

Community Profile
and Livelihood
Baseline Assessment

Peckham

Clarendon, Jamaica

Acknowledgements

We would like to acknowledge the tremendous spirit of cooperation from the citizens of Peckham in providing the relevant information used to compile this profile.

We would also like to acknowledge the assistance of the Peckham Citizens Association, all the schools in the community, businesses and other stakeholders.

Mention must also be made of the special SDC team that conducted data collection activities in June 2019, to inform the livelihood baseline assessment presented in Section 4.

Special thanks for the technical and financial support given by the Caribbean Development Bank (CDB) through the Community Disaster Risk Reduction Fund (CDRFF) and the Food and Agriculture Organization of the United Nations for the completion of the Livelihood Baseline Assessment done in Peckham and its bordering communities. The assistance of the Food and Agriculture Organisation of the United Nations (FAO) is also duly noted for the editing and publication of the final reports.

Thank you all for your contribution towards the success of this process.

We are confident that the participatory approach that was undertaken, integrating the community, stakeholders and agencies in the process has contributed to producing a summary profile that can be used as evidentiary data for participatory planning.

Suggested citation: CDB (2022). *Preparation of Revised Livelihood Baseline Assessment Report: Peckham, Jamaica*. Community Disaster Risk Reduction Fund. Caribbean Development Bank. St. Michael, Barbados.

Prepared by: Donovan Campbell and Marc James, Department of Geography & Geology, The University of the West Indies, Kingston, Jamaica.

Disclaimer:

Please note that all reasonable effort and care was taken in the preparation of this document. The Social Development Commission accepts neither responsibility nor liability as it relates to any omission, error, loss or consequence caused by the user of this document.

Executive Summary

Pre-disaster information is always a key resource in post disaster response (which includes post disaster assessments). When disaster strikes, it is critical to know how many people are likely to have been affected by the event and how. This requires knowledge of the demographic breakdown of the population and the likely vulnerability of different people to the disaster. Vulnerability will determine how badly they will be affected, how quickly they can be expected to recover and what kinds of assistance they are likely to need.

In many instances, however, pre-disaster planning focuses on immediate response and action to protect human life and infrastructure, but without giving sufficient attention to damage and loss to livelihoods. Yet in the post-disaster period, if people are to recover, they need to restore their livelihoods as quickly as possible. This can only happen if detailed and quantitative information has been collected in advance of potential disasters so that livelihood based contingency plans, can be created and planned for.

In 2019, the Livelihood Based Assessment (LBA) and Contingency Planning approach was applied in Jamaica to provide pre-disaster livelihood information for five of the communities being supported through community projects funded by the Community Disaster Risk Reduction Fund (CDRRF) of the Caribbean Development Bank (CDB). These communities included:

1. Trinityville in St. Thomas;
2. Llandewey in St. Thomas;
3. Peckham and its surrounding communities in Clarendon;
4. Jeffery Town in St. Mary; and
5. Savanna La Mar in Westmoreland.

This report presents the information that was collected for the LBA exercise done in Peckham, Clarendon.

Table of Contents

ACKNOWLEDGEMENTS	ii
EXECUTIVE SUMMARY	iii
ACRONYMS	vi
INTRODUCTION	1
METHODOLOGY	3
OVERVIEW OF THE COMMUNITY	4



1 GEOGRAPHIC DATA

1.1	Location	7
1.2	Description of Community Boundary	8
1.3	Physical Features & Natural Resources	8
1.4	Historical Background	9



2 SOCIAL DATA

2.1	Population	13
2.2	Education	13
2.3	Housing & Amenities	18
2.4	Social Services	20
2.5	Emergency Services	21



3 ECONOMIC DATA

22



4 LIVELIHOOD & ENVIRONMENTAL ASSESSMENT DATA 25

4.1	Livelihood Profile	26
4.2	Environmental Profile	28
4.3	Hazard Analysis	29
4.4	Seasonal Calendar	32
4.5	Coping Strategies	34
4.6	Response Typologies	35
4.7	Recommended Mitigation Strategies	37



5 SOCIAL ENVIRONMENT 38

5.1	Safety and Security	39
-----	---------------------	----



6 GOVERNANCE DATA 40

6.1	Political Directorate	41
6.2	Social/Civic Organisations	41
6.3	Faith Based Organizations	41

APPENDICES 43

Acronyms

BCJ	Blue Cross of Jamaica
BMC	Borrowing Member Country
CAP	Community Adaptation Planning
CBO	Community Based Organisations
CDB	Caribbean Development Bank
CDMC	Community Disaster Management Committee
CDRMP	Community Disaster Risk Reduction Plan
CDRRF	Community Disaster Risk Reduction Fund
CPA	Country Poverty Assessment
DMP	Disaster Management Plan
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ED	Enumeration District
EHF	Environmental and Health Foundation
ESSJ	Economic and Social Survey of Jamaica
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
FG	Focus Group
FHH	Female Headed Households
ILO	International Labour Organization
JADEP	Jamaica Drug for the Elderly Programme
JAS	Jamaica Agricultural Society
JDF	Jamaica Defence Force
JSLC	Jamaica Survey of Living Conditions
LBA	Livelihood Baseline Analysis
MHH	Male Headed Household
MOA	Ministry of Agriculture
MOH	Ministry of Health
MTWH	Ministry of Transport, Works and Housing
NDP	National Development Plan
NGO	Non-Governmental Organisation
NHF	National Health Fund
NHT	National Health Trust
NHT	National Housing Trust
ODPEM	Office of Disaster Preparedness and Emergency Management
PAD	Project Appraisal Document
PATH	Programme of Advancement Through Health and Education
PIOJ	Planning Institute of Jamaica
RADA	Rural Agricultural Development Agency
RCCVA	Rapid Community Climate Vulnerability Assessment
SDC	Social Development Commission
SPSS	Statistical Package for Social Sciences
STATIN	Statistical Office of Jamaica
UNDP	United Nations Development Programme

Introduction

THE NEED FOR A LIVELIHOOD BASELINE AND CONTINGENCY PLAN

Pre-disaster information is always a key resource in post disaster response (which includes post disaster assessments). When disaster strikes, it is critical to know how many people are likely to have been affected and how. This requires knowledge of the demographic breakdown of the population and the likely vulnerability of different people to the disaster. Vulnerability will determine how badly they will be affected, how quickly they can be expected to recover and what kinds of assistance they are likely to need. In many instances however, pre-disaster planning focuses on immediate response and action to protect human life and infrastructure, but without giving sufficient attention to damage and loss to livelihoods. Yet in the post-disaster period, if people are to recover, they need to restore their livelihoods as quickly as possible. This can only happen if detailed and quantitative information has been collected in advance of potential disasters so that livelihood based contingency plans, can be created and planned for.

In 2019, the Community Disaster Risk Reduction Fund (CDRRF) of the Caribbean Development Bank (CDB) partnered with the Food and Agriculture organization of the United Nations (FAO) to introduce Borrowing Member Countries (BMC) in the region to the Livelihood Baseline Assessment (LBA) process which was pioneered by FAO and the International Labour Organisation (ILO).

The Livelihood Assessment Tool-kit¹ provides well-defined guidelines for the preparation of baselines that can be used to:

- analyse and respond to the impacts of disasters on the livelihoods;
- develop and update contingency plans.

In February 2019, a one-week training and capacity building session was held in Belize and introduced persons from Belize, the British Virgin Islands, Jamaica and St. Vincent and the Grenadines on the use of the LBA methodology for their own planning purposes.

OBJECTIVES OF THE LBA PROCESS

The objectives of the LBA approach are:

- a) To make it possible for countries to compare the livelihood context and activities for residents in the communities and local economies before and after a disaster
- b) To establish a robust basis for making estimates of the impact of disasters on livelihoods, in particular vulnerable groups, that can feed into various appeals for aid required for reconstruction and rehabilitation of the sector(s) affected.
- c) To provide a reliable basis for immediate post-disaster assessments including the initial Livelihood Impact Appraisal (Volume 3 of the Toolkit) and the more in-depth detailed Livelihood Assessment of the impact of disasters on livelihoods and identify opportunities and recovery capacities at the local, community and household levels (Volume 4).

¹ *The Livelihood Assessment Tool-kit* was published by the Food and Agriculture Organisation of the United Nations and the International Labour Organisation in April 2009.

THE LBA PROCESS IN JAMAICA

Following the February 2019 capacity building, the Social Development Commission (SDC) conducted a total of five (5) Community Profiles and Livelihood Assessment reports to provide pre-disaster livelihood information for the communities being supported through projects funded by the Community Disaster Risk Reduction Fund (CDRRF) of the Caribbean Development Bank (CDB). These communities included:

1. Trinityville in St. Thomas;
2. Llandewey in St. Thomas;
3. Peckham and its surrounding communities in Clarendon;
4. Jeffery Town in St. Mary; and
5. Savanna La Mar in Westmoreland.

This report presents the LBA findings for the community of Peckham, Clarendon.

A community profile provides useful information on a community; its population, economic structure and activity, social services, community organization and participation, and perceived challenges to development. This information is needed by community development agencies and individuals to guide the process of development.

It is useful to know about the community, its location and description before any sort of intervention strategies are planned. The community profile therefore serves as a practical guide for the justification of economic, social, political and environmental interventions/support for the community. Importantly, much of the data contained therein is provided by community members themselves.

Critical to the development of communities is the extent to which their livelihoods are sustainable and have systems in place for their protection. While individuals are able to control their own actions, there is very limited control over the actions of others and none over those deemed as 'Acts of God'.

In order to improve understanding of the impact of disasters on livelihoods, the Food and Agriculture Organization of the United Nations (FAO) and the International Labour Organization (ILO) jointly developed the Livelihood Assessment Tool-kit which consists of three main technical elements including a Livelihood Baseline Assessment (which is undertaken pre-disaster). The Livelihood Baseline Assessment is used to provide a good picture of 'normal' livelihood² patterns in areas at risk from natural hazards together with an indication of likely impact of hazards, key response priorities and institutions likely to be involved in recovery. The Livelihood Baseline Assessment gives a 'head start' for post-disaster assessments and provides the pre-disaster context for the ILIA and DLA, so enhancing the power of these tools to make informed generalizations on the livelihood impact and opportunities presented by the disaster.

In recognizing the possible impact on livelihoods and therefore the sustenance of communities, the SDC with support from the CDB engaged the community in an assessment of its main livelihoods. This assessment included looking at the impact of natural and man-made hazards on livelihoods in the community of Peckham and its surrounding areas, as well as existing coping strategies and desired response interventions in the event of specific hazards.

Of note, the presentation of responses required in the event of the most frequently occurring hazards (Section 4, Table 4.3) refers also to Peckham and its neighbouring communities of Johns Hall and Morgan's Forest in the North, Grantham in the South and Sanguinetti in the West, and forms part of the Project Area for a disaster mitigation and resilience project funded under the Caribbean Development Bank's Community Disaster Risk Reduction Fund. This area (Peckham, Grantham, Johns Hall, Sanguinetti and Morgan's Forest) has an estimated population of 9,044 persons (STATIN, 2011).

In doing the livelihood assessment, the communities are able to develop formal strategies that engender greater resilience to disasters and by extension foster more secure livelihoods.

² *Livelihoods* consist of the capabilities, assets - both material and social resources - and activities required for a means of living

Methodology

The SDC in its mission to contribute to community development has created a household survey and other supplementary forms to gather information within the communities. The information gathered will inform the community development process. The activity was aimed at:

- Providing evidence of the current realities regarding poverty, social, economic, environmental and infrastructure for the community.
- Providing basic knowledge about the community and develop an understanding of the issues affecting the community.

The data contained within this profile was collected utilizing secondary sources of data such as the Population and Housing Census, 2001 and 2011 (STATIN).

DATA COLLECTION METHODS:

- Informal rap sessions and one-on-one dialogue/ meetings and transect walks were used by the SDC Officer to collect data from residents.
- Collection of secondary data from Ministries, Departments and Agencies
- Historical records

LIVELIHOOD BASELINE ASSESSMENT

A Livelihood Baseline Assessment (LBA) involving the use of a set of Qualitative Data Collection Tools was conducted at a community meeting in Frankfield involving the residents of Peckham and the bordering communities of Morgan's Forest, Johns' Hall and

Grantham, in June 2019. Additionally, a Community Asset Inventory Sheet which captured existing assets and businesses, and an assessment of the vulnerability of natural and man-made resources was completed through a transect/observation of the community. Qualitative Data Tools utilized to conduct the Livelihood Baseline Assessment included:

- Wide community and focus group sessions to define livelihoods and assess impacts and response needs to hazards.
- Observation/ completion of a Community Asset Inventory
- Convenience Sample survey conducted with members of the community examining the impact of hazards on their livelihood and coping strategies. Thirty-three (33) persons were interviewed.

DATA ANALYSIS

Findings from the rap sessions and one-on-one dialogue/meetings were organized around the way of life and development of the community. Data in the document was presented using a series of tables and graphs. Data collected through the convenience sample was entered and analyzed utilizing KOBO Toolbox³ and Excel.

The information provided in this profile provides a description of the community under the following headings:

- Geographic Data
- Social Data
- Economic Data
- Livelihood and Environmental Assessment Data
- Governance Data

³ KoBo Toolbox is a free open-source tool for mobile data collection. It allows users to collect data in the field using mobile devices such as mobile phones or tablets, as well as with paper or computers.

Overview of the Community

The community of Peckham lies approximately 70kms from the parish capital of May Pen in the Frankfield Development Area and comprises of four (4) districts. These are Peckham Proper, Fairy Hill, Tweedside and Wisbeach. According to STATIN's Population and Housing Census, 2011, the estimated total population for the community of Peckham was 1580. The terrain of the community is sloping/hilly.

The bordering communities are Johns Hall and Morgan's Forest in the North, Grantham in the South, Johns Hall in the East and Sanguinetti in the West. Tweedside, the main district in Peckham lies on the border of Alston and this is where the majority of the area's physical resources are situated. Among the natural resources are fertile land, springs (Barnett's) and indigenous flora and fauna. The White Rock River and the Mahoe River traverse sections of the community.

There are five educational institutions in the community. These are: Tweedside Primary, Peckham Basic, Tweedside Early Childhood Institution and the Zoe Nursing & Entrepreneurial Institute (which opened its doors in September of 2012) and C. Palmer Project of Hope. Additionally, there is one Community Centre and a Cemetery and nine Faith Based Organizations in Peckham.

Peckham is quite remote and relies almost exclusively on agriculture for economic sustenance. Citrus and coffee are the main crops. Other crops also cultivated include yam, banana, breadfruit, calaloo, mango, cocoa, pumpkin, sweet pepper, scallion and corn. The sole factory in the community, Maurice Food Processing, is built around the processing of ackee and now recently calaloo and sorrel. The most recent economic venture in the area is the Bamboo Project which is expected to provide employment for scores of residents, while creating entrepreneurial opportunities.

The frequent and intense impacts of natural hazards such as droughts, landslides, flooding, hurricanes, bush fires and pest infestation identified by the Livelihood Baseline Assessment done in June 2019, along with the impacts of climate change severely hampers the community's potential for social and economic development.

Of the multiple hazards faced, drought was ranked the number one during the livelihood baseline assessment community meeting. It was noted by participants that drought affects the community primarily during the months of November to March but due to climate change the period is extended to mid-May. Due to the unpredictable rainfall patterns and severe drought currently experienced as a result of climate change, farmers suffer from severe water shortage and lower agricultural output, which threaten their livelihoods.

In general, the hazard assessment data for Peckham revealed that the and its bordering that the hazards faced have resulted led to in severe damage to crops and livestock which have resulted in less value for goods, hence great financial loss. As a response to how they coped during these hazards, residents indicated they can only continue to pray, hope and press along while they seek assistance from both government and private agencies, through remittances, loans and so on. However, several mitigation actions are also taken geared at protecting their livelihoods. For example, for bush fires, landslides and flooding, the actions include building fire barriers (bushfires), planting trees (landslides) and cleaning drains (flooding).

From informal community meetings and consultations, the other socio-economic development challenges affecting the community of Peckham and its bordering communities are:

- Few recreational facilities
- High levels of unemployment
- Inappropriate use of land
- Poor parenting



1 Geographic Data



1.1 LOCATION

Peckham is one of eight (8) rural communities that make up the Frankfield Development Area (DA)⁴ in the Northwestern Constituency of the parish of Clarendon. The other communities are Frankfield Proper, Trout Hall, Orange Hill, James Hill, John's Hall, Grantham and Crooked River. There are forty-five (45) districts across the DA. The Frankfield DA is easily accessible on the B1 main road leading from May Pen to Chapelton. The commercial hub of the DA, Frankfield is located about 42km from the parish capital May Pen and stands at an elevation of 276m (906ft).

This area of Clarendon is often referred to as Upper Clarendon, and as the name suggests has a hilly, undulating nature and thus Peckham has inherited this. The area has its fair share of natural resources such as farmlands, indigenous flora, spring, rivers, tributaries and sand. Peckham is not prone to flooding as there are many manmade and natural drains to channel water from homes and other infrastructure. The temperature in the area is relative to the rest of Jamaica but gets cooler as dusk approaches.

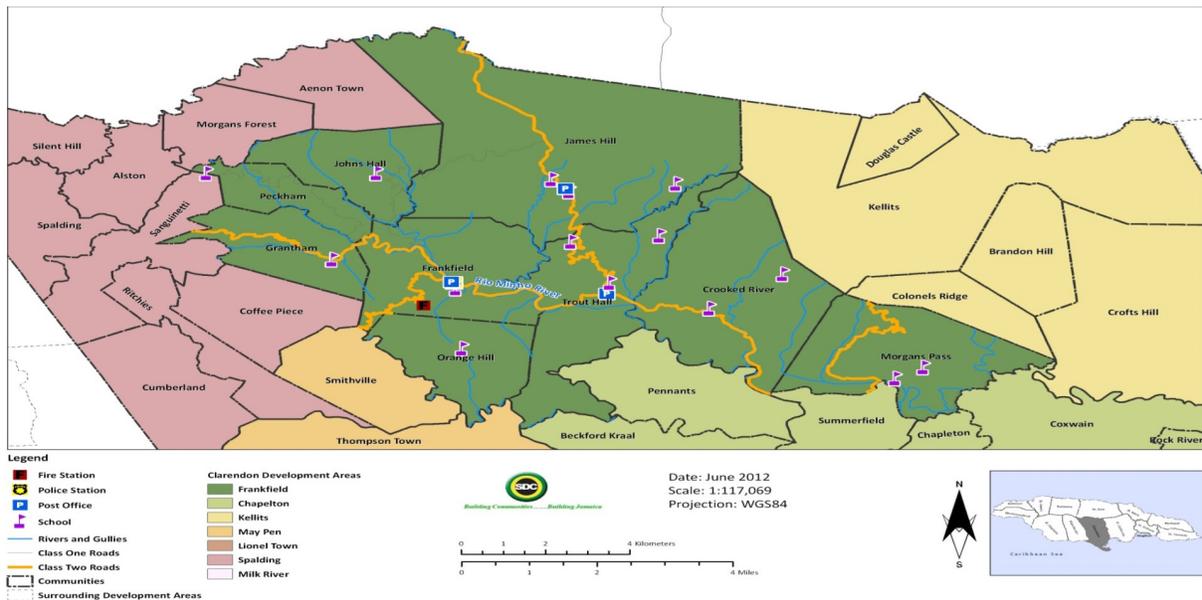
Peckham is made up of four (4) sub-areas, called Districts, namely: Peckham Proper, Fairy Hill, Tweedside and Wisbeach. The bordering communities are Johns Hall and Morgan's Forest in the North, Grantham in the South, Johns Hall in the East and Sanguinetti in the West. See Frankfield DA Map below.

The community's main access is the secondary road leading from Frankfield to Alston community. The chief district of Tweedside lies on the border of Alston.



Main Road leading to Alston

Figure 1.1: Map of Frankfield Development Area (Source: SDC)



⁴ A Development Area (DA) is seen as a grouping of communities based on geographic, demographic, economic, and social criteria/commonalities. The DA has the potential for growth to satisfy the needs of the people. The DA has a centre or hub where people gravitate to for socio-economic activities. The DA is usually given the name of the community which is the hub of activities for that area.

COMMUNITY BORDERS

North- Johns Hall, Morgan's Forest
South - Grantham Coffee Piece
East- Johns Hall
West - Sanguinetti
S.E. –Frankfield

1.2 DESCRIPTION OF COMMUNITY BOUNDARIES

FROMTHEPOINT where the Mahoe River crosses the Johns Hall/Guinea Corn Secondary Road;

SOUTHWESTERLY in a straight line from this river to where the Tweedside/Guinea Corn Secondary Road meets the Spalding Frankfield Main Road;

SOUTHWESTERLY along this main road to where the White Rock River crosses a bridge;

NORTHWESTERLY and SOUTHWESTERLY along this river to where it meets a tract in Wisbeach leading from Morant;

NORTHWESTERLY in a straight line from this tract to where several springs merges in Fearon;

NORTHEASTERLY in a straight line from where the spring merges to the intersection of Fearon PCR and Alston/Tweedside Secondary Road at Kenneth Mayne premises;

NORTHWESTERLY in a straight line from the intersection to the white Rock River;

NORTHEASTERLY along this river to where it meets a tract leading to Tweedside;

SOUTHEASTERLY in a straight line from this tract to where several springs meet;

SOUTHEASTERLY in a straight line from where the springs merge to the intersection of a road leading to Morgans Forest and the Tweedside/Guinea Corn Secondary Road;

NORTHEASTERLY along this secondary road to where it meets the Mahoe Gully tract;

NORTHEASTERLY along this tract to where it meets the Mahoe River (called the Mahoe Gully);

SOUTHEASTERLY along this river to the starting point.

1.3 PHYSICAL FEATURES & NATURAL RESOURCES

The terrain of the community is sloping/hilly in nature. Among the resources of the area are fertile farmland, springs and indigenous flora and fauna. The White Rock River and the Mahoe River traverse sections of the area.

RELIEF & DRAINAGE

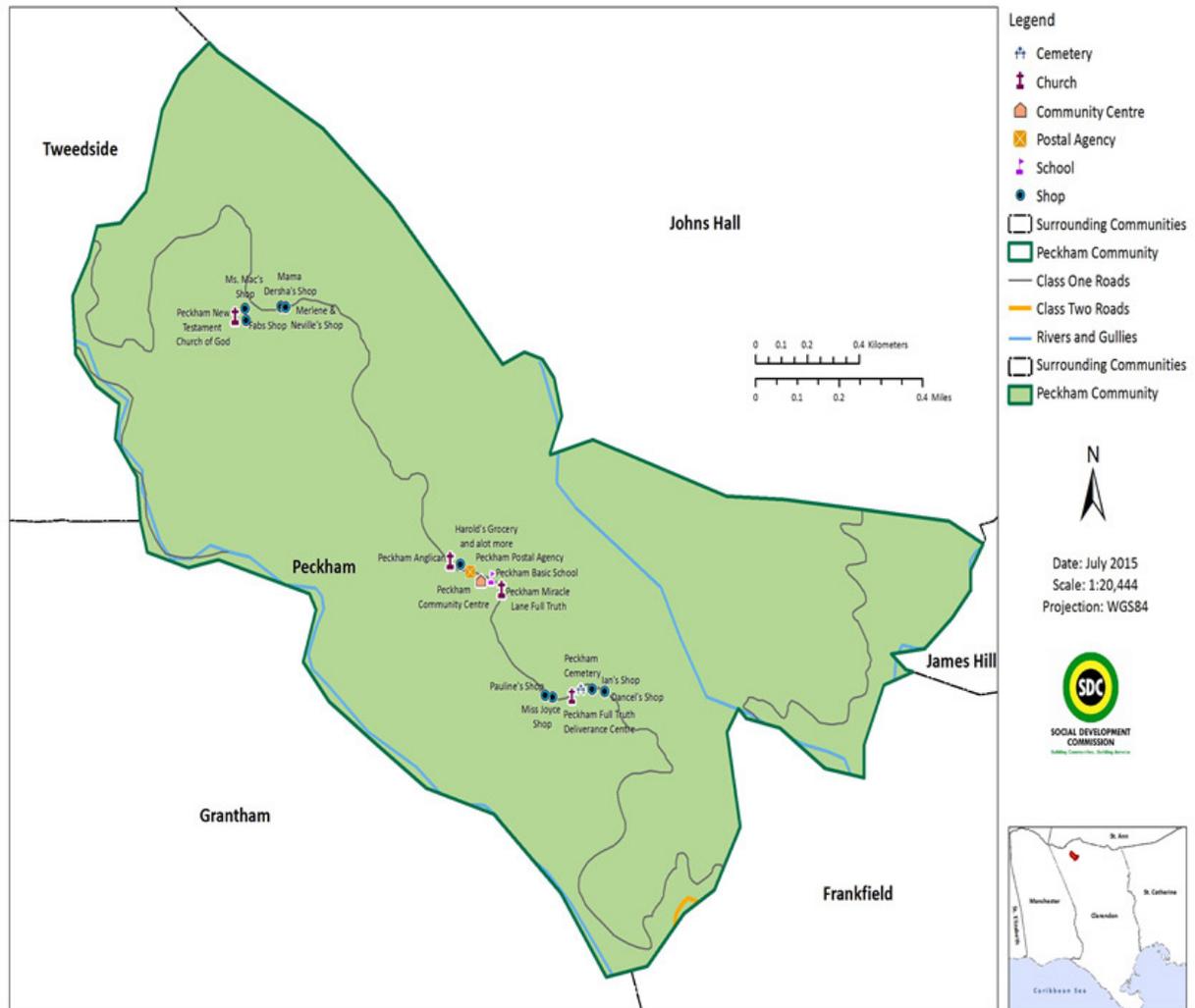
Peckham has an abundance of drainage facilities that are both man-made and natural which greatly facilitates easy run-off from surface water. Flooding is therefore not a main issue in the community.



CLIMATIC CONDITIONS

The weather in Peckham is very humid during the day but gets cooler in the evenings. Rainfall is more frequent in this heavily dense and fertile community.

Figure 1.1: Map of Frankfield Development Area (Source: SDC)



1.4 HISTORICAL BACKGROUND

The story of Peckham is told by numerous persons from across the entire community especially the elderly and the middle aged who remembers stories passed down through oral tradition by parents and grandparents.

Peckham like most other communities in the parish of Clarendon was once a part of a larger estate owned by rich landowners. In times gone by, the land was rented to occupants and a quarterly rent charged. This rent was expensive and many times the tenants could not afford it. After a while the land was sold to these occupants and they became dignified land owners.



A store in Tweedside that was once owned and operated by a Chinese family

Cocoa, coffee and bananas were grown in abundance, and the bananas would be taken to Frankfield and loaded on trains to be taken to the various processing plants.

The now sleepy Peckham Proper was abuzz of activities in the earlier days. In fact, the site where the community centre and Anglican Church now stands was once a race track where at holiday time horses, donkeys and even people would compete against each other. The community market was also on the same plot of land where ground provision and animals were sold. Persons as far away as Alston and James Hill came to market in Peckham. Later the community centre was erected and with it came a new hope for the citizens of Peckham as skills training was done there, offering young persons a life skill to better themselves.



Tweedside Church of God

The first elementary school was in Tweedside close to the square. Students from the community also attended elementary school in the nearby Grantham community. In the early days the school in Grantham was situated across the river. Another longstanding church, the Tweedside Church of God was also used as an educational institution as it once housed the Tweedside Basic.

Travelling through Tweedside Square one cannot help but notice the very old architecture, giving a feel of a time long ago. What is also peculiar is that some of these old buildings are still being used as dwelling

houses and businesses. It is said that a number of Chinese stores were in the community and when they ceased operation in the area, these properties were sold to local persons.



Remnants of old architecture

In the early days, not many motor vehicles were in the community and privately owned cars took persons to the hospitals, airports and any other important business outside of the community.

One lady remembers a time when Peckham was thought of as remote, and so when she told her friend in Frankfield that she was now living in Peckham the response was astonishment.

Today Peckham has developed, with modern homes replacing the more ancient structures. The young persons do not see a career in farming as attractive, as such lands that were once in productive cultivation are now unoccupied. Many young persons have migrated from the community.



Table 1.1: Community Timeline

Time Period	Significant Events
1950's – 1970's	<ul style="list-style-type: none"> • The Peckham Basic school was established through the JAS • Electricity came to the area • Peckham Land settlement was established as part of the Leicester field property • Portable water came to the area • Construction of the Community center through the JAS and Citizen Association • Peckham Cemetery was established
1980's – 2000's	<ul style="list-style-type: none"> • The Citizens' Association lobbied for household water supply • Households got water supply • Hurricane Gilbert caused major damage to the community • Community center was refurbished by Lift Up Jamaica • Hurricane Gilbert affected all farms (1988). Morgan's Forest Primary School roof destroyed
2000's to present	<ul style="list-style-type: none"> • Renovation of the community Center through the Tourism Enhancement Fund • Implementation of the Peckham Bamboo project • Construction of the Peckham Multipurpose court • Poverty alleviation: A number of persons got houses from Food For The Poor and a number of young persons gained employment through the Overseas Work Programme • Crops destroyed by Hurricane Ivan in 2006 • Major flooding in Morgan's Forest and surroundings due to heavy rains in 2017 • Morgan's Forest was severely affected by fire in 2018

2 Social Data



2.1 POPULATION

As indicated in Table 2.1 the estimated population in Peckham according to STATIN 2001 population data was 1214 persons in 293 households spread across four districts: Peckham Proper, Tweedside, Wisbeach and Fairy Hill. The latest STATIN census (2011) placed the estimated total population for the community of Peckham at 1580, persons of which 804 (51%) are males and 776 (41%) are females.

Table 2.1: Estimated Population by Communities in the Frankfield Development Area

Community	Population	Number of Dwelling
Frankfield	4000	928
Grantham	3323	728
Orange Hill	928	178
Peckham	1214	293
Crooked River	3065	765
Trout Hall	4000	830
James Hill	1772	466
John Hall	1000	361

Population & Housing Census, STATIN, 2001

Table 2.2: Educational Institutions' Listing

School	Principal	Contact	Capacity	Enrolment		# of Teachers
				Males	Females	
Tweedside Primary	Mrs. S Card	448-6507				4
C. Palmer Project of Hope	Miss Slowley	618-0647	150			5
Zoe Nursing & Entrepreneurial Institute	Mrs. Commission	322-8359				3
Peckham Basic						
Tweedside Early Childhood Institution	Ms S. Whyte	425-7736	50	10	12	

Source: SDC School Audits, 2013

2.2 EDUCATION

There are five educational institutions in the community as a vocational institution opened its doors in September of 2012. The community now boasts the Zoe Nursing & Entrepreneurial Institute, C. Palmer Project of Hope, Tweedside Primary, Peckham Basic and Tweedside Early Childhood Institution. See additional information on these institutions in Table 2.2.

ZOE NURSING & ENTREPRENEURIAL INSTITUTE

The Zoe Nursing & Entrepreneurial Institute which can be found in Tweedside square commenced in September 2013. The school started with thirteen (13) students and three (3) teachers. The main courses offered are House Keeping, Commercial Cooking, Early Childhood Education and Nursing. The option of having students sit subjects at the CXC Level has also been considered as with an entry requirement of 4 CXCs some students might need further assistance in order to matriculate. Courses are accredited by City and Guild. The school is also in an immaculate condition.



C. PALMER PROJECT OF HOPE

This Institution is the brain child of Mr. C. Palmer a returning resident of the community, who saw the need for such a school and selflessly donated his land to its construction. The school opened its doors in 2005 with three (3) teachers and twenty-five (25) students, offering one course in Data Operations. The school is opened five days per week from 9am to 3pm and has a capacity of 150. Cosmetology and welding is now sponsored by HEART, which means that HEART is financially responsible for all the overheads including administrative cost. Presently, plans are in place to introduce two new courses; these are Call Centre Operator and Electrical Installation. To matriculate, students need a grade nine level education or one CXC other than Religious Education. Students without a subject can sit an entry examination. Students attend from Peckham, Frankfield, Christiana, Alston, James Hill, Sanguinetti and Leicesterfield.



Plans for the school include the refurbishing of the upstairs roof, the construction of a playfield and improvement in the literacy and numeracy performance. Support to the school from the community and private individuals is tremendous. Also, there is currently a breakfast programme, where community members assist in preparation of the meals. The PTA is also very active and assists in fundraising and other school activities.

The school is in fairly good condition with the most critical issues being the improvement needed to the toilet facilities, the refurbishing of the upstairs roof and improvement to the library which is not in use at the moment.



TWEEDSIDE PRIMARY

Tweedside Primary is the only primary school in the community and is affiliated to the New Testament and Baptist Churches. The school was built to accommodate one hundred (100) students. The current enrolment is however eighty- nine (89). The staff compliment is five (5) and all teachers are educated up to the teachers college/degree level. The students come mostly from the wider Peckham community with a few attending from Alston.



Table 2.3: Existing Facilities: Tweedside Early Childhood Institute

Facilities	Present (Y/N)	Condition		
		Poor	Adequate	Very Good
School building	Y	✓		
General School Grounds	Y	✓		
School Office	Y	-		
Play Area	N	-		
Playfield	Y	✓		
School Fence	Y	✓		
Water Piles/Drinking fountains	Y		✓	
Bathroom/Toilets/Latrine	Y	✓		
Facilities near toilets/latrines to wash hands	Y			✓
Garbage Bins	Y			✓



TWEEDSIDE EARLY CHILDHOOD INSTITUTE

This school is housed in a small building near the Tweedside Primary school playfield, on the same property as the Tweedside Primary. It is recognized and therefore uses the curriculum provided by the Ministry of Education. The Tweedside ECI can accommodate fifty (50) students but has a current enrolment of twenty-two (22) and two (2) staff members. Both teachers have attained NCT VET Level II certification.

The school is funded by school fees and government subsidy both of which are inadequate. The PTA is active, and in addition to engendering support, they undertake fundraising activities aimed at erecting proper fencing, establishing a play area and acquiring materials for the partition of classrooms. A community resident residing overseas also assists the school with learning materials. The table below outlines the facilities present at the school and their condition.

The present physical condition of the school needs improvement. The building is quite old and small with chalkboard as a partition. Of note also is the fact that the small children have to use a pit latrine which is unsafe for this age group. Another issue is that the students and staff share the facility. The school is not fenced and hence also rated as poor and in dire need of attention. The school was once affected by break-ins; however, the recent grilling of the facility has assisted in stemming this problem. Table below indicates that all the required systems are in place and illustrates their condition.

Table 2.4: Existing Equipment: Tweedside Early Childhood Institute

Equipment/System	Present (Y/N)	Condition		
		Poor	Adequate	Very Good
Are there enough benches and desk?	N	✓		
Is the building properly wired?	N	✓		
Does the school have electricity?	N	✓		
Does a water drainage and sewage system exists?	Y			✓
Is there sufficient light inside the classroom?	Y		✓	
Is there good ventilation?	Y			
Is there enough teaching material?	Y			
Are there enough books and learning equipment?	Y			

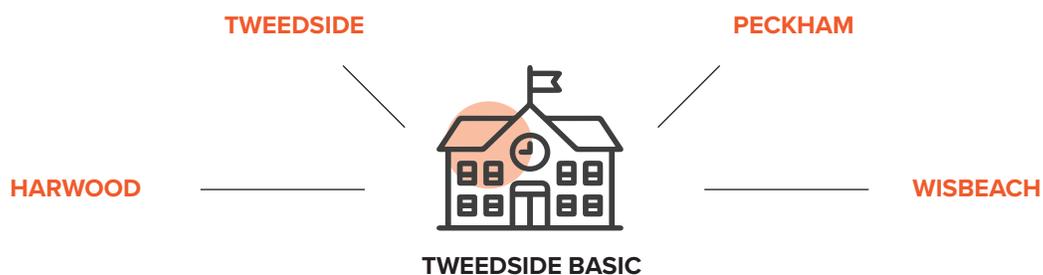
No after school care is provided. Parents are expected to provide mid-meal snacks and also bear the cost to provide cooked lunch. The school is reliably provided with water by NWC. Only a bed is available but telephone is accessible and the clinic is not too far away. Health personnel also visit the school quarterly.

PECKHAM BASIC

The Peckham Basic School is found on the same property as the Community Centre. The present enrollment is Twenty-two (22) with a staff compliment of one (1) teacher. At the time of visit a student teacher was there as a volunteer on the JEED Programme.



Tweedside Basic School Mobility Map



The school satisfies the needs of the immediate surrounding districts such as Peckham and Wisbeach. Operation is mainly depended on the MOE as the payment of school fee is very irregular. The PTA is not very active and this affects the development and growth of the institution. The school is recognized by the MOE and utilizes their Curriculum.

Presently there is no electricity at the institution and the bathroom facility is a pit latrine, which is shared by the teachers. This is quite dangerous for small

children. Additionally, there is a break away near the school leading to the playfield that poses some danger. Although there is no health facility in the community, this can be accessed in nearby Frankfield. Health personnel also visit the school. Cooked lunch is provided daily, however, the kitchen needs upgrading. The community assists especially with the cleaning of the school grounds. No after school care is offered and so the children are collected promptly after school by parents.

Table 2.5: Existing Facilities: Peckham Basic

Facilities	Present (Y/N)	Condition		
		Poor	Adequate	Very Good
School building	Y		✓	
General School Grounds	Y	✓		
School Office	N	✓		
Play Area	N	✓		
Playfield	Y		✓	
School Fence	N	✓		
Water Piles/Drinking fountains	N	✓		
Bathroom/Toilets/Latrine	Y	✓		
Facilities near toilets/latrines to wash hands	Y		✓	
Garbage Bins	Y		✓	

The following shows that most of the required systems such as electricity are not in place and thus the condition under which the children learn at the school is considered to be poor. Currently, Community leaders have been assessing the situation along with the Member of Parliament to correct it.

Table 2.6: Existing Equipment: Peckham Basic

Equipment/System	Present (Y/N)	Condition		
		Poor	Adequate	Very Good
Are there enough benches and desk?	N	✓		
Is the building properly wired?	N	✓		
Does the school have electricity?	N	✓		
Does a water drainage and sewage system exists?	Y		✓	
Is there sufficient light inside the classroom?	Y		✓	
Is there good ventilation?	Y		✓	
Is there enough teaching material?	N	✓		
Are there enough books and learning equipment?	Y			✓

2.3 HOUSING & AMENITIES

Dwelling count in the community is approximately two hundred and ninety-three (293). As with rural communities, houses are mainly widely dispersed and intersperse by forestry with only pockets of nearby dwellings. The tributaries in the area coupled with the natural sloping formation of the land allow for adequate run-off hence flooding does not occur.

The overall conditions of the dwellings are good according to a recently done observation sheet; 30% is considered very good while 60% is considered good. Overtime with improvement of the standard of living this area has been impacted. Even old structures are properly maintained and occupied.



Table 27: Dwelling Material

Housing Materials	%
Concrete & block	90
Stone & brick	-
Nog	0.2
Wattle	-
Wood	.8
Wood & Concrete	8
Wood & Brick	-
Others	1
Not reported	
Total	100.0

Source: SDC's Observation Sheet

Land and dwelling tenancy is mainly owned with a few persons acquiring their properties through descendants. Squatter is present but only on a minimal scale.

HEALTH CARE

Residents of Peckham access health care at institutions in Frankfield and Spalding depending on their location in the community but the majority gravitate towards Frankfield. The Frankfield Health Centre is located in the district of Andrew Hill. This type III facility is in superb condition being upgraded by the National Health Fund in November 2010.

There are however reports of furniture shortage for patients and staff. With the transfer of the registered nurse to Spalding, there is also the complaint of being short-staffed. The remaining staff include: one (1) public health nurse, one (1) registered midwife, a male and female orderly, one (1) records staff, a visiting doctor, a family life practitioner who comes in on Thursdays and Fridays and four (4) community health aides. Opening hours are Monday to Thursday 8:30am – 5:00pm and Friday 8:30am – 4:30pm. There is also a private doctor's office in the community.

WATER SUPPLY

Barnett Spring at Peckham Pass serves part of Peckham to Guinea Corn (Water Works) in Frankfield. The rest of the community is served by the Greater Alston Water Supply System. Catchment facilities are therefore heavily utilized in storage.



Barnett Spring

TOILET FACILITIES

Pit latrine usage is still quite prominent in the community of Peckham which is a reflection of water and sanitary amenities in the area. However, most households utilize flush toilets.

GARBAGE COLLECTION

Poor garbage collection affects the community like all others in the rural area. Some residents complain they have never seen the garbage truck while others say the visits are few and far between, and thus they resort to burning to prevent pile up that can lead to other health issues.

FUEL USE

A combination of sources is used with the slight dominant source being liquid petroleum gas. Other forms of fuel are coal and wood.

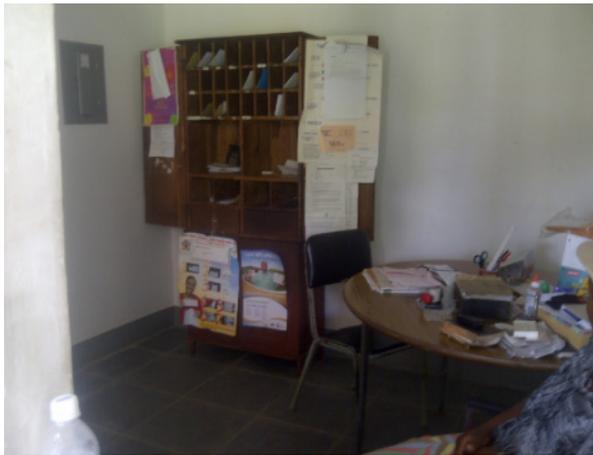
COMMUNICATION

Access to communication in the community is gained mainly by cellular phones with a few individuals opting to have landline service although it is widely available. Coverage is fair as connectivity is sometimes low and lost in some areas due to dense forestry.

Two (2) immediate postal facilities are in Peckham which also facilitates the communication needs of residents: Peckham Postal Agency and Tweedside Postal Agency. The Peckham Postal Agency is housed in a section of the community Centre. Areas served include Peckham and Burnt Cedar. Services include regular mails delivery and the PATH payment. The facility has no electricity and no bathroom facility. Bathroom is accessed at the neighboring Basic School.



Peckham & Tweedside Postal Agencies



ROAD NETWORK

The community can be accessed from the main road coming from Frankfield going to Spalding and Alston. Whilst some recent repairs were done to the main road going into the community, the general view is being maintained that the roads of the community (interior and exterior) are poor.

TRANSPORTATION

The most utilized modes of transportation in Peckham are licensed and robot taxis, buses, trucks, private cars, motorcycles, bicycles and donkeys. There are two main motor vehicle stands: one at Frankfield Square and the other at Spalding which takes persons into the area.

2.4 SOCIAL SERVICES

There are limited social services that can be directly accessed in the community and thus citizens travel into nearby Frankfield and sometimes Spalding to gain access. See Table 2.8.

Table 2.8: Social Services present within the Community

Community	Number	Location (District)
Schools	5	Tweedside (4) Peckham (1)
Churches	11	Peckham , Tweedside, Wishbeach
Postal Agency	2	Peckham , Tweedside
Community Centre	1	Peckham
Cemeteries	1	Peckham
Playfields	1	Peckham

PECKHAM COMMUNITY CENTRE

The Peckham Community Centre houses the Postal Agency and next door to the Centre is the Peckham Basic School. The facility is in need of repairs especially the bathrooms. Also, there is no electricity at the moment. A retaining wall is also needed near the basic school as there is indication of soil erosion, which creates an elevation that could be dangerous for the young children. The centre is also used by the newly formed Peckham Citizens Association that conducts its meetings there.



Netball Court of the Peckham Community Centre



PECKHAM CEMETERY

There is a community cemetery in Peckham Proper and as such most deaths in the community are interred here. The usual burial in the yard which is a feature of most rural communities is not so common in Peckham and driving through the community only a small number of yards had graves in them. Other communities such as Frankfield and Grantham also utilize this cemetery.

2.5 EMERGENCY SERVICES

FRANKFIELD FIRE STATION

The Frankfield Fire Station which was built in 1875 serves the community of Peckham. Its condition was rated as fair despite being affected by poor lighting and plumbing issues. The interior now needs painting to compliment the proper flooring it now has. The challenges faced also include re-roofing to eliminate the pests.

The facility was staffed by twenty-six (26) officers but only eight (8) works per shift. However, at least five (5) persons are required to be on duty when there is a shortage of staff. Cellular phones and one landline complete the list of devices used to communicate. The main equipment for the job, (the fire truck) is available and is in good condition but it carries only a small water tank.



3 Economic Data



Agriculture is the cornerstone for many in Peckham as there is very little else to do in the area for employment. The area is quite fruitful with an abundance of ackee. Other crops grown are banana, breadfruit, calaloo, mangoes, citrus, cocoa and coffee. Most of the crops produced are consumed domestically with the surplus sold in the local markets such as Spalding, Christiana, Frankfield and May Pen. The square of Tweedside could be described as the hub of the community, with most of the schools and businesses concentrated there.

The nurses, police and security officers, teachers and other skilled workers access employment outside of the area in adjoining communities as well as afar such as in May Pen, Kingston, Manchester and St. Catherine.

Maurice Food Processing, opened in 2008, is located in the district of Tweedside. It has provided an avenue to contain and make use of locally grown farm produce, especially those in season that would normally go to waste when there is a glut. The facility is a family owned business and specializes in the canning of ackee. Recently they have started to process sorrel and calaloo with the intent to go into the manufacturing of bag juice.

Off season, the plant provides employment for twenty (20) individuals while in season seventy-five (75) persons are employed. The employees are from Peckham, Frankfield, Johns Hall Chapelton and Four Paths. Suppliers to the factory are varied and those external to Peckham include Pennants, Porus, St Elizabeth and Portmore. Farmers close by deliver their produce to the plant while supplies afar are collected by one of the two trucks owned by the factory or the ones contracted to it.



Maurice Food Processing Factory



The interior of the factory



Cans prepared for canning

There are other interventions in the area, such as the Bamboo Project which is expected to provide employment for scores of residents, while creating entrepreneurial opportunities. Several initiatives will be undertaken such as cultivating 40 hectares of bamboo; construction of a factory and installation of the requisite equipment and technology to produce a range of by-products; training of residents in bamboo cultivation techniques and production methodologies. Job creation through the cultivation of bamboo increases the population adaptation to climate change for example the production of charcoal from bamboo benefits environmental protection by reducing pollutant residue. It is also an environmentally functional material that has excellent absorption properties.

The project is being implemented by the Ministry of Transport, Works, and Housing and funded by the People's Republic of China and Caribbean Local Economic Development Project (CARILED). Several other agencies are also involved in the development

and implementation of the Peckham bamboo project. They include the Planning Institute of Jamaica, National Housing Trust, Institute of Nursing, Technology and Household Management; Social Development Commission and the Constituency Development Fund. (Jamaica Observer, 2015)

LAND USES

The nature of land use within the wider Frankfield Development Area is mainly agricultural and residential. The majority of the households within the area are involved in farming activities, mainly crop cultivation. A lot of land suitable for agriculture is available throughout the area but they are underutilized which results in a lot of open spaces and overgrown vegetation. Commercial activities take place within the Development Area, mainly in Frankfield, Trout Hall, James Hill, Crooked River and Peckham.

4 Livelihood and Environmental Assessment Data



This section of the community profile explains the livelihood coping and recovery strategies of the people of Peckham and its surrounding areas in the wake of natural hazards. The information is a key resource for post disaster response as it is critical to know how many people are likely to have been affected and what response is needed.

The key elements of this section include environmental data and hazard information and analysis, livelihood exposure and vulnerability profiling, and a contingency plan which outlines the livelihood support needed and institutions for livelihood support as it pertains to the impact of the main hazard on the main livelihoods of Peckham and surrounding communities such as Morgan’s Forest, Grantham, Sanguinetti and Johns Hall; these being beneficiary communities of the Caribbean Development Bank (CDB), Community Disaster and Risk Reduction Fund (CDRRF). The estimated total population for these communities when aggregated is 9,044 (STATIN, 2011).

The data herein presented were collected via mixed methodology. The quantitative approach took the form of a quantitative survey which was administered to 33 individuals using convenience sampling. The sample comprised of 63.4% males and 33.36% females. Additionally, an Observation Sheet which captured existing assets and businesses, and an assessment of the vulnerability of natural and man-made resources was also used. The qualitative approach involved informal interviews with a cross-section of the residents (youths, elderly, men and women) and a community wide meeting.

4.1 LIVELIHOOD PROFILE

Livelihoods consist of the capabilities, assets (both material and social resources), and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, and provide net benefits to other livelihoods locally and more widely, both now and in the future, while not undermining the natural resource base. (The Livelihood Assessment Tool-Kit)

To plan for and evaluate the possible impact hazards may have on the livelihoods within a community, an understanding of the types of livelihoods present, the resources needed, the susceptibility of these livelihoods to hazards (natural and man-made) and the existing and required response mechanisms, is needed.

The qualitative engagement with the community identified two (2) main types of livelihood in Peckham and surrounding areas. The main types of livelihood found in the community are presented in Figure 4.1.

Figure 4.1: Main livelihoods Present in Peckham and Surrounding Areas



FARMING



**SMALL BUSINESS
OPERATION
ENTREPRENEURS**

A detailed breakdown of the various livelihoods, along with the skills required and natural and equipment resources needed, is presented in Table 4.1.

Table 4.1: Profile of Main Livelihoods in Peckham and Surrounding Areas

Livelihood types present	Skills Needed	Tools & Equipment Needed	Natural Resources Utilized/needed
<p>Farming:</p> <ul style="list-style-type: none"> • Farmers (crops such as yam, plantain, banana, Irish potato, sweet potato, coco, cocoa, cabbage, cassava, sugar cane,) • Burning charcoal • Chicken/poultry rearing • Vegetable growers (sweet pepper, • Fruit growers (citrus, sorrel, ginger) 	<p>Knowledge of:</p> <ul style="list-style-type: none"> • Land type/soil type • Weather • Tools needed <p>Training</p> <ul style="list-style-type: none"> • Know the right pesticide to use • How to use modern technology in farming • Get certification from HEART and or School of Agriculture 	<ul style="list-style-type: none"> • Forks • Cutlass • Tractors • Pick ox • Jack Hammer • Auger • Shelter/storage • Water tank/hose • File 	<ul style="list-style-type: none"> • Water supply • Breeze • Sunlight • Plants/seedlings • Wood/green trees • Grass • Land • Soil
<p>Small Business Operators/ Entrepreneurs:</p> <ul style="list-style-type: none"> • Hairdressers • Dressmakers • Domestic helpers • Taxi drivers • Shop keepers • Hardware workers • Construction workers such as masons, carpenters, electricians painters 	<ul style="list-style-type: none"> • Training • Certification • License • Know how to talk to people (communication skill) • Proper customer service skills • Technical skills • Certification 	<ul style="list-style-type: none"> • Dryer • Protective gears • Shampoo bowl • Hair tools • Cars • Licenses • Proper tires • Back hoe • Vehicle • Computer • Cranes • Labour animals such as donkeys 	<ul style="list-style-type: none"> • Water • Water • Soil • Sand • Stone

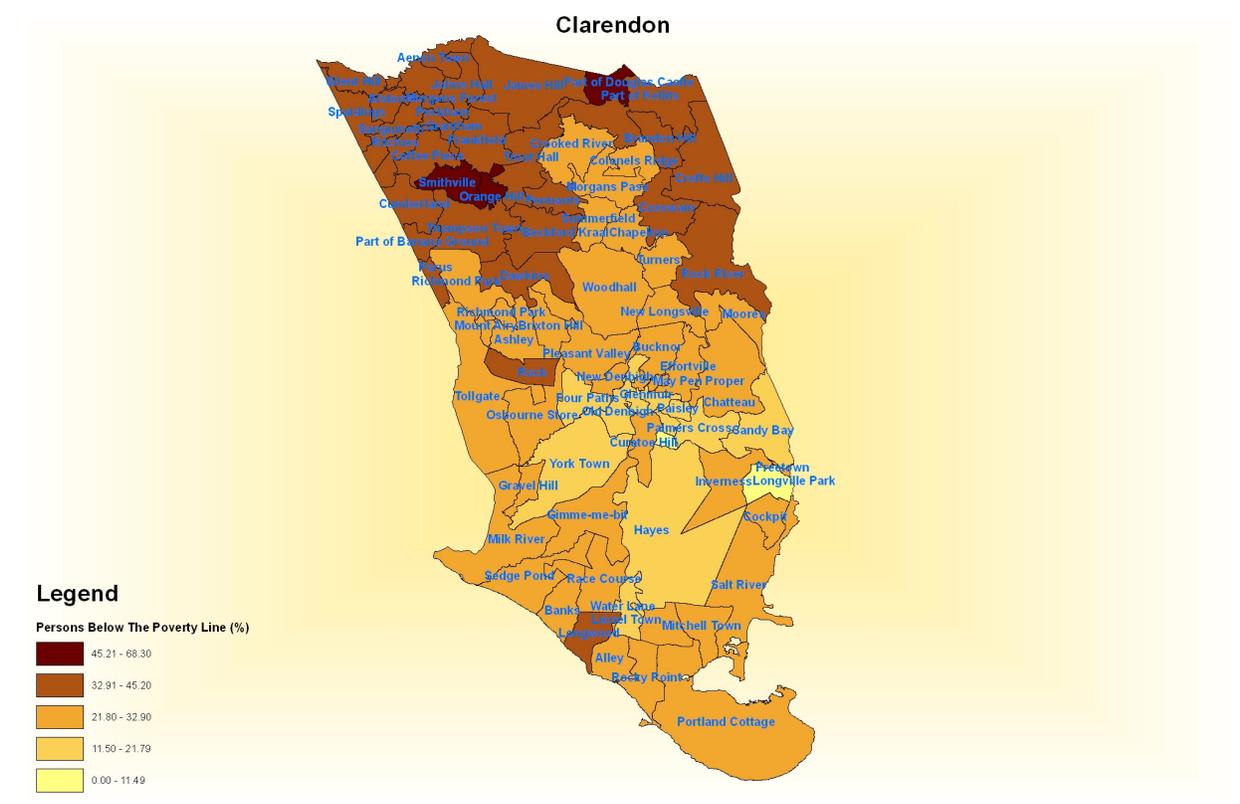
Further review of the secondary data and existing community profiles for Peckham, Johns Hall and Morgan’s Forest indicates that the farming sector provides a major source of employment and income for the residents. Approximately 75% of the households are engaged in the agriculture and livestock activities as their main source of income. Even where other livelihood activities are pursued, most households still engage in some form of farming activities for mostly domestic purpose and for sale in small shops/ businesses.

POVERTY LEVELS

The ability of a household to recover depends largely on their ability to absorb and respond to shocks and stressors so it is therefore imperative that we understand not just their living conditions and their livelihoods but also their wealth and likely vulnerability.

The data presented by the PIOJ 2008 (See Map 1 below) indicates that within the parish of Clarendon, Peckham and its bordering communities had up to 32.9% and 42.5% of its population living below the poverty line.

Map 1: Consumption Based Poverty, PIOJ, 2008



Poverty from the angle of unsatisfied basic needs (shown in Map 2 below) paints a different picture. It showed that in addition to the coastal parts of Clarendon, the greatest level of unsatisfied basic needs was also prevalent in most sections of Upper Clarendon including Peckham and its surrounding areas, with Morgan’s Forest and Grantham being in quintile 1 (worst)⁵.

4.2 ENVIRONMENTAL PROFILE

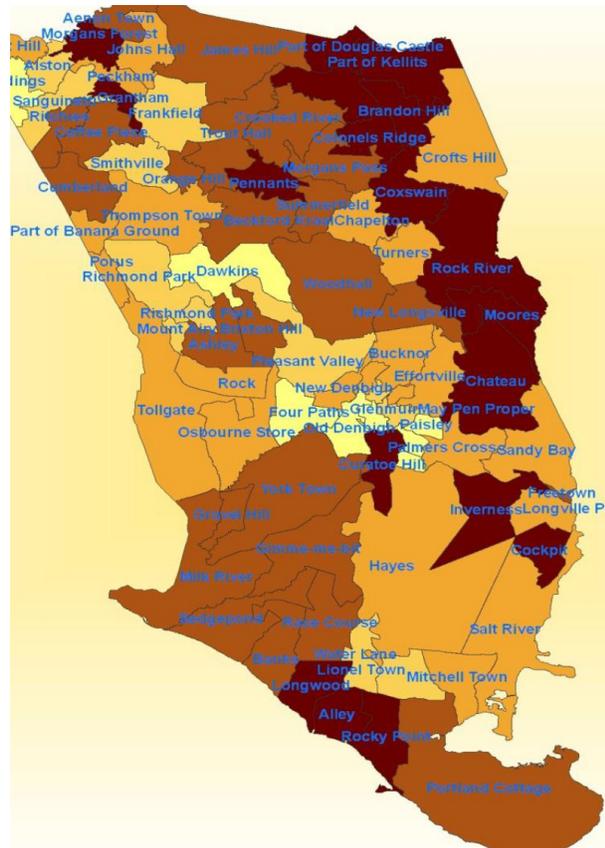
Peckham, along with the other surrounding communities falls in the Rio Minho Watershed area which is a protected area and forms part of the Clarendon watershed which supports the cycling of clean water supply to surrounding communities (Jamaica NEGAR, pg.39, 2009).

Within the community of Peckham and its environs, there is a wealth of untapped natural resources. This includes fertile farmlands, indigenous flora, spring, rivers and tributaries, sand and lush vegetation, which makes Peckham of utmost importance to the Clarendon watershed.

However, the area currently suffers from several environmental issues with the high potential for others. Chief among these issues is improper waste management practices stemming from unscheduled garbage collection by the relevant authorities and the disposal of garbage in drains, and gullies causing blocked drains.

The agricultural practices of the community have also resulted in deforestation and some amount of land and environmental degradation which can further exacerbate climate change impacts.

Map 2: Unsatisfied Basic Needs, PIOJ, 2008



These issues of poor garbage collection and unsustainable environmental practices such as charcoal burning and deforestation via slash and burn activities during land preparation are cause for concern in the area as they contribute to the community's vulnerability, resulting in the loss of natural vegetation and massive soil loss causing severe incidences of landslides.

Sand mining also is considered a potential environmental issue for the Frankfield Development Area, in which Peckham is located. This, as the continuation of excavation without allowing adequate renewal of the river, will have a negative impact on the environment. Over fishing is also an environmental concern. In fishing, bombs are used which is severely affecting the industry and the DA suffers from frequent foul odour especially in the commercial hub of Frankfield.

4.3 HAZARD ANALYSIS

A hazard is defined as a potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

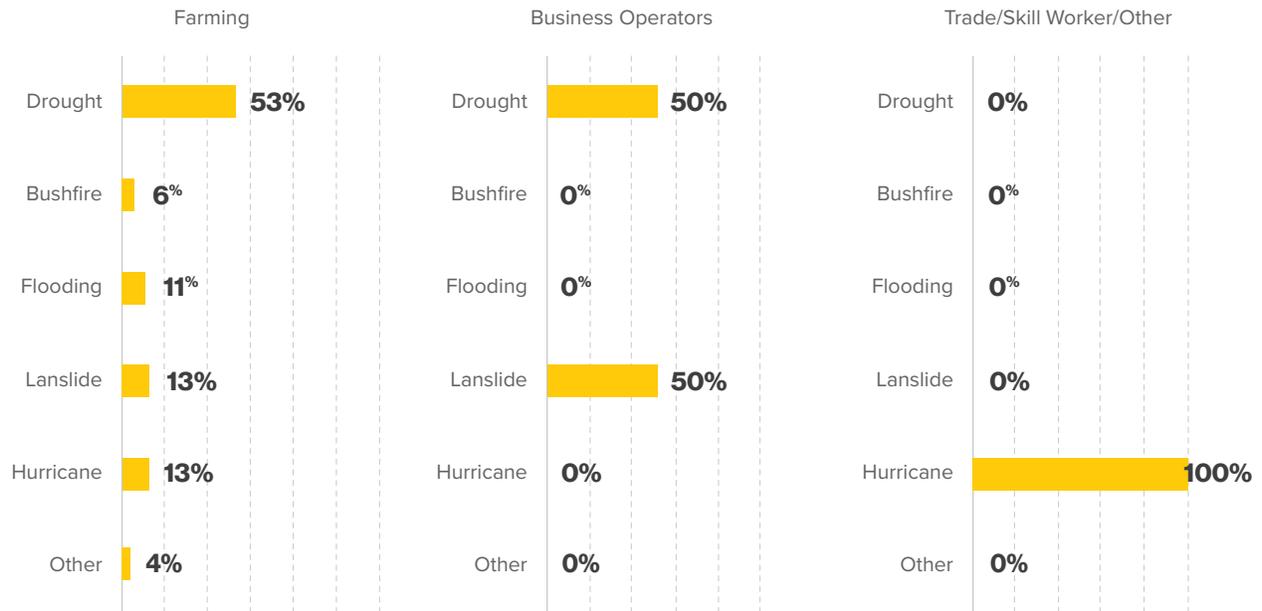
The Peckham community consultation indicated six (6) hazards against which the main livelihoods in Peckham are most vulnerable. They are ranked as follows:

1. Drought
2. Pests
3. Bush fire
4. Landslides
5. Flooding
6. Hurricane

The quantitative survey sought to find out from representatives of the various livelihood groups the hazards that most impacted their livelihoods. As can be seen at Fig. 5.2, Farming, being the livelihood that is most reliant on the environment was affected by all the hazards, with most of the respondents indicating drought being the most prevalent (53%). This was followed by hurricane and landslide (each at 13%) and flooding at 11%. Half of the business operators indicated that they were more affected by drought and the other half by landslide (each at 50%). All the respondents (100%) who were professionals indicated that hurricane was most impactful.

One of the important functions of the fieldwork for the compilation of the livelihood baseline is to get a consensus from key stakeholders on the frequency, severity and geographical impact of hazards within the district. Table 4.3 presents the six most regularly occurring hazards along with their yearly frequency and season, the geographic areas usually affected and the severity of physical and financial losses. The scores assigned to physical and financial losses were assessed on a scale of 1 to 5, with 5 meaning most severe. In determining the overall impact, both physical and financial losses were collectively taken into consideration.

Figure 4.2: Types of Natural Hazards that affects the main Livelihoods in the community

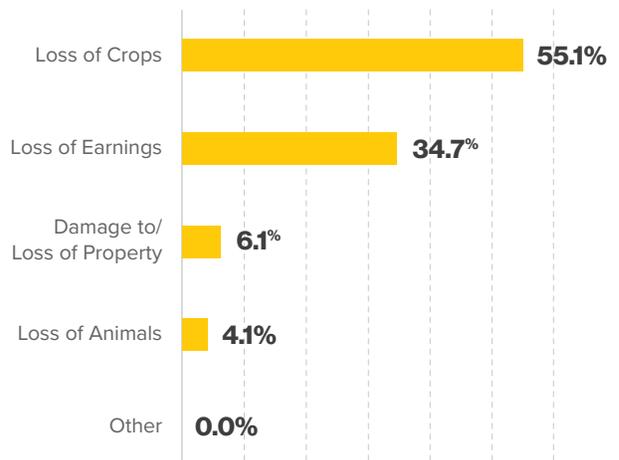


As seen in Table 4.3, flooding and pest infestation result in the most severe physical losses and also have highly severe financial impact on all the communities in Upper Clarendon, including Peckham, Tweedside, Johns Hall and Morgan’s Forest. The Hazard map in Appendix 1, identify the areas for flooding.

The quantitative survey findings with regards to the impact of all natural hazards on farmers generally show that the two main impacts are the loss of crops (55.1%) and the loss of earnings (34.7%).

Landslides and bushfires were both ranked as severe especially the financial losses caused from same. In the discussion, participants indicated that landslide however was not unique to all areas and that the area most affected is Dykes Hill (Snguinetti), where when there is a landslide, the main road is cut off. This has resulted in great damage to the road surface and limited mobility to access services, school and work.

Figure 4.3: Impact of Main Natural Hazards on Farmers



Landslides were also most severe in areas such as Tweedside and Johns Hall and its intensity was deemed medium in Morgan’s forest, while flooding was severe in Tweedside and Morgan’s Forest. Landslides and Flooding were not considered severe in the community of Peckham.

Bush Fires can be natural or man-made (resulting from the clearing of land or mere idleness). Farm areas closet to the bamboos will ignite faster. Physical damage by fire is ranked 4 and financial loss 5. Morgan’s Forest was badly damaged by fire in 2018.

Figure 4.3: Hazard Matrix

Hazard	Frequency	Season	Geography	Total Physical Damage Score (max = 5)	Total Loss Score (max = 5)	Overall impact
Drought	Once per year (Lasting for 6 – 8 months)	December -March Unpredictable due to climate change	Upper Clarendon	4	4	High
Pest	Once per year	July - August	Upper Clarendon	5	5	Very High
Bush Fire	Once per year	November - April	Upper Clarendon	4	5	High
Landslides	Once per year	May-Oct Unpredictable due to climate change	Dykes Hill	4	5	Very High
			Johns Hall	3	5	Very High
			Tweedside	3	5	Very High
			Morgan’s Forrest	3	3	Medium
			Frankfield	3	5	Very High
Flooding	Once per year (During periods of Heavy Rainfall)	September - October	Frankfield Aenon Town Bag Hole Cave Valley Morgan’s Forrest Tweedside	5	5	Very High

4.4 SEASONAL CALENDAR

Medium-scale farming inclusive of poultry and animal rearing and crop production forms the major economic base of Peckham and surrounding areas. A Seasonal Calendar is used to show what happens to the various activities carried out by farmers during a calendar year and how these have been affected by drought which is ranked as the number one hazard affecting farming, the main livelihood.

The seasonal calendar, presented by Table 4.2 shows the main activities related to the planting and reaping of major crops during the year and also identifies the effects during drought.

During a normal year under normal condition the crops planted include yellow and sweet yam, plantain, sweet potato, Irish potato, banana, cocoa, sorrel, ginger, sweet pepper, corn, citrus and sugar cane. Some crops are planted all year round such as sugar cane, yellow yam (especially in Fearon District, Sanguinetti), sweet pepper and cocoa. In fact, cocoa is planted as an alternative crop during droughts. The data also shows where the yield in other crops is smaller in size during drought.

Participants indicated that the drought season varies and has gotten worst over the last few years. They indicated a normal drought period between December and March. However, in recent years there has been an extension to about mid-May, extending the period 6-8 months.

Meeting participants noted that due to changes in weather pattern which residents said is linked to climate change, there are longer periods of drought and so many crops are destroyed. In fact, the residents indicated that in recent times, the changing climate made the occurrence of heavy rains and droughts very unpredictable.

Much of the preparation for planting is done during the months of December to March even though this is the period of intense drought. In this period, many farmers usually turn to chicken rearing and planting of round leaf yam, corn and cocoa, which carry a good and stable price.

Table 4.2: Seasonal Calendar Normal Year and Hazard Time (Drought) – Peckham & Surrounding Areas

Description of Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Effects of Drought
LAND PREPARATION	Sweet potato; Sweet yam/ Yellow yam	✓ X	✓ X	✓ X	✓ X	✓	✓	✓	Cash crops	✓	✓ X	✓ X	Land preparation (cleaning, spraying; burning etc.) is done all year round.
PLANTING • Sweet yam/Yellow yam	✓ Round leaf Yam (X)	✓ Round leaf Yam (X)											When the yam crop is destroyed during drought, the yam head is dug up in Oct/Nov and saved for the next planting season. Round leaf yam which is drought resistant is also planted.
• Sweet potato • Irish potato	✓ Coco X												Irish potato affected by drought so more sweet potato is planted during drought. Coco is planted as an alternate crop.
• Cash crops (pepper, sweet pepper; cabbage)	✓	✓ Corn	✓ Corn	✓	✓ X	✓ X Corn	✓ X	✓ X	✓	✓	✓	✓	Cash crops are planted all year round Cash crops affected by pests (slugs, worms, white flies, bats birds, and rats) during the dry season of April-August. Corn is planted as an alternate crop.
• Sugar cane	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Sugar cane is planted all year round, not affected by drought.
• Sorrel													
• Ginger			✓	✓									Frog Blue ginger is planted as it is more disease resistant
• Cocoa	✓ X	✓ X	✓ X	✓	✓	✓	✓	✓	✓	✓	✓	✓ X	Cocoa is an alternative crop during drought period.
• Banana & Plantain	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	Plantain and banana are planted all year round except late April /May.
REAPING	Cocoa Sorrel Sugar cane	Cocoa Sugar cane	Cocoa Yellow & Sweet Yam Sugar cane	Cocoa Yellow & Sweet Yam Sugar cane	Cocoa Sugar cane	Cocoa Sugar cane	Cocoa Sugar cane	Cocoa Sugar cane	Yellow & Sweet yam Irish potato Sugar cane	Cocoa Sweet Yam Yellow yam Irish potato Sugar cane	Ginger Cocoa Yellow/ Sweet yam Irish potato Sugar cane	Cocoa Cash Crops (X) Sorrel Ginger (X) Sugar cane	Good yield & price for cocoa all year round. Cash crops & Ginger harvest are smaller in size and yield due to drought and pests. Sugar cane is reaped all year round.
LIVESTOCK REARING	✓ Chicken rearing X	✓ Chicken rearing X	✓ Chicken rearing X	✓	✓	✓	✓	✓	✓	✓	✓	✓ Chicken rearing X	During the periods of intense drought (December to March) chicken rearing is done as an alternate means of livelihood.

Key: Black – Y– Denotes activities for ‘Normal Year’ , ‘X’– Highlights effects of Drought (“Abnormal Year”)

NB - Normal Drought period is from November to April. In recent years there has been an extension to mid-May

The other hazards (pests, flooding, landslides, bush fires) affecting the community are also seasonal. In the dry season, July to August, pests such as slug, worms, bats, birds and rats, white flies and ants are common and also destroy the crops. Bush fires also occur mostly during the dry season, November to April. Flooding occurs during heavy rains in the period of May/June and September/October while landslides which result from heavy rains occur during the rainy season, usually May.

4.5 COPING STRATEGIES

In order to meet their food and income needs, households must employ a number of strategies to sustain themselves or continue with their livelihoods when such livelihoods are affected by natural hazards. Some strategies are deemed to be positive while others are negative.

Table 4.4 presents the four main hazards most regularly affecting livelihoods in Peckham and its surrounding areas and the attendant strategies at coping. However, the strategies presented relate primarily to farming, as of the five main types of livelihood identified it is the one most susceptible to natural hazards.

Table 4.4: Coping strategies in response to hazards: Farming

Likely Climate Impact	Positive Coping Strategies and Practices	Negative or Harmful Coping Strategies/Practices
Drought	<ul style="list-style-type: none"> Pray, hope, press along Seek assistance from government Agencies – RADA, Member of Parliament, Jamaica Agricultural Society and Ministry of Labour and Social Security Seek assistance from the Private Sector, Food for the Poor and Church Community members assist each other Go back to work (farming) Get financial assistance from overseas (remittance) Seek loans 	<ul style="list-style-type: none"> Trust from shop (credit) Do more charcoal burning
Bush Fires	<ul style="list-style-type: none"> Build fire barriers Use grass to keep the ground cool 	
Landslides	<ul style="list-style-type: none"> Clear the road Plant trees on hillside Seek assistance from Members of Parliament to put in retaining walls Plant pineapple and cuscus grass Use fever grass as barriers Use hibiscus as hedging 	
Flooding	<ul style="list-style-type: none"> Clean drains Dispose of garbage properly Use sand bags as barriers Build houses higher to reduce the risk of flooding 	

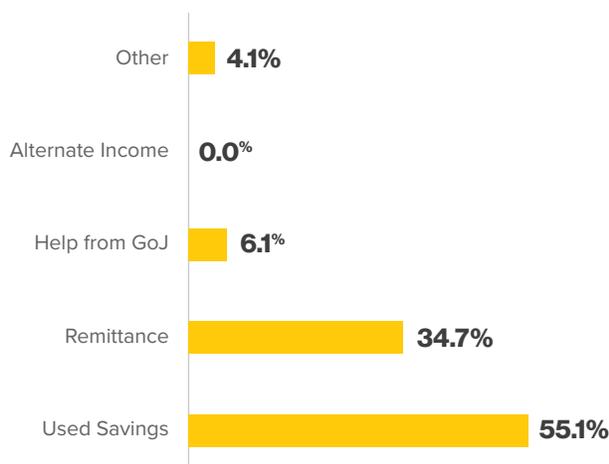
Table 4.4 indicates that except for doing more charcoal burning and crediting goods at shops, the community considers much of the strategies positive, meaning that they believed that are of not much harm to the resource base of the community.

Notably, participants indicated they can only continue to pray, hope and press along, during periods of drought. During these periods, they also seek assistance from both government and private agencies, through remittances, loans and so on.

However, for bush fires, landslides and flooding, the strategies were more geared at protecting their livelihoods and includes actions such as building fire barriers (bushfires), planting trees (landslides) and cleaning drains (flooding). See details in Table 4.4.

The quantitative survey findings with regards to coping strategies for hazards in general, garnered responses as outlined in Fig. 4.4. Chief among the responses were using savings (55.1%) and remittances (34.7%).

Figure 4.4: Coping Strategies for Hazards: Farmers



4.6 RESPONSE TYPOLOGIES

While individuals employ their own responsive mechanisms/coping strategies, external interventions are usually required for the effective and efficient restoration of livelihoods. The response strategies will consist of a number of different kinds of interventions including relief activities as well as early recovery and rehabilitation. Generally for Peckham, critical agencies that would need to respond in the event of the occurrence of the six natural hazards identified include the SDC, the Clarendon Municipal Corporation, RADA, ODPEM, NEPA NWA, NWC, JAS and other farming groups and the Forestry Department.

The individuals at the community meeting in Peckham, while providing information on the main activities/actions to respond to the main hazards of drought, flooding, landslide, bushfire, hurricane and pests provided more detailed and specific information regarding the types of response the community deems necessary in response to drought which was ranked as the number one hazard.

Table 4.5 indicates the types of response the community deems necessary in response to drought. The three main responses are for the installation of black tanks to provide affected households with water, gravity-fed water and drip irrigation to assist farmers. It further indicates the specific areas of need and likely quantities along with costs. Importantly, the data presented relates to Peckham, including Tweedside and the surrounding communities of Morgan's Forest, Sangunietti, and Johns Hall, which form part of the Caribbean Development Bank's Project Area being supported under its Community Disaster Risk Reduction Fund.

The critical agencies that would need to respond in accordance with the types of support needed for drought as outlined in Table 4.5 are the Farmers Group, the Community Development Committee (CDC) and SDC.

Figure 4.5: Responses required by hazard type

Type of Hazard	Geographic Area	Extent of Impact (# of households likely to be affected)	Types of Response Needed	Quantity	Cost (JMD)	Duration	Responsible Entities
Drought	Sanguinetti	10 Households	1,000 Gallon Black Tank Project	280	\$10,850,000	6-8 months	• Farmers Group
	Morgan's Forrest	20 Households					• CDC
	Tweedside	120 Households					• SDC
	John's hall	100 Households					
	Peckham	30 Households					
	Tweedside	120 households	Gravity-fed from River to black tank		\$6,000,000		
	Peckham	40 households	Drip Irrigation • Rio Minho		\$2,000,000		
	Morgan's Forrest	20 households	Drip Irrigation • Cave River		\$1,000,000		

4.7 RECOMMENDED MITIGATION STRATEGIES

In recognizing their vulnerability not only to drought but also to the other hazards of landslides, flooding, pests, bush fires and hurricanes, farmers have also identified the following activities/actions of which some are preventive or responsive while others may be useful for planning longer term adaptation strategies.

DROUGHT:

- Store water in tanks and buckets
- Get water from springs in the community (Peckham)
- Drip irrigation for hillside farming (Tweedside)
- Build a community tank

LANDSLIDES:

- Plant trees
- Plant grass
- Install a Gabian basket

The main partners for these activities are identified as the residents of the community and the Forestry Department.

BUSH FIRES:

- Education Programme
- Farmer's Watch Programme ("Farmers looking out for each other")

FLOODING:

- River training
- Educational Programme
- Clean drains

The main partners for these activities are identified as the Clarendon Municipal Corporation, National Works agency (NWA), the CDCs, and the National Environmental Planning Agency (NEPA)

PEST CONTROL:

- Chemicals
- Pesticides
- Equipment project (mist blower and back pack)

HURRICANE:

- Public Education (3 months before the hurricane)

The main partners for these activities are identified as the Clarendon Municipal Corporation, and the Office of Disaster Preparation and Emergency Management (ODPEM).

With the above information, further strategies can be designed and implemented in response to the six main hazards identified for Peckham and surrounding areas.

5 Social Environment



NATURE OF THE DEVELOPMENT AREA

The community of Peckham is considered as being peaceful by residents except for the issues of robbery and praedial larceny. Volunteerism and civic pride is moderate.

5.1 SAFETY AND SECURITY

The Frankfield Police Station is centrally located and serves approximately fifty-two (52) surrounding communities/ districts. The facility is very clean, and spacious with good ventilation. It also has proper lighting and roofing which makes the environment worker friendly. The staff consists of fourteen (14) persons inclusive of auxiliary workers. However, only five (5) police officers are available on any one shift. The types of communicative devices present include landline phones, one portable radio and one base radio. Mention was made of personal cell phones to aid in communicating on the job. A jeep is the only equipment available to transport officers on their daily operations.

PUBLIC SAFETY ISSUES

Like many communities within the Upper Clarendon belt, Peckham is dense with vegetation. This could be a haven for criminals but is not the current case. There are a few abandoned and dilapidated structures which also pose a threat to citizen's security in the area.



Frankfield Police Station

6 Governance Data



6.1 POLITICAL DIRECTORATE



Constituency:
North West
PC Divisions:
Frankfield Ritchies



Member of Parliament:
Richard Azan
Councillors:
Orville Hackett
Elvis Marshall

6.2 SOCIAL/CIVIC ORGANISATIONS

There exists a number of the governance institutions in the community namely Peckham Citizens Association and Youth Club and the Tweedside Citizens Association. The Tweedside PTA is also a very active and vibrant group.

Table 6.1: Community Based Organization Listing

District	Name	Type	Status	Name of Leader	Contact	MTG Date, Venue & Time
Peckham	Citizens Association	CA	Active			Community Centre
Peckham	Youth Club	YC	Active			
Tweedside	Citizens Association	CA	Active			

6.3 FAITH BASED ORGANIZATIONS

TWEEDSIDE BAPTIST

The Tweedside Baptist is the oldest church in the community and can be found a few chains from Tweedside Church of God another long-standing church in the community. Over the years, other denominations emerged to include Anglican, Apostolic, Church of God, Adventist, New Testament among others. In total, there are approximately nine (9) faith based organizations in the community of Peckham, the majority of which are listed in the table below.



Table 6.2: Peckham Church Listing

Location	Percentages	Leader/Pastor	Telephone
Peckham	Peckham Full Truth Church of God	Pastor Anderson	
Peckham	Peckham Church of God	Pastor Veronica Paterson	
Peckham	Peckham Anglican Mission of the Resurrection	No resident Pastor	
Wesbeach	Wisbeach New Testament	Pastor Brown	
Wesbeach	Wisbeach Church of God of Prophecy	Pastor Forbes	
Tweedside	Tweedside Baptist	Pastor Hall	
Tweedside	Tweedside Church of God	Pastor Williams	
Tweedside	Tweedside Apostolic		
Tweedside	Tweedside New Testament	Pastor Haughton	

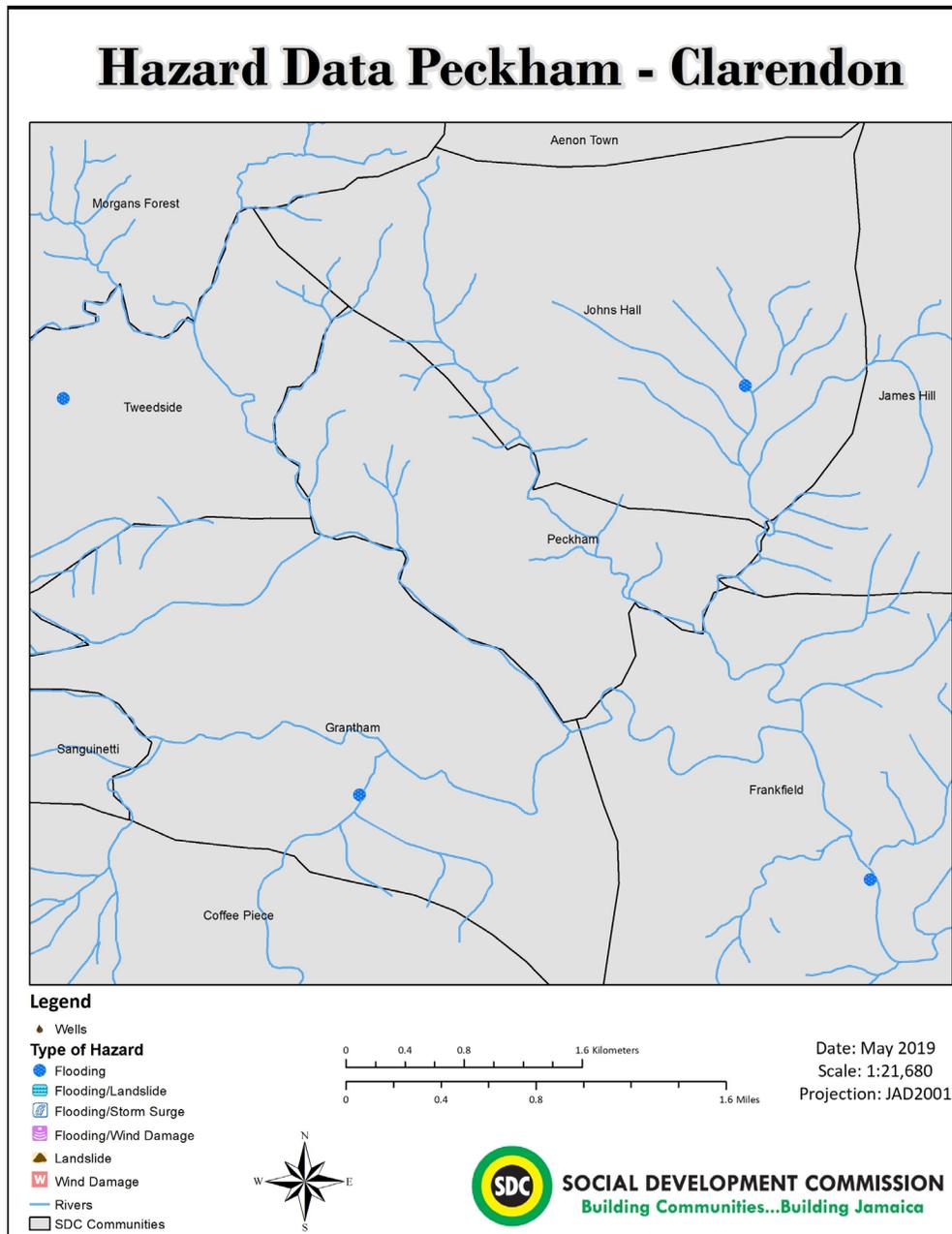
COMMUNITY ISSUES

The community also suffers from the following issues:

- Few recreational facility
- High levels of unemployment
- Inappropriate use of land
- Poor parenting

Appendices

APPENDIX 1 - HAZARD MAP



APPENDIX 2 - REFERENCES

Beckford, Camille. 2018. Building Disaster Resilient Communities (BDRC). BDRC Process. Peckham Clarendon, EHF/CDB CCA DRR/DRM Project PowerPoint.

CDRRF-PAD-Template-CFP2, July 2014, Environmental Health Foundation & Caribbean Development Bank.

ODPEM. Clarendon Parish Profile, 2013. Office of Disaster Preparedness and Emergency Management. Kingston.

PIOJ. Economic and Social Survey of Jamaica: 2009. Planning Institute of Jamaica.

PIOJ. Mapping Poverty Indicators, Consumption and Basic Needs in Jamaica 2001/2002 – Planning Institute of Jamaica 2008

SDC 2009. Community Profile – Peckham, Clarendon.

SENDAI Framework for Disaster Risk Reduction (SENDAI). UNDRR. DesInventar Sendai. Jamaica Maps. <https://www.desinventar.net/DesInventar/profiletab.jsp?countrycode=jam&continue=y>

Social Development Commission (SDC). Frankfield Development Area Profile, SDC, 2014. Kingston

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011: Jamaica. General Report. Volume 1. STATIN, Kingston.

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011 - Jamaica Education Volume 4. STATIN, Kingston.

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011 – Jamaica. Housing. Volume 10. Part A. STATIN, Kingston.

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011 – Jamaica. Housing. Volume 10. Part B. STATIN, Kingston.

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011 – Jamaica. Age and Sex. Volume 2. STATIN, Kingston.

Statistical Institute of Jamaica. 2011. Population and Housing Census 2011 – Jamaica. Disability Indicators. Volume 3. STATIN. Kingston.