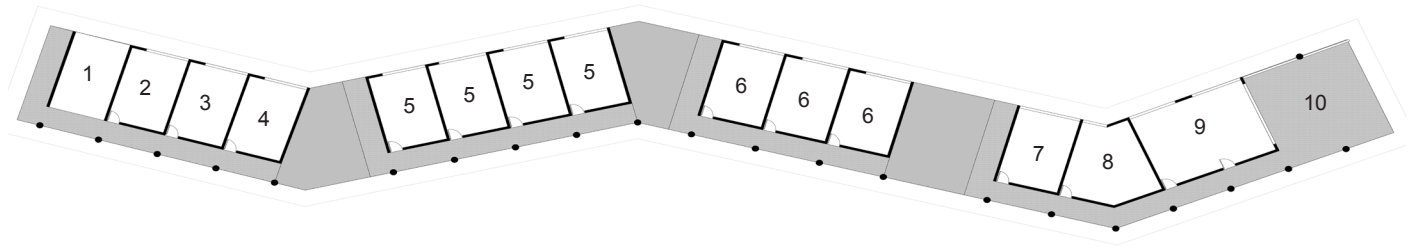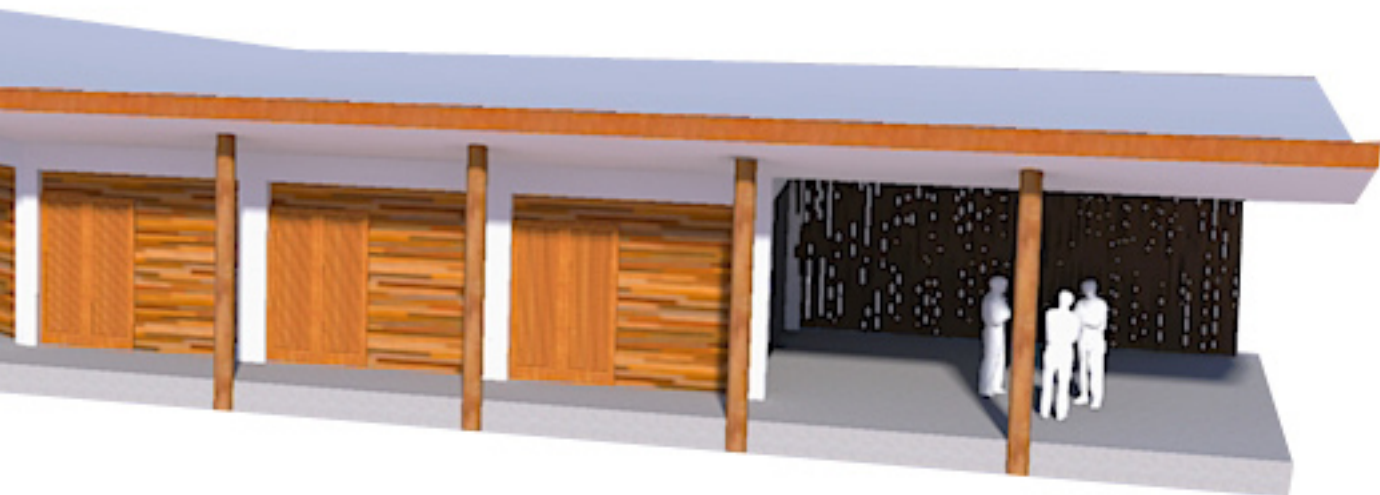
ROOM KEY

1) Communal Laundry
2) Communal Restroom (Male)
3) Communal Restroom (Female)
4) Communal Showers (Male & Female)
5) Administrative Offices
6) Seminar & Class Romms
7) Clinic
8) Police Post
9) Communal Kitchen
10) Covered Gathering Space

Fig. 4.19   ABOVE - View of Community Services Building.

Fig. 4.20   ABOVE - External Views of Community Services
              Building.

CENTRAL ENTERTAINMENT & PERFORMANCE SPACE

As culture and entertainment have played a pivotal role in the history and development of Trench Town, and are generally important within the larger context of Jamaican society, there exists a great opportunity to capitalize on this and create a space within the overall programmatic scheme that allows for the cultural products that are being developed to be displayed and showcased in a variety of ways, in a hope to further activate the site, and more importantly turn the site into a venue for the staging of various social and cultural events than begin to effectively maximize the income potential of the project by creating a draw for those in other strata of society to visit the community and introduce a greater input into the local economy. Additionally, it is hoped that by creating the Central Entertainment Space it would in turn allow for the development of more tourism related products, to bring ever needed foreign exchange into the local economy. Also, it is projected that by creating programming that occurs at various times throughout the day and night in the overall safety and security of the site and surrounding community would be increased by avoiding ensuring the site is always occupied, creating activity and hopefully deterring criminal elements.

The Central Entertainment and Performance space is an excavated region in the center of the site that is a single story lower than the surrounding terrain at its lowest point, adjacent to the Music Incubator Hub. In front of the internal face of the Music Incubator Hub, in the lowest region of the sunken space, is a large stage structure that provides a back drop for performances on the stage which faces away from the building, but also houses the back of stage areas when being used for performances or events. Between the Music Incubator and the stage is an area of lower court where five of the main pedestrian circulation paths terminate, adjacent to which is a large and flexible, multi-use space tucked beneath the Music Hub. This space provides an indoor space that may be used for various social functions, performances or as display space in a gallery like setup, with the ability to range from being an completely internal space to a space with one wall entirely open to the lower court area. Radiating from the stage area is a lower audience court directly in front of the stage that can be set up as concert seating or used as an open area for other events or parties. Beyond the lower central court there are a series of terraced landscaped areas that rise on the opposite side of the arena area from the stage, creating a large open air amphitheater, with clear, elevated views of the stage from most points around the central area. On each of the terraced landscaping areas are a series of two or three concrete platforms with shading structures. These spaces are intended to allow vendors to set up various temporary commercial activities during events, allowing for the inclusion of further economic development in this part of the project.
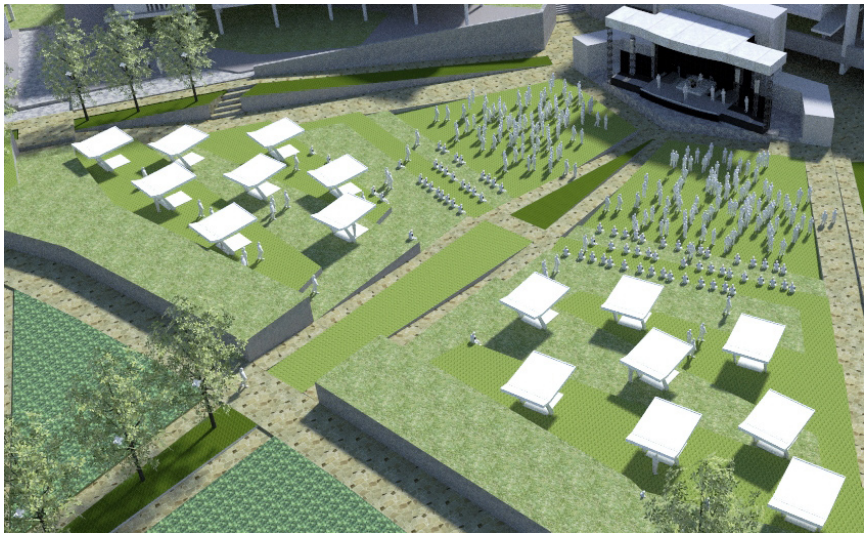
Fig. 4.21   RIGHT (TOP) - Aerial view of Central Community
            Space.

Fig. 4.22   RIGHT (MIDDLE) - View looking across Central
            Community

Fig. 4.23   RIGHT (BOTTOM) - View looking down at stage in
            Central Community Space.
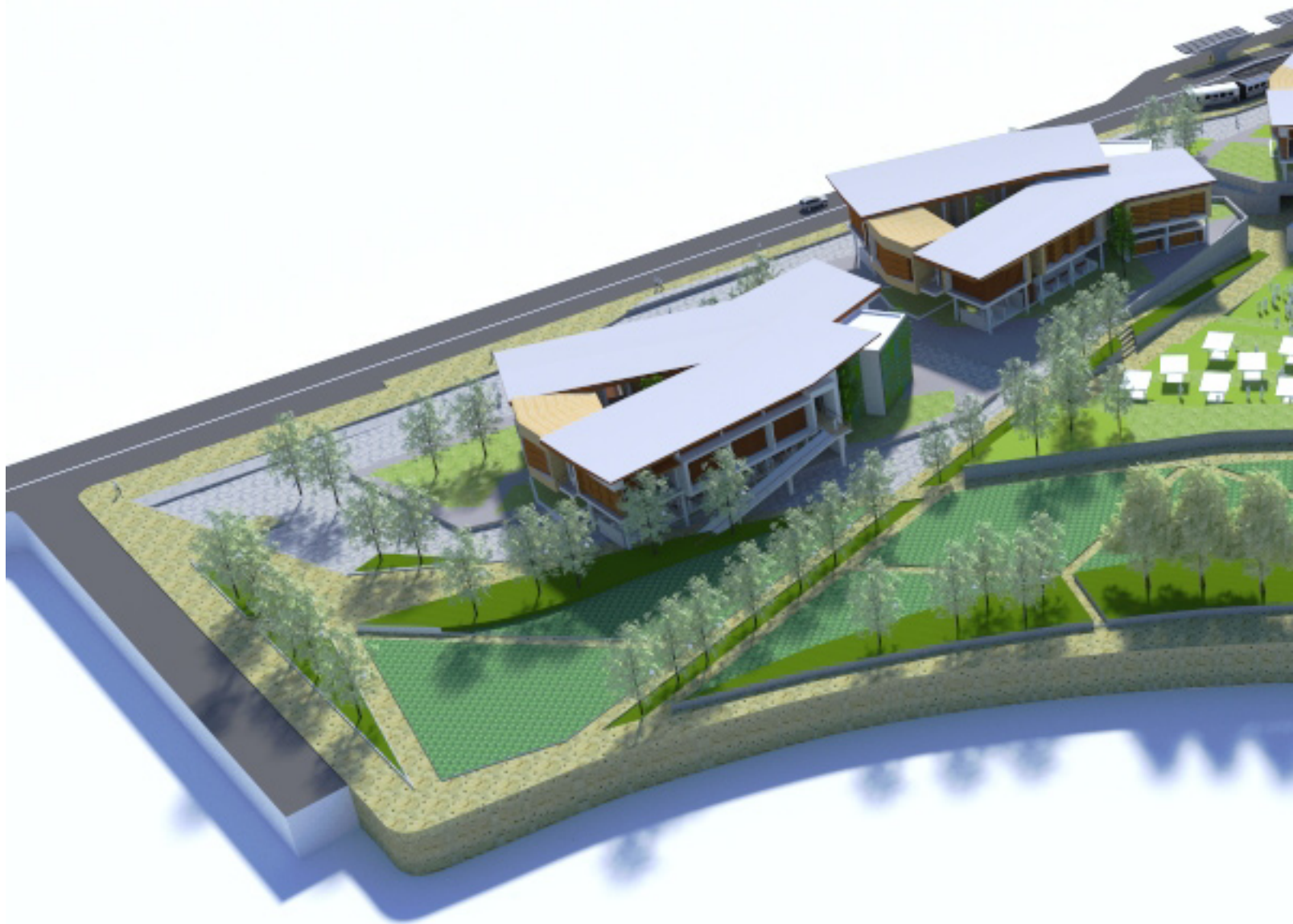
Fig. 4.24   ABOVE - Aerial view of overall Proposed Trench
Town Creative Labs (Looking Southwest)

Fig. 4.25   ABOVE - Aerial view of overall Proposed Trench
            Town Creative Labs (Looking Northwest)

5.0 > 2022 FORECAST & CONCLUSIONS

In realistic terms it would be unreasonable to expect that in the unstable economic climate currently being experienced both in Jamaica and in the wider international arena that a project of this nature could be able to be undertaken in a developing country such as Jamaica in one single effort. Therefore the proposed architectural intervention is designed to be an entirely scalable and phased project, taking into account the often precarious financial situation that the Government of Jamaica finds itself in.

There are several opportunities to develop several aspects of the project at different scales in a phased manner, over a time scale of several years. The time table for the development of the project to completion of the entire site as proposed is projected to be as long a decade, so we will explore how the project might be scaled to make it affordable and therefore feasible as a long term project that would reach maximum maturity in 2022 if undertaken in a hypothetical scenario in the early part of next year, 2012.

As the project is divided into larger zones within the site, an evaluation of which ones may not be included the initial stages of the project itself may be undertaken, and those deemed less critical could be developed at a slower pace. Additionally, as each of the major architectural component parts of the project are comprised of yet smaller modules, these component parts themselves may be phased. Therefore in the initial stages of the project, perhaps only two or three of the Incubator hubs may be constructed, though undoubtedly the first ones to be constructed would include the music incubator unit and the central Entertainment Space, as these are central to the cultural themes and heritage of the site and project itself. Also in the initial stages of the project there is the option of being able to develop perhaps only a portion of the housing clusters, dependent on the available resources. In a similar fashion, parts of the programming of the Creative Hubs and the Community Services pavilion may also be phased in their construction.

Fig. 5.01   OPPOSITE TOP – View of complete Trench Town Creative Labs Complex looking Northwest along Spanish Town Road.

Fig. 5.02   OPPOSITE MIDDLE – View of complete Trench Town Creative Labs Complex looking Southeast along Spanish Town Road.

Fig. 5.03   OPPOSITE BOTTOM – View of economic zone beneath complete Trench Town Creative Labs Creative Hub module.

FUTURE DEVELOPMENT AND EXPANSION

Although the project time span for the completion of the entire facility maybe spread across a ten year period before final completion, there is an extended life span of growth proposed for the larger community as a whole. It is proposed that the project continues to expand beyond the original foot print of the initial site, and the housing and community services begin to replicate and modify their patterning and positioning to begin to infiltrate and slowly formalized the community of Jones town to the North and unoccupied spaces within the original Federal Gardens and larger Trench Town area. In this scenario the original project site becomes a hub for a larger network of interconnected facilities and programming, that begin to self replicate and contextually reinvent themselves as the network redistributes across the wider city fabric of Kingston.

TRANSFERING SUCESSES TO OTHER COMMUNITIES

One of the overall aims of the proposed design thesis is to create a precedent in the local context of Jamaica, demonstrating strategies for urban renewal and overall development of the many low income communities found across the Island. The overall goal of the project is to act as a pilot project that is intended to demonstrate that the creation of the larger frame-work comprised of the various components of the housing equation for low income individuals can help in the revitalization process of these often marginalised communities within the urban fabric. It has long been recognised by various sectors in Jamaica that there is an inherent value associated with the Trench Town community, and there are already strong efforts to form grass roots organisations to help to rebuild the community and strength re-lationships between and among residents, as well as between the other various actors with vested interest in Trench Town's success. With this said, it is also no secret that if any low income inner-city community in is going to succeed through these types of development efforts, particularly efforts to encourage enterprise and industry from the informal markets, it is Trench Town that has the greatest likelihood of success through the pursuit of cultural industries associated with the communities long history.

CONCLUSIONS

Jamaica, like many other developing countries that have emerged as post colonial nations after years of degradation and systematic stripping of the material and financial resources by the respective Mother Countries and other imperial forces, faces a crisis that has been in the making during centuries of colonial rule and the subsequent mismanagement the new nation went through while enduring the teething pains of early nationhood. The disproportionate distribution of wealth across the various different strata of society means that many of the basic services that are required to keep populations out of poverty are largely unavailable to many at the bottom of the economic pyramid. The cycle of poverty and the insecurities that often come with the often related inability of low-income earners to provide sufficient housing for themselves is a problem faced the world over.

The low income areas of Kingston need motivation and means of beginning to climb out of their circumstances without giving in to drugs, gangs and the underworld culture; not everyone can be a world class athlete or musician. However, in Jamaica, there seems to be an above average sized pool of talent that can be tapped to create new and exciting cultural industries around the available talent, teaching people how to make a living within the supporting industries that are available. The range of professions that are associated with the five selected streams of the arts is staggering, potentially numbering in the hundreds of professions and sub professions, hopefully with enough range of educational and creative production streams that will entice the youth of the communities, particularly young men who are generally at the greatest risk and the lowest performers in the education system, to become involved in creative pursuits as a means of earning a living as opposed to becoming entangled in the criminal gangs that have traditionally thrived in these communities.

Trench Town has already begun the climb out of poverty by exploiting its musical heritage and links with tourism: its recognition of the importance of education and music to its evolution make it a natural site for continuing the process. Its establishment of the Trench Town Development Council (TTDC) indicates that the community understands the importance of managing change positively in the community – and documenting its progress. The existence of the TTDC indicates the community's commitment to work together under an administrative structure to manage their development.

There is already a positive history of the community development of education (the Trench Town Reading Room) supported from outside to advance the community. The community has experience in exploiting its cultural history (the Trench Town Culture Yard) and the community leaders know how to access resources to assist them to develop. Their connections with the Jamaica Tourist Board (JTB) and the Jamaica social investment Fund (JSIF) are examples of their exploitation of local connections for assistance; the assistance from the British Columbia Reading Council and USAID demonstrate that they know how to develop viable proposals for international assistance. Since the thesis relies on the assumption that the community wants to – and is able to – contribute to its own development, Trench Town is a viable site for the project: the ground work to develop a communal collaborative spirit already exists, and provides a perfect opportunity to explore the role that architecture and urban design might have on the development of these types of strategies and frame work to pair housing solutions, services and livelihood opportunities into a single unified project within a suitable site and community context.

Fig. 5.04   ABOVE (TOP) - View along main pedestrian path
              between community zone and Creative Hubs in
              complete Trench Town Creative Complex.
Fig. 5.05   ABOVE (BOTTOM) - View along main pedestrian
              path between community zone and housing zone
              in complete Trench Town Creative Complex.

END NOTES

1 _____, Extreme Poverty Rates Continue to Fall. The World Bank. (The World Bank, 2 June 2010. Web. 19 Jan. 2012.) <http://Data.worldbank.org/news/extreme-poverty-rates-continue-to-fall>.

2 _____, Poverty (Wikipedia, Web. 19 Jan. 2012) <http://en.wikipedia.org/wiki/Poverty>.

3 _____. "Poverty and Inequality Analysis." The World Bank Group. The World Bank, 5 May 2010. Web. 19 Jan. 2012. <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/0,, contentMDK:22569747~pagePK:148956~piPK:216618~theSitePK:336992,00.html>.

4 _____ , Globalization, (Wikipedia. Web. 19 Jan. 2012) <http://en.wikipedia.org/wiki/Globalization>.

5 Niall Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power (New York: Basic, 2004. Print); Kenneth Morgan, Slavery and the British Empire: From Africa to America. (Oxford: Oxford UP, 2007. Print); George Ann Potter, Deeper than Debt: Economic Globalisation and the Poor (London: Latin America Bureau, 2000. Print); Kathleen E.A. Monteith & Glen Richards, Jamaica in Slavery and Freedom: History, Heritage and Culture. (Kingston, Jamaica: University of the West Indies, 2002. Print)

6 Stephanie Black, Life & Debt, (Jamaica, Tuff Gong Pictures, DVD, 2001); Kevin Danaher, 50 Years Is Enough: The Case against the World Bank and the International Monetary Fund (Boston, MA: South End, 1994. Print.); Kari Levitt, The Origins and Consequences of Jamaica's Debt Crisis, 1970-1990 (Mona, Jamaica: Consortium Graduate School of Social Sciences, 1991. Print);

7 Stephanie Black, Life & Debt, (Jamaica, Tuff Gong Pictures, DVD, 2001)

8 Paul H. Williams, "The Beginning of Kingston's Decline." Jamaica Gleaner News Online. (The Jamaica Gleaner, 29 Apr. 2009. Web. 19 Jan. 2012) <http://jamaica-gleaner.com/gleaner/20090427/news/news1.html>.

9 Laurie Gunst, Born Fi' Dead: A Journey through the Jamaican Posse Underworld (New York: H. Holt, 1996. Print);Anthony Harriott, Understanding Crime in Jamaica: New Challenges for Public Policy (Kingston, Jamaica: University of the West Indies, 2003. Print); Ian Thomson, The Dead Yard: A Story of Modern Jamaica (New York: Nation, 2011. Print); P. K. Morris & A. Graycar. "Homicide Through A Different Lens." British Journal of Criminology 51.5 (2011): (823-38. Print.); Amanda Sives, Amanda. Elections, Violence, and the Democratic Process in Jamaica, 1944-2007 (Kingston, Jamaica: Ian Randle, 2010. Print); Caroline Moser & Jeremy Holland, Urban Poverty and Violence in Jamaica (Washington D.C.: World Bank, February 1997), p. 2, 13-15;National Committee on Political Tribalism, Report of the National Committee on Political Tribalism (Kingston, Jamaica: Government of Jamaica, 23 July 1997), p. 11-13, 29, 53.

10 Deepali Pant Joshi, Poverty and Sustainable Development (New Delhi: Gyan Pub. House, 2006. Print)

11 Alicia Roache, "Developers Fear Low-cost Housing." The Jamaica Observer (The Jamaica Observer, 20 Apr. 2011. Web. 19 Jan. 2012) <http://www.jamaicaobserver.com/business/Developers-fear-low-cost-housing_8692036>.

12 Lily Kim, The Kijiji Kit a Strategy for Slum Upgrading in Nairobi, Kenya. (Thesis. University of Waterloo, 2009. Print.)

13 J. Tindigarukayo, "An Attempt to Empower Jamaican Squatters." Environment and Urbanization 16.1 (2004): (199-210. Print.)

14 _____, National Housing Trust - About Us (National Housing Trust, 17 Jan. 2012. Web. 19 Jan. 2012) <http://www.nht.gov.jm/about-us>.

15 _____. Housing Agency of Jamaica - About Us (Housing Agency of Jamaica. Web. 19 Jan. 2012) <http://www.hajl.gov.jm/about.html>.

16   _____, National Land Agency - About Us (National Land Agency. 16 Jan. 2012. Web. 19 Jan. 2012) <http://www.nla.gov.jm/aboutus.asp>.

17   _____, Brief History of the Urban Development Corporation (The Urban Development Corporation, 2011. Web. 19 Jan. 2012) <http://www.udcja.com/corporate/history>.

18   _____, History of the KSAC (The Kingston and St. Andrew Corporation. 2011. Web. 19 Jan. 2012) <http://www.ksac.gov.jm/index.php?option=com_content&view=article&id=53&Itemid=83&showall=1>

19   _____, The Kingston Restoration Company – Profile (Kingston Restoration Company. 2011. Web. 19 Jan. 2012)<http://www.kingstonrestoration.com/index.php?option=com_k2&view=latest&layout=latest&Itemid=59>

20   Stephanie Schmidt & Valerie Budinichm, Housing Solutions Serving Low-Income Populations: A Frame Work for Action (Arlington Virgina: Ashoka, March 2007. Print) Available at <http://ssrn.com/abstract=981217 or doi:10.2139/ssrn.981217>

21   _____, Social Enterprise (Wikipedia. Web. 19 Jan. 2012) <http://en.wikipedia.org/wiki/Social_enterprise>.

22   Rory Ridley-Duff & Mike Bull, Understanding Social Enterprise: Theory & Practice (London: SAGE, 2011. Print); David Bornstein & Susan Davis, Social Entrepreneurship: What Everyone Needs to Know (New York: Oxford UP, 2010. Print)

23   _____, CIA – The World Fact Book – Jamaica (Central Intelligence Agency, 11 Nov. 2011. Web. 19 Jan. 2012.)<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

24   Donna P. Hope, Inna Di Dancehall: Popular Culture and the Politics of Identity in Jamaica (Mona, Jamaica: University of the West Indies, 2006. Print)

25   Stephanie Schmidt & Valerie Budinichm, Housing Solutions Serving Low-Income Populations: A Frame Work for Action (Arlington Virgina: Ashoka, March 2007. Print) Available at http://ssrn.com/abstract=981217 or doi:10.2139/ssrn.981217

26   Hassan Fathy, Architecture for the Poor: An Experiment in Rural Egypt (Chicago: University of Chicago, 1976. Print)

27   Rodolfo Machado, The Favela-Bairro Project: Jorge Mario Jáuregui Architects (Cambridge, MA: Harvard University Graduate School of Design, 2003. Print)

28   Adriana Navarro-Sertich, "From Product to Process, Building on Urban Think-Tank's Approach to the Informal City." Architectural Design (AD) (81.3 (2011): 104-09. Print) p. 106

29   Adriana Navarro-Sertich, "From Product to Process, Building on Urban Think-Tank's Approach to the Informal City." Architectural Design (AD) (81.3 (2011): 104-09. Print)

30   L. Castro & A. Echeverri, "Bogotá and Medellín: Architecture and Politics". Architectural Design, (2011, 81: 96–103. doi: 10.1002/ad.1246)

31   Ibid., p.100

32   Ibid., p.96-103; Alejandro Bahamón & Ana María Álvarez, Light Color Sound: Sensory Effects in Contemporary Architecture (New York: W.W. Norton &, 2010. Print)

33   A. Aravena, "Elemental: A Do Tank", Architectural Design, (2011, 81: 32–37. doi: 10.1002/ad.1235) p.32

34   Ibid., p.32-37

35   _____, "About ACCION". ACCION International. 2007. Web. 19 Jan. 2012.
        <http://www.accion.org/page.aspx?pid=254>

36   Akhil Malaki, Informal Finance and Microfinance in Jamaica and Trinidad & Tobago: An Institutional Study.
        (Stockholm: Almqvist & Wiksell International, 2005. Print)

37   David Bornstein, the Price of a Dream: The Story of the Grameen Bank (Oxford: Oxford UP, 2005. Print);
        Muhammad Yunus & Alan Jolis, Banker to the Poor: Micro-lending and the Battle against World Poverty
        (New York, NY: PublicAffairs, 2003. Print)

38   _____, Geography of Jamaica (Wikipedia, Web. 19 Jan. 2012)
        <http://en.wikipedia.org/wiki/Geograhy_of_Jamaica>

39   _____, Geography of Jamaica (Wikipedia, Web. 19 Jan. 2012)
        <http://en.wikipedia.org/wiki/Geograhy_of_Jamaica>

40   _____, Geography of Jamaica (Wikipedia, Web. 19 Jan. 2012)
        <http://en.wikipedia.org/wiki/Geograhy_of_Jamaica>

41   _____, CIA – The World Fact Book – Jamaica (Central Intelligence Agency, 11 Nov. 2011.
        Web. 19 Jan. 2012.)<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

42   _____, CIA – The World Fact Book – Jamaica (Central Intelligence Agency, 11 Nov. 2011.
        Web. 19 Jan. 2012.)<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

43   _____, Geography of Jamaica (Wikipedia, Web. 19 Jan. 2012)
        <http://en.wikipedia.org/wiki/Geograhy_of_Jamaica>

44   _____, History of Jamaica (Wikipedia, Web. 19 Jan. 2012) <http://en.wikipedia.org/wiki/History_of_
        Jamaica>; Clinton Black, The History of Jamaica (Harlow: Longman, 1988. Print);

45   Colin G. Clarke, Kingston, Jamaica: Urban Development and Social Change, 1692- 2002 (Kingston,
        Jamaica: Ian Randle, 2006. Print); Colin G .Clarke, Decolonizing the Colonial City: Urbanization and
        Stratification in Kingston, Jamaica (Oxford: Oxford UP, 2006. Print); Brian L. Moore, and Michele A.
        Johnson. "Squalid Kingston", 1890-1920: How the Poor Lived, Moved and Had Their Being (Mona:
        Social History Project, Dept. of History, University of the West Indies, 2000. Print)

46   _____, Geography of Jamaica (Wikipedia, Web. 19 Jan. 2012) <http://en.wikipedia.org/wiki/
        Geograhy_of_Jamaica>

47   Shankland & Cox, Proposals for Redevelopment of a Squatter Area in Trench Town, Kingston Jamaica.
        (London: Shankland & Cox. 1971, Drawing with Text)

48   Amanda Sives, Elections, Violence, and the Democratic Process in Jamaica, 1944-2007 (Kingston [Jamaica: Ian Randle, 2010. Print);Morris P. K. Morris & A. Graycar. "Homicide Through A Different Lens." British Journal of Criminology 51.5 (2011): (823-38. Print.); National Committee on Political Tribalism. Report of the National Committee on Political Tribalism (Kingston, Jamaica: Government of Jamaica, 23 July 1997), p. 11-13, 29, 53.

49   Kevin O'Brien Chang & Wayne Chen, Reggae Routes: The Story of Jamaican Music (Philadelphia: Temple UP, 1998. Print); Lloyd Bradley & Dennis Morris, Reggae: The Story of Jamaican Music (London: BBC Worldwide, 2002. Print); Chris Salewicz & Adrian Boot, Reggae Explosion: The Story of Jamaican Music (United States: ABRADALE PR (NY), 2003. Print)

50   Timothy White, Catch a Fire: The Life of Bob Marley (New York: H. Holt, 1998. Print); Lou Gooden, Reggae Heritage: Jamaica's Music History, Culture & Politic. (United States: 1st, 2003. Print)

BIBLIOGRAPHY

Bahamón, Alejandro, and Ana María Álvarez. Light Color Sound: Sensory Effects in Contemporary Architecture.
    New York: W.W. Norton &, 2010.

Best, Lloyd, and Kari Levitt. Essays on the Theory of Plantation Economy: A Historical and Institutional Approach to
    Caribbean Economic Development. Kingston, Jamaica: University of West Indies Press, 2009.

Black, Clinton. The History of Jamaica. Harlow: Longman, 1988.

Bornstein, David, and Susan Davis. Social Entrepreneurship: What Everyone Needs to Know.
    New York: Oxford University Press, 2010.

Bornstein, David. The Price of a Dream: The Story of the Grameen Bank. Oxford: Oxford University Press, 2005.

Bradley, Lloyd, and Dennis Morris. Reggae: The Story of Jamaican Music. London: BBC Worldwide, 2002.

Central Intelligence Agency. "CIA - The World Factbook - Jamaica." Central Intelligence Agency. November 10, 2011.
    Accessed January 19, 2012. https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html.

Cervantes, Jorge. Marijuana Horticulture: The Indoor/outdoor Medical Grower's Bible.
    [Sacramento, CA]: Van Patten Pub., 2006.

Chang, Kevin O'Brien., and Wayne Chen. Reggae Routes: The Story of Jamaican Music.
    Philadelphia: Temple University Press, 1998.

"CIA - The World Factbook." Welcome to the CIA Web Site — Central Intelligence Agency.
    Accessed January 19, 2012. https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html.

Clarke, Colin G. Decolonizing the Colonial City: Urbanization and Stratification in Kingston, Jamaica.
    Oxford: Oxford University Press, 2006.

Clarke, Colin G. Kingston, Jamaica: Urban Development and Social Change, 1692- 2002.
    Kingston, Jamaica: Ian Randle, 2006.

Danaher, Kevin. 50 Years Is Enough: The Case against the World Bank and the International Monetary Fund.
    Boston, MA: South End Press, 1994.

"Definition of Social Enterprise | Enterprising Non Profits." Enterprising Non-profits | Enterprising Non Profits.
    Accessed January 19, 2012. http://www.enterprisingnonprofits.ca/what-social-enterprise/definition-social-
    enterprise.

Fathy, Hassan, and Hassan Fathy. Architecture for the Poor: An Experiment in Rural Egypt.
    Chicago: University of Chicago Press, 1976.

Ferguson, Niall. Empire: The Rise and Demise of the British World Order and the Lessons for Global Power.
    New York: Basic Books, 2004.

Gooden, Lou. Reggae Heritage: Jamaica's Music History, Culture & Politic. [United States]: 1st Books, 2003.

Gunst, Laurie. Born Fi' Dead: A Journey through the Yardie Underworld. Edinburgh: Canongate, 2003.

Harriott, Anthony. Understanding Crime in Jamaica: New Challenges for Public Policy.
    Kingston, Jamaica: University of the West Indies Press, 2003.

Hope, Donna P. Inna Di Dancehall: Popular Culture and the Politics of Identity in Jamaica.
        Mona, Jamaica: University of the West Indies Press, 2006.

Housing Agency of Jamaica. "Housing Agency of Jamaica - About Us." Housing Agency of Jamaica.
        Accessed January 19, 2012. http://www.hajl.gov.jm/about.html.

Joshi, Deepali Pant. Poverty and Sustainable Development. New Delhi: Gyan Pub. House, 2006.

Kim, Lily. The Kijiji Kit a Strategy for Slum Upgrading in Nairobi, Kenya.
        Thesis, University of Waterloo, 2009. Waterloo: University of Waterloo, 2009.

The Kingston and St. Andrew Corporation. "History of the KSAC." The Kingston and St. Andrew Corporation. 2011.
        Accessed January 19, 2012. http://www.ksac.gov.jm/index.php?option=com_content&view=article&id=
        53&Itemid=83&showall=1.

The Kingston Restoration Company. "The Kingston Restoration Company - Profile." Kingston Restoration Company.
        2011. Accessed January 19, 2012. http://www.kingstonrestoration.com/index.php?option=com_k2&view=
        latest&layout=latest&Itemid=59.

Kinley, David. Civilising Globalisation: Human Rights and the Global Economy.
        Cambridge [U.K.: Cambridge University Press, 2009.

Ledgerwood, Joanna. Microfinance Handbook: An Institutional and Financial Perspective.
        Washington, D.C.: World Bank, 1999.

Levitt, Kari. The Origins and Consequences of Jamaica's Debt Crisis, 1970-1990.
        Mona, Jamaica: Consortium Graduate School of Social Sciences, 1991.

Machado, Rodolfo. The Favela-Bairro Project: Jorge Mario Jáuregui Architects.
        Cambridge, MA: Harvard University Graduate School of Design, 2003.

Malaki, Akhil. Informal Finance and Microfinance in Jamaica and Trinidad & Tobago: An Institutional Study.
        Stockholm: Almqvist & Wiksell International, 2005.

Malaki, Akhil. The Role of Informal Institutions in Microfinance in Jamaica and Trinidad & Tobago.
        Saarbrücken: VDM Verlag Dr. Müller, 2008.

McGregor, Duncan F. M., David Barker, and Sally Lloyd-Evans. Resource Sustainability and Caribbean Development.
        Kingston, Jamaica: Press, University of the West Indies, 1998.

Monteith, Kathleen E. A., and Glen Richards. Jamaica in Slavery and Freedom: History, Heritage and Culture.
        Kingston, Jamaica: University of the West Indies Press, 2002.

Moore, Brian L., and Michele A. Johnson. "Squalid Kingston", 1890-1920: How the Poor Lived, Moved and Had Their
        Being. Mona: Social History Project, Dept. of History, University of the West Indies, 2000.

Morgan, Kenneth. Slavery and the British Empire: From Africa to America. Oxford: Oxford University Press, 2007.

Morris, P. K., and A. Graycar. "Homicide Through A Different Lens." British Journal of Criminology 51,
        no. 5 (2011): 823-38.

Moser, Caroline O. N., and Jeremy Holland. Urban Poverty and Violence in Jamaica. Washington, D.C.: World Bank, 1997.

The National Housing Trust. "National Housing Trust - About Us." National Housing Trust. January 17, 2012.
        Accessed January 19, 2012. http://www.nht.gov.jm/about-us.

National Land Agency. "National Land Agency - About Us." National Land Agency. January 16, 2012.
        Accessed January 19, 2012. http://www.nla.gov.jm/aboutus.asp.

Perkins, John. Confessions of an Economic Hit Man. New York: Plume, 2006.

Potter, George Ann. Deeper than Debt: Economic Globalisation and the Poor. London: Latin America Bureau, 2000.

Ridley-Duff, Rory, and Mike Bull. Understanding Social Enterprise: Theory & Practice. London: SAGE, 2011.

Roache, Alicia. "Developers Fear Low-cost Housing." The Jamaica Observer, April 20, 2011.
        Accessed January 19, 2012. http://www.jamaicaobserver.com/business/Developers-fear-low-
        cost-housing_8692036.

Salewicz, Chris, and Adrian Boot. Reggae Explosion: The Story of Jamaican Music.
        United States: ABRADALE PR (NY), 2003.

Sives, Amanda. Elections, Violence, and the Democratic Process in Jamaica, 1944-2007.
        Kingston [Jamaica: Ian Randle Publishers, 2010.

"Social Enterprise." Wikipedia. Accessed January 19, 2012. http://en.wikipedia.org/wiki/Social_enterprise.

Thomson, Ian. The Dead Yard: A Story of Modern Jamaica. New York: Nation Books, 2011.

Tindigarukayo, J. "An Attempt to Empower Jamaican Squatters."
        Environment and Urbanization 16, no. 1 (2004): 199-210.

The Urban Development Corporation. "Brief History of the Urban Development Corporation."
        Urban Development Corporation. 2011. Accessed January 19, 2012. http://www.udcja.com/corporate/history.

White, Timothy. Catch a Fire: The Life of Bob Marley. New York: H. Holt, 1998.

Wikipedia. Accessed January 19, 2012. http://en.wikipedia.org/wiki/Globalization.

Wikipedia. Accessed January 19, 2012. http://en.wikipedia.org/wiki/Poverty.

Williams, Paul H. "The Beginning of Kingston's Decline." Jamaica Gleaner News Online, April 29, 2009.
        Accessed January 19, 2012. http://jamaica-gleaner.com/gleaner/20090427/news/news1.html.

The World Bank. "Extreme Poverty Rates Continue to Fall." June 2, 2010.
        Accessed January 19, 2012. http://Data.worldbank.org/news/extreme-poverty-rates-continue-to-fall.

The World Bank. "Poverty and Inequality Analysis." The World Bank Group. May 5, 2010.
        Accessed January 19, 2012. http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/
        0,,contentMDK:22569747~pagePK:148956~piPK:216618~theSitePK:336992,00.html.

Yunus, Muhammad, and Alan Jolis. Banker to the Poor: Micro-lending and the Battle against World Poverty. New York, NY:
PublicAffairs, 2003.