

Community Profile
and Livelihood
Baseline Assessment

Llandewey

St. Thomas, Jamaica



Food and Agriculture Organization
of the United Nations



SOCIAL DEVELOPMENT COMMISSION
Building Communities...Building Jamaica

Acknowledgements

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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.

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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 Llandewey, St. Thomas.

Need for the study

The Social Development Commission (SDC) has a mandate to facilitate community development in 783 communities and 3,979 districts in Jamaica.

It does this through:

1. Improving local governance, and
2. Establishing and maintaining community profiles and assessments, as the basis for
3. Facilitating community planning actions that lead to local development and priority actions.

The rationale for this profile is therefore to provide current and relevant information to inform development plans at the local (community) levels and to arm community representatives with information necessary to empower them and create a deeper understanding and appreciation of the environs within which they live.

METHODOLOGY EMPLOYED

DATA COLLECTION METHODS

Initial data was collected via a dwelling count and socio-economic household survey in March 2009. The dwelling count provided an opportunity for the verification of community boundary descriptions. The dwelling count also facilitated the development of a community map that formed the basis of the sample frame used to select 50% of all dwellings in the community. Later, in 2019, wide community consultations and focus group sessions, observation and a convenience sample survey were used to collect primary data during the Livelihood-Based Assessment process.

Secondary data were sourced from a previously done profile on the community as well as reports and publications done by other agencies, ministries and departments.

DATA ANALYSIS AND PRESENTATION

Quantitative data analysis was done using the Statistical Package for the Social Sciences (SPSS), KOBO Toolbox and Microsoft Excel applications.

Elementary occupations, in the context of this document, refers, inter alia, to those employed as street vendors, peddlers, door to door and telephone sales persons, domestic helpers and office cleaners, messengers, watchmen, garbage collectors, and labourers on building construction, mining, manufacturing and transport sites.

PRESENTATION OF FINDINGS

DEMOGRAPHIC DATA

At the time of the survey, the community of Llandewey had an estimated population of 696 individuals occupying an estimated 174 households at an average household size of 4 persons. The male to female ratio within the population was very close with 49% being females and 51% being males. The population was also very youthful with 50.4% of the individuals within the households surveyed being 0-24 years of age. Those 10-14 years of age formed the largest bulk of the population, accounting for 13.3%. On the other hand, the elderly, being those persons aged 60 years amounted to 9.6%.

EDUCATION AND TRAINING DATA

The very youthful nature of the community helps to explain why 61% of households had at least one member enrolled in an educational institution at the time of the survey. Not surprisingly therefore, the highest levels of enrolment were found at the primary (30.2%) or secondary (28.8%) levels.

The highest educational level attained by most household heads was up to Grade Nine with 52.6% of that population having attended All-Age institutions as their last. The data on academic qualifications for household heads indicated that 82.6% had no qualifications, shared almost equally between sexes. Where household heads did have academic qualifications vocational certification and subjects at the Basic Proficiency Level of the Caribbean Examinations were most commonly held.

As it relates to the academic qualifications of other members of the households, the findings were similar to that among household heads with a majority of 64.5% having no qualification. Among the remaining household members, the largest proportion (6.8%), had at least five subjects at the General Proficiency Level.

Approximately 40% of household heads had received training for a specific occupation, activity or trade. Of these persons, the majority received such training by learning from a more experienced person.

HEALTH INDICATORS

The data captured on the use of health care facilities concurs with national data where public health care facilities are utilized by the majority of households. The most significant obstacle to obtaining health service, as noted by 42.5% and 25.3% of respondents respectively, was that of long waiting hours and financial constraints.

Hypertension and asthma were the most common illnesses found among household members while sight-related disability was most common among them.

TENURE STATUS OF HOUSE AND LAND

The majority of household heads (71.3%) stated they owned the house they reside in; however only 50.6% indicated land ownership.

HOUSING STOCK

The majority of houses in Llandewey were made of block and steel or board. A collective total of 71% was either in good or fair condition.

TOILET FACILITIES

Pit latrines were the most prevalent types of toilet facility used in Llandewey by approximately 70%.

ENERGY SOURCES

Household lighting was provided by electricity for 78.2% of households while 72% utilized gas as a fuel source for cooking.

GARBAGE DISPOSAL

At the time of the survey, 83.9% of households in Llandewey indicated that their refuse was picked up by the garbage truck assigned by the National Solid Waste Management Authority. Approximately 65% the households also engaged in the burning of garbage.

EMPLOYMENT AND OCCUPATION

The majority (55.2%) of household heads were male. Of all employed persons, just over half (51.7%) were self-employed on a full-time basis. The main type of occupation held was that as skilled agricultural and fisher workers.

Among other members of households who were employed, the majority were self-employed. The main occupational classifications of household members were service workers and shop and market sales workers, skilled agricultural and fishery workers and elementary level workers.

Unemployment was highest among persons over 60 years of age.

AGRICULTURAL ACTIVITIES

Approximately 74% of households indicated an involvement in farming activities at the time of the survey. The cultivation of cash crops, green banana, fruits and ground provision were the most popular farming activity cited among them. The cultivation of these crops by individual households were not mutually exclusive.

More than half (51.8%) the households involved in farming owned the lands utilized. Approximately 77% disposed of their produce via home use and local markets.

LIVELIHOOD ACTIVITIES

The main economic livelihoods for residents of Llandewey were small business operation, farming, transportation and trade/skilled work. Among the activities carried out as small business operation are hair-dressing, barbering and shop-keeping. Farming activities include coal mining, bee-keeping and traditional farming while trade/craft work includes plumbers, carpenters and chefs.

IMPACT OF HAZARDS ON LIVELIHOOD

The environmental profile on Llandewey indicates flooding, bushfires, droughts and landslides as natural hazards more regularly and likely to impact the livelihood activities within the community. While droughts and landslides affect all areas of the community, bushfires and flooding specifically impact areas such as Mount Sinai, Hillside and Subana, and Orange Tree, Guinea Corn Piece and Gordon Castle, respectively. Hazards have varying impacts on the residents and their livelihood: loss of income and loss of property, primarily. While strategies are employed locally to cope with these hazards, the residents point to immediate response needs such as the distribution of seedlings/plants, the construction of temporary bridges and footpaths, and the provision of water. A number of external entities such as the Jamaica Defence Force, the Rural Agricultural Development Agency and the National Work Agency are cited as having responsibility. Medium to long-term response but also mitigation strategies recommended include bush fire management training and the provision of water harvesting and irrigation mechanisms.

CRIME AND SAFETY

Only 9.2% of households had a member who had ever been a victim of crime within their lifetime. No victim reported any of the crimes. Approximately 56% of household respondents felt very safe in the community and a further 88.5% indicated the level of crime in the community was low.

COMMUNITY NEEDS

Respondents identified the following as the top five development priority/needs for the community:

1. High levels of adult unemployment
2. High levels of youth unemployment
3. Limited access to required amenities
4. Poor roads
5. Limited or no opportunities for training and employment

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Acronyms

BMC	Borrowing Member Country
CBO	Community Based Organisations
CDB	Caribbean Development Bank
CDC	Community Development Committee
CDMC	Community Disaster Management Committee
CDRMP	Community Disaster Risk Reduction Plan
CDRRF	Community Disaster Risk Reduction Fund
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ESSJ	Economic and Social Survey of Jamaica
FAO	Food and Agriculture Organization of the United Nations
HH	Household
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
JTDRMP	Jeffrey Town Disaster Risk Management Plan
JTFA	Jeffrey Town Farmers' Association
JTFYG	Jeffrey Town Farmers' Youth Group
JTIDRRP	Jeffrey Town Integrated Disaster Risk Reduction Project
JTWFG	Jeffrey Town Women's Farmers Group
LBA	Livelihood Baseline Analysis
MHH	Male Headed Household
MOA	Ministry of Agriculture
MOH	Ministry of Health
MP	Member of Parliament
NDP	National Development Plan
NGO	Non-Governmental Organisation
NHF	National Health Fund
NWA	National Works Agency
NWC	National Water Commission
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
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 Llandewey, St. Thomas.

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 over others and none over those deemed as 'Acts of God'. In recognizing the possible impact on livelihoods and therefore the sustenance of communities, the SDC also 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, 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 (Table 4.7) refers also to the neighbouring community of Ramble. Ramble, like Llandewey, 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.

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.

Methodology

DATA COLLECTION METHODS

Primary and secondary data were used in the compilation of this community profile.

PRIMARY DATA COLLECTION METHODS:

A dwelling count and socio-economic household survey was conducted over a one month period commencing in February 2009. The dwelling count provided an opportunity for the verification of community boundary descriptions. The dwelling count identified a total of 183 dwelling units.

The dwelling count facilitated the development of a community map that formed the basis of the sample frame used to select 50% of all dwellings in the community. A systematic approach was used to select all dwellings for the survey. Simple random sampling was used to select participating households. Single households were self selected. The head of household was identified as the respondent to the questionnaire. In the absence of the head of household another individual who could speak on matters of the household was selected.

Informal rap sessions were used to collect historical information of the community from residents.

LIVELIHOOD BASELINE ASSESSMENT

- 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

SECONDARY DATA COLLECTION

Secondary data were gleaned from reports and publications provided by various agencies, ministries and departments.

DATA ANALYSIS

Quantitative data analysis was conducted through the use of Microsoft Excel and Statistical Package for the Social Sciences (SPSS). Household Survey data is presented using a series of tables and graphs. Data collected through the convenience sample was entered and analyzed utilizing KOBO Toolbox and Excel.

Overview of the Community

Llandewey is an agricultural community and a major centre that provides social services to four surrounding communities. Llandewey is best known for its green hills, most prominent of which is Judgment Cliff which is the only site on record that sank with Port Royal during the great earthquake. Judgment Cliff was recorded in history to be a plantation which collapsed during the earthquake leaving a giant crater on the mountain side. The community is also known for mangoes as the major crop cultivated since the creation of the land settlements and the intervention of the Yallahs Valley Lands Authority in advancing agriculture as part of the arrangements. Historically, there was a Banana house which was a central point for collecting the product from Hagley Gap, Cedar Valley, Richmond Vale and surrounding communities. As a main centre the community has a post office, police station, People's Cooperative Bank and clinic that serve residents in the four communities of Ramble, Riverhead, Easington and Llandewey.

The community was originally two sugar plantations: one at Turner's Gap which was owned by the Burke's Family and the other at Gordon Castle which was owned by National Hero George William Gordon. The community later expanded from Turner's Gap to Sobana and the Abbey with the establishment of the land settlement under Project Land Lease (PLL) 2 which provided land for housing and agriculture for a "live and work" arrangement. Later, residents migrated from the hilly interior of Turner's Gap and Sobana and across the river from Gordon Castle and Orange Field and populated areas along the main road to further develop the district of Village Hall.

The community is rich in natural resources; rivers, springs, arable lands but is grossly under-populated. There are only 183 dwellings in the community and overtime, the youth population has sought to migrate to the city for career and educational pursuits. This has impacted significantly on the social capital of the community as thriving youth clubs have become defunct and succession planning in organizations continues to be a major problem.

Llandewey is among several communities in the area that have suffered the effects of severe environmental degradation. The impact is mainly seen in the eroding banks of the Yallahs River that flows through community eating away the mountainside and taking land and homes in its path. The infamous Murray Gully at the entrance of the community has also been a major challenge as flooding in that area has caused loss of lives in many instances and is therefore impassible during heavy rains.

Despite the challenges, the community has the prospect for great development that can contribute significantly to the development of the parish and the overall economy. The vast land spaces could be utilized in the expansion of agriculture, housing, and commercial activities to support a heritage tourism product as the community has a rich historical legacy. Llandewey is home to Rudolph Burke, the first JAS president who also established an office which is now the People's Cooperative Bank in the community. Other personalities include Nancy Williams and Linda Cain, social workers who contributed significantly to the early community development process through the Social Development Commission's Community centre programme who are still remembered today for their contribution.

The Llandewey community centre is the second oldest community centre in Jamaica and is one of numerous historical sites in the community. Others include the previously mentioned Gordon Castle which was the home, church and plantation of National Hero George William Gordon, the ruins of the Sugar Works at Village Hall, Judgment Cliff, the Abbey Church, a graceful stone structure built in 1889, in the shape of a cross and the Llandewey Police Station formerly a storage area for Manheim estate.

The community is also known for the preservation of culture and traditions especially in music, specifically Mento with the 'S-man' and presently Red Top Mento band, one of very few in the country that preserves this aspect of our culture. Obeah was also a prominent feature of this community as Yaya Moodie, one of two persons who started the practice in the parish was directly connected to the community as Manheim estate, owned by her family, was located just above the community, divided by the Yallahs River Valley. There were therefore two prominent personalities Gartlet Fisher and the other known only as "Sugar" who was the healer. Baalam Moodie, husband of Yaya Moodie is buried on the premises of the Bethesda Methodist Church. The community is also known for cricket as a major community activity which is still maintained today.

The community of Llandewey has great potential for development if its resources are harnessed and utilized in a properly planned and systematic manner with the participation of its greatest resource- its people.



1 Geographic Data



The Llandewey community is located north off the St. Thomas main road, approximately six miles from Yallahs, one of the parish’s main commercial centres and nineteen miles from the parish capital, Morant Bay. The country’s capital is accessible by approximately thirteen miles through Cambridge Hill and Eleven miles. Llandewey is a small community with small scale commercial activities and no formal residential arrangements as dwellings are located along the main road with the exception of Gordon Castle and Orange Field which are located across the Yallahs River. Mount Sinai, Gordon Castle, Village Hall and Cambridge Hill are the four main districts in the community. It is the main centre of the Llandewey community cluster which is comprised of five communities on the western border of the parish.

1.1 COMMUNITY MAP

The Llandewey Community map can be accessed at the Social Development Commissions’ Parish Office in St. Thomas.

The Llandewey Community map can be accessed at the Social Development Commissions’ Parish Office in ST Thomas.

East	West	North	South
Judgement cliff/ Yallahs River	Eleven Miles	Ramble	Smithfield

1.2 DESCRIPTION OF COMMUNITY BOUNDARY

From the point where big gully crosses the Mount Sinai main road, west across the hill to Cambridge Hill gap, northerly across the mountain to Turner’s Gap then north to Subanna and East down the slope to Bethesda All Age School along the interior road which intersects with Ramble main road at Cocoa Walk then East across the Yallahs river to Orange Field, then south along the Yallahs river bank to the point where big gully crosses Mount Sinai road. There are four (4) districts in the community:

- Mount Sinai
- Village Hall
- Cambridge Hill
- Gordon Castle

1.3 PHYSICAL FEATURES

The terrain of the Llandewey community is predominantly hilly as the foothills of the Blue Mountain Range are located in the community. There is one river, the Yallahs River, which borders the community and three springs - one that flows through the district of Mount Sinai, known as Alin Spring; one through the Gordon Castle district known as Mellington Spring; and Samson Spring which flows from a rock adjacent the main road at Village Hall.

The climate of Llandewey is usually dry, however the moderate drainage and storm relief systems are sometimes overwhelmed during periods of heavy rain especially at Samson Spring which usually floods the main road and causes infrastructural damage.

The community of Llandewey possesses valuable natural resources. Sand is mined at one major location in the community and the river is used for domestic purposes. Most of the land in the community is not utilized but occupied portions are used for agriculture, housing, commercial activities and social services.

Despite its small population the community is rich in physical capital. Though sections of the road are badly damaged, the roadways are designed to accommodate two lanes of traffic and are in relatively good condition. There are numerous historical sites and buildings present in the community and the community has a health centre, post office, Rural Agricultural Development Authority (RADA) office, community centre, police station, PC Bank, all age school, four churches and one basic school.

1.4 OVERALL HISTORY AND CULTURE

Llandewey was originally a community of large sugar plantations stretching across its borders. Chief of these was the plantation owned by George William Gordon which stretched across the Yallahs River to the border of Ramble. The community was named after a town in North East Wales. The historical sites in the community testify to this fact. These include the Sugar works at Village Hall, the plantation ruins at Garden Castle and the abbey church built in 1889 which remains in very

good condition. Judgment Cliff, recorded in history as a sugar plantation which also sank during the great earthquake that sank Port Royal, also remains as a testimony to this.

The Llandewey community centre is second oldest in Jamaica after Porus. The historical development of the community was based on expansion in agriculture, more-so peasant farming, which remains the main source of income today.

Over the years the community has benefited from programmes that seek to advance agricultural development such as the Yallahs River Lands Authority's

expansion of agriculture through the land settlement programme. The community presently is the location of a functional Rural Agricultural Development Authority office which also houses a women's programme and supports the Llandewey Women's organization.

Housing development in the community has been slow as the presence of the dangerous Murray Gully and bad roads is a major deterrent. Furthermore, large portions of the land in the community are still owned by the family of the early proprietors and remain unoccupied. The development of the community overtime is documented in the historical timeline below.

Table 1.1: Community Timeline

Time Period	Major Developments	Major Developments
1950's	<ul style="list-style-type: none"> • Yallahs Valley Lands Authority advanced agriculture with the planting of mangoes at Sobana • Bethesda Methodist Church was built. 	<ul style="list-style-type: none"> • Hurricane Charlie devastated the community and claimed seven lives which was significant to the then population
1960's	<ul style="list-style-type: none"> • Bethesda All Age School was built. • Land settlement programme implemented to provide housing and farm lots to residents 	
1970's	<ul style="list-style-type: none"> • Bethlehem Basic School built • More houses constructed; community became more populated • Community centre programme established by SDC • RADA office was built • Bridge widened at Samson Spring to allow for easier vehicular traffic. 	
1980's	<ul style="list-style-type: none"> • Bethlehem Church of God Prayer House built • More houses built • Community centre reconstructed and fenced. 	<ul style="list-style-type: none"> • Hurricane Gilbert destroyed many houses and caused three deaths. • Blue Mountain Water scheme makes community water supply inadequate.
1990's	<ul style="list-style-type: none"> • Baptist Church moved from Gordon Castle to Village Hall • Community centre refurbished • Electricity went to Cambridge Hill • Llandewey Main road resurfaced • Telephone lines came to the community • Catchments tank built at Sobana 	<ul style="list-style-type: none"> • Unemployment among the youth and adult population • Decline in agriculture • Environmental degradation • Damaged infrastructure
2000-2009	<ul style="list-style-type: none"> • Bethesda All Age School burnt and rebuilt • Police Station and RADA office refurbished 	<ul style="list-style-type: none"> • Methodist Basic School closed • No attention given to the community by elected representatives. • Bad roads • Poor transportation system • Low skill levels and unemployment among youth and adult population

2 Social Data



2.1 DEMOGRAPHICS

POPULATION AND HOUSEHOLD SIZE

The estimated total population of Llandewey community was 696 (SDC household survey). The total number of households was 174 and the average household size was 4 persons, which is a little above the national average of 3.3 persons per household (The Jamaica, Survey of Living Conditions, 2007).

AGE AND SEX DISTRIBUTION OF HOUSEHOLD HEADS

The sex composition of household heads in the community compares well with the trends across Jamaica, where the man is primarily reported as the head of the house (Figure 2.1). Approximately 44.8% of the households surveyed are headed by females, contrasting the national average of 53.4% male reported by the Jamaica Survey of Living Conditions, 2007.

Figure 2.1: Percentage Distribution of the sex of Household Heads in the Community

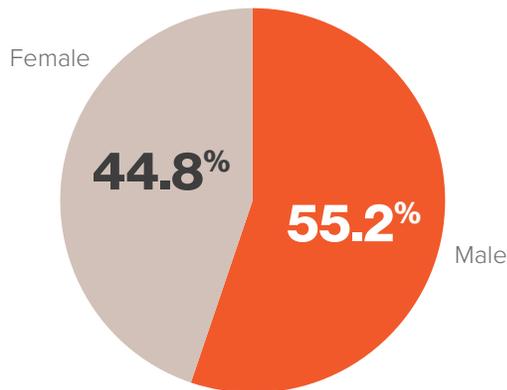


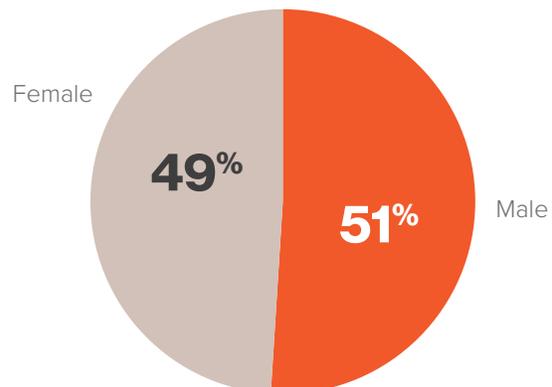
Table 2.1: Age and Sex Distribution of the Household Heads (Source: SDC Social and Economic Survey 2009)

Age Cohort (years)	% Male	% Female
15-19	0	3
20-24	4	5
25-29	6	0
30-34	10	0
35-39	6	21
40-44	17	8
45-49	15	13
50-54	10	10
55-59	10	5
60 – 64	4	3
65+	18	32
Total	100	100

AGE AND SEX DISTRIBUTION OF THE POPULATION

The community's population as represented by Figure 2.1 shows that there is approximately two percent more males than females in the community of Llandewey. This statistic coincides with the national trend where the percentage of males to females is almost always closer to 50%.

Figure 2.1a: Percentage Gender Distribution in Jeffery Town



The age group with the largest percentage (13.3%) of residents in the community is the 10-14 years (Table 2.2). Approximately 12.4% are between the ages of 5-9 and 11.5% between 15-19 years, 8.3% between the ages of 0-4 years and 7.8% above sixty five years. Llandewey therefore has a very youthful population which creates demand on essential social services. Education, training and employment opportunities are most essential and are highlighted as the main priorities for the community (SDC social survey 2009).

Table 2.2: Age and Sex Distribution of the Community

Age Cohort (years)	% Male	% Female	% Total
0-4	4.6	3.7	8.3
5-9	4.9	7.5	12.4
10-14	7.8	5.5	13.3
15-19	6.9	4.6	11.5
20-24	2.3	2.6	4.9
25-29	2.6	4.0	6.6
30-34	3.2	3.2	6.4
35-39	2.9	4.0	6.9
40-44	3.7	2.9	6.6
45-49	3.2	2.6	5.8
50-54	2.6	2.0	4.6
55-59	2.0	1.2	3.2
60 – 64	1.2	0.6	1.8
65+	3.2	4.6	7.8
Total	51	49	100.0

An examination of the age structure indicates a close distribution of the population by sex for almost all age groups except for the 5- 9, 10-14 and 15- 19 age groups where there are more males than females in the 10-14 and 15-19 age cohorts and more females than males in the 5-9 age cohort.

Overall, the percentage of the 0-24 years accounted for 50.4% of the total population thus making the population a fairly youthful one. The community boasts a working population (15-64 years) of 52.3% which is slightly below the national figure reported by the JSLC, 2007. The elderly (60 years and over) accounted for only 9.6% of the overall population of the community which is much lower than the national figure of 12. 2% reported by the JSLC, 2007. Therefore, the population of the community when compared to the national is more youthful, has a lower percentage of working age but a smaller percentage in the elderly years.

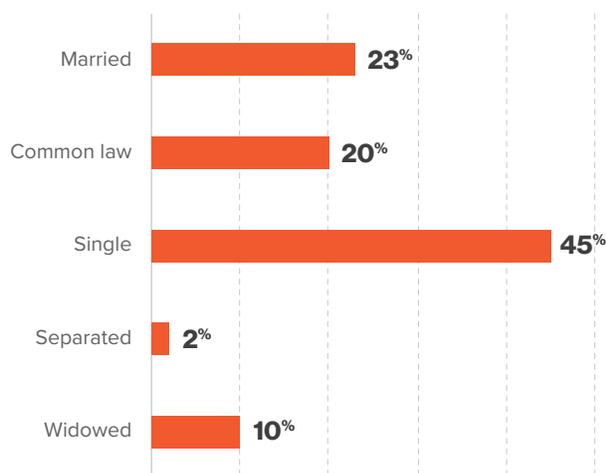
DISTRIBUTION OF THE POPULATION BY DISTRICTS OF THE COMMUNITY

Village Hall is the largest district in the Llandewey community and accounts for approximately 65% of its population. This can be attributed to the fact that historically this was the centre of the community as residents migrated from the land settlements at Turner’s Gap and Sobana to reside in this district while utilizing those land spaces for agriculture. Residents of Gordon Castle also migrated from across the Yallahs River which caused severe damage to homes and property in that district. Mount Sinai is the second largest district accounting for approximately 20% of the population, while approximately 10% is accounted for at Cambridge Hill and 5% at Gordon Castle.

UNION STATUS OF HOUSEHOLD HEADS

The majority (45%) of the household heads described their union status as being single (Fig.2.2). However, married and common law unions, 23% and 20% respectively, reflect a high level of “stable” or co – residential unions (43%) in the community of Llandewey. The remaining household heads (12%) accounted for the separated and widowed statuses.

Figure 2.2: Percentage Distribution of Union Status of Household Head



There is a higher percentage (43.6%) of female heads of household who are single which is comparable to males (45.8%). Male heads of household are more likely to be married than female heads, 25% and 20.5% respectively (Fig. 2.3). Male heads (25%) are also more likely to be in common law relationships than female heads (12.8%). Significantly, (17.9%) of female heads are widowed compared to 4.2% of male household heads.

Figure 2.3: Union Status by Sex of Head of Household

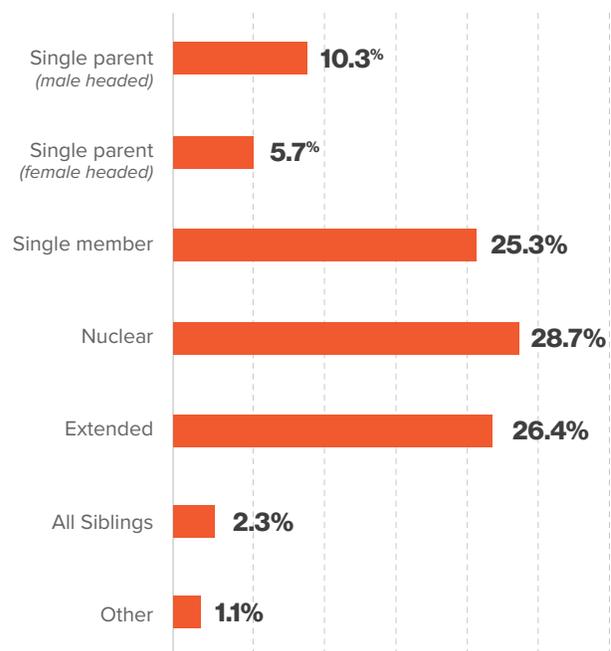
Union Status	Male	Female	Total
Married	25	20.5	23
Common Law	25	12.8	19.5
Single	45.8	43.6	44.8
Divorced	0	0	0
Separated	0	5.1	2.3
Widowed	4.2	17.9	10.3
Total	100	100	100

FAMILY STRUCTURE

Figure 2.4 reveals that the nuclear family structure is dominant in the Community of Llandewey, with almost 30% of households surveyed being such, indicating the

presence of both mother and father in the households. Of significance is the relatively high percentage of extended families (26.4%) which is almost comparable to the percentage of nuclear families. There is also a very high percentage of single member families in the community accounting for 25.3%.

Figure 2.4: Types of Family Structure



MIGRATION PATTERNS

Table 2.4: Parish of Birth of Household Head

Parish	Percentage (%)
Kingston	12.6
St. Andrew	1.1
St. Thomas	79.3
St. Catherine	2.3
St. Elizabeth	2.3
St. Ann	1.1
St. Mary	1.1

The majority (79.3%) of household heads are natives of the parish, while the remaining are migrants from other parishes (Table 2.4). The data also shows that 12.6% of the household heads who migrated to the parish are from Kingston while other migrants, who account for very small percentages, are from St Mary, St Ann, St Catherine, St Andrew and St Elizabeth.

2.2 EDUCATION & TRAINING

EDUCATIONAL INSTITUTIONS

There are two educational institutions in the Llandewey community namely

- Bethlehem Basic School
- Bethesda All Age

Both schools could be described as being in fair condition. Bethesda All Age is located at the border of Llandewey and Ramble while Bethlehem Basic School is located near the community square.

ENROLMENT AND ATTENDANCE

The Bethesda All Age has a seating capacity of two hundred and ten (210) persons and enrollment of one hundred and eight (108). Bethlehem Basic School has a seating capacity of sixty (60) and enrollment of thirty- four (34) students with a student teacher ratio of one to sixteen (1:16). Its attendance figures are comparable with students attending five days per week. A meager 0.9% reported absence from school due to inability to afford supplies. Most teachers within these institutions do not have university degrees but with recent requirements have been enrolled in tertiary institutions.

Sixty one percent (61%) of all household members are presently enrolled in an educational institution (Fig. 2.5).

Figure 2.5: Percentage Distribution of Households with members currently Enrolled in an Educational Institution

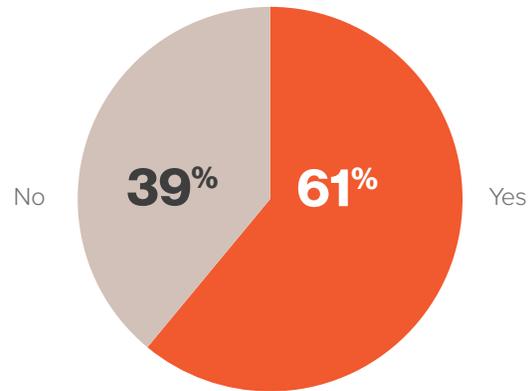


Figure 2.6a indicates that of the household members who are enrolled in educational institutions 16.5% are at the Basic level, Secondary/High 28.8%, All Age 17.3% and the primary/prep with the largest percentage 30.2%. Significantly, tertiary enrollment is extremely small at 5% and vocational 2.2%.

Figure 2.6a: Enrollment by School

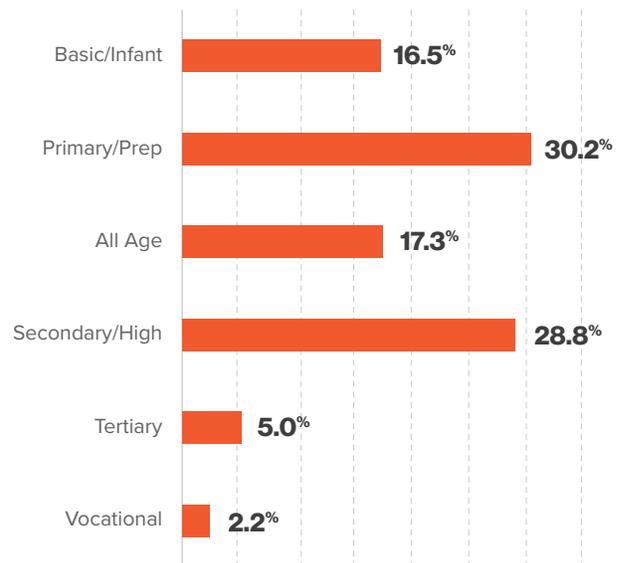


Figure 2.6b clearly shows that at all levels, more girls than boys are enrolled in these educational institutions with the exception of secondary and all age. There are almost equal numbers of boys and girls enrolled at basic school level but no females reported to be enrolled in Junior High Schools.

The majority of persons enrolled in educational institutions attend school five days per week (Fig. 2.7).

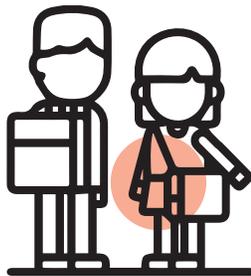


Figure 2.6b: Enrollment by School and Sex

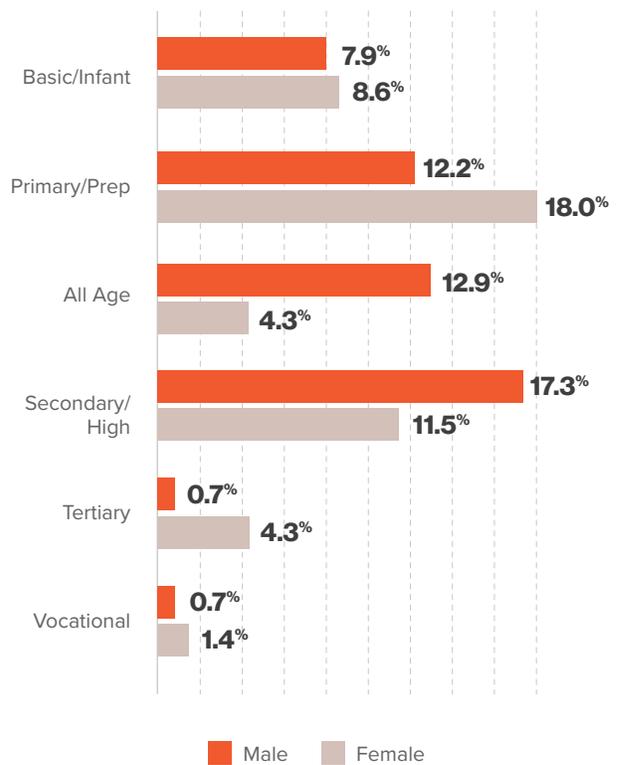


Figure 2.7: Educational Institution Attendance by Sex



It is important to note that for this community, school attendance is very consistent at five days per week for both males and females from the basic to secondary levels. At the vocational, post secondary and tertiary levels, school attendance is consistent between two to four days with the exception of both males and females attending tertiary institutions for five days. The major reasons given for students not attending school was 'working for wages' while others included lack of interest in study and truancy while 1.1% refused to answer.

Table 2.5: Reasons for Non-Attendance

Reasons	Percentages (%)
No interest in study	1.1
Have to work for wages	2.3
Truancy	1.1
Not Stated	1.1

This Question allowed for Multiple Responses

EDUCATIONAL ATTAINMENT OF HOUSEHOLD HEADS

An examination of the gender differentials in terms of household head educational attainment (Table 2.6) reveals an almost even spread between male and females at most of the education levels. Significantly, most household heads, both male and female have attained All Age level education, almost sixty percent (58.3%) males and 52.6% females. This may be attributed to the presence of the Bethesda All Age School in the community which was attended by most household heads, who did not move on to further educational pursuits. Secondary level is second with 26.3% females and 22.9% males. Significantly there are no female household heads who have attained education at the University level but there is a meager 2.1% of males who have--we; which is contrary to the national trends where more females than males have attained tertiary level education.

Table 2.6: Highest Level of Education Attained by Sex of Household Head

Highest Level of Education Attained	% Male	% Female
1 Pre-Primary	0	0
2 Primary	4.2	5.3
3 Secondary	22.9	26.3
4 Elementary	4.2	2.6
5 All –Age	58.3	52.6
6 University	2.1	0
7 Vocational	6.3	5.3
8 Other Tertiary	0	0
9 Post Secondary	0	0
10 None	2.1	5.3
11 Others (State)	0	2.6
Total	100	100

ACADEMIC QUALIFICATIONS OF HOUSEHOLD HEADS

Data on academic qualifications of household heads reveals that an alarming 82.6% of household heads, more being females than males, have no academic qualifications, (Table 2.7). Only 6.3% males attained qualifications at the CXC basic or JSC levels and 2.6% females attained same. While 2.1% males attained 3-4 and above 5 subjects each, no female household head was recoded in this category. Other qualifications mentioned included vocational certification which was attained by for 4.2% of males and 5.3% females, Associate degree/diploma 4.2% males, no females and degree no males and 2.6% females. 5.3% of respondents did not state their level of qualification.

Table 2.7: Highest Level of Academic Qualifications by Sex of Household Head

Highest Level of Academic Qualification		Male (%)	Female (%)	Total (%)
1	None	81.3	84.2	82.6
2	C.X.C Basic, JSC, JSCE, SSC, JC OR 3rd JLCL	6.3	2.6	4.7
3	CXC General, GCE 'O, AEB 1-2 Subjects	0	0	0
4	CXC General, GCE O AEB 3-4 Subjects	2.1	0	1.2
5	CXC General, GCE O AEB 5+ Subjects	2.1	0	1.2
6	GCE General A Level/Cape 1-3 Subjects, HSC	0	0	0
7	College Certificate/Diploma	0	0	0
8	Vocational (Certificate)	4.2	5.3	4.7
9	Associate Degree/Diploma/Other Certificates	4.2	0	2.3
10	Degree/Postgraduate Degree/Professional Qualification	0	2.6	1.2
11	Other Examination (State)	0	0	0
12	Not Stated	0	5.3	2.3

ACADEMIC QUALIFICATIONS OF OTHER HOUSEHOLD MEMBERS

Table 2.8 outlines the highest academic qualifications existing in the community of Llandewey. Males and females academic qualification are comparable, the percentages being 14.8% and 12.5% respectively. It is significant to note the relatively high level (27.6%) female and (36.8%) male reporting having no form of academic qualifications, with males being in the majority. The data however, is much more favourable than the national situation where 77.8% of the 14 and over age group have no academic qualifications (JSLC, 2006)

As it relates to CXC level academic qualifications, a closer examination of the data reveals that both females and males are at equal levels. In fact 3.4% of both males and females had five or more CXC subjects which is the basic requirement for entry to most tertiary institutions. This possibly explains the low percentage of the overall population that indicated being enrolled in a tertiary institution.

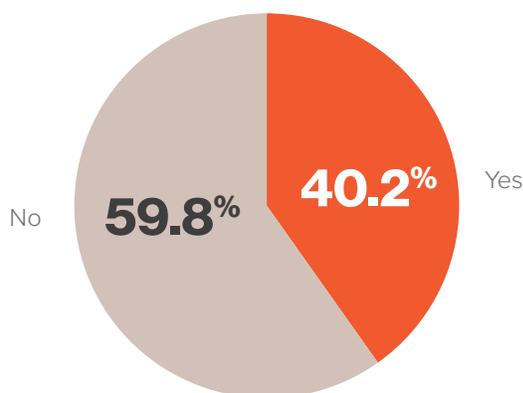
Table 2.8: Educational Attainment Household Members 14 Years and Older

Highest Level of Academic Qualification		Male (%)	Female (%)	Total (%)
1	None	36.8	27.7	64.5
2	CXC Basic, JSC, JHSC, JSCE, SSC,JC or 3rd JLCL	2.3	2.3	4.6
3	CXC General, GCE 'O', AEB 1-2 Subjects	3.4	2.3	5.7
4	CXC General, GCE 'O' , AEB 3-4 Subjects	0.0	0.0	0.0
5	CXC Gen, GCE 'O', AEB 5+ Subjects	3.4	3.4	6.8
6	GCE 'A' Level/ Cape 1-3 Subjects, HSC	0.0	3.4	3.4
7	College Certificate/Diploma	0.0	0.0	0.0
8	Vocational (Certificate)	0.0	2.3	2.3
9	Associate Degree / Diploma / Other Certificates and Degrees MOE Recognized	2.3	2.3	4.6
10	Degree / Postgraduate Degree/Professional Qualification	0.0	1.2	1.2
11	Other Programme(s)	1.2	0.0	1.2
12	Not Stated	3.4	2.3	5.7
TOTAL		52.8	47.2	100.0

TRAINING OBTAINED BY HEAD OF HOUSEHOLD

Less than half, 40.2% of household heads received training in a particular activity, occupation or trade (Figure 2.9).

Figure 2.9: Household Heads with Training in a Specific Activity, Occupation or Trade



A look at Table 2.9 indicates that of those who received training, 19.5% received training from a more experienced person and 9.2% learnt on the job or had

vocational training without certificate. 6.9% received vocational training with certification while 4.6% had professional or technical training with certificate.

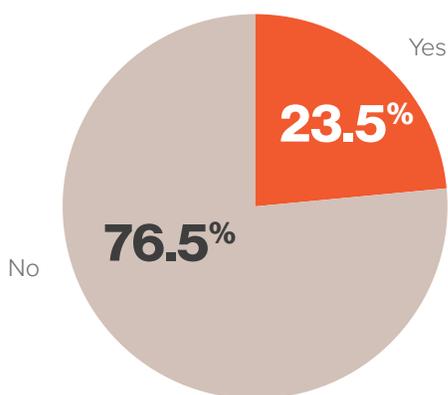
Table 2.9: Training Qualifications for Specific Activity, Occupation and Trade by Household Heads

Training Qualifications	%
Learn from more experienced person	19.5
On the Job	9.2
Professional or Technical: With certificate	4.6
Vocational: with certificate	6.9
Vocational: without certificate	9.2
Professional or Technical: Without certificate	0.0
Other, (state)	0.0

Note: The Questionnaire Allowed for Multiple Responses

Information was collected on how training impacted on employment. Figure 2.10 shows that approximately 23.5% of the persons trained reported that they were currently employed using the training received while the remaining 76.5 % were employed in areas for which they were not trained.

Figure 2.10: Percentage Distribution of Household Heads Employed using Training Received



2.3 HOUSING

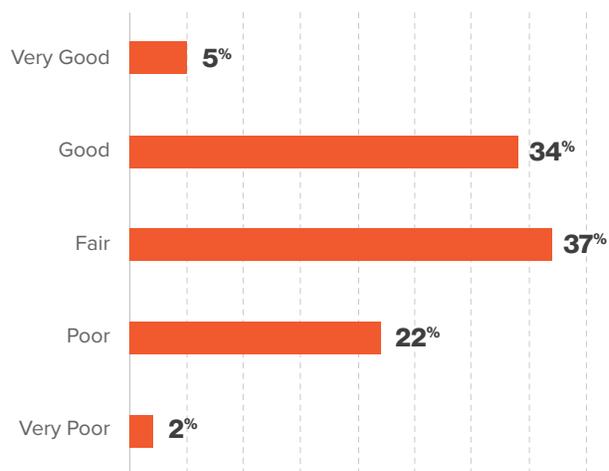
MATERIAL OF OUTER WALLS OF HOUSES IN THE COMMUNITY

The majority (45%) of dwellings in the Llandewey community is made of concrete and blocks, blocks (7%) and boards (34%). Seven percent of dwellings are made of concrete and wood. The use of block and concrete in the outer walls of dwellings in Jamaica, continues to be preferable with the national percentage being 66.6% (JSLC, 2007)

Table 2.11: Material of outer walls of Dwellings

Housing Materials	% of Dwellings in Community
Board	34
Wood	5
Concrete	0
Block	7
Brick	0
Concrete & Blocks	45
Concrete & Wood	7
Stone and Brick	0
Wood & brick	0
Other	2

Figure 2.12: Conditions of Houses in the Community



Very good	Sound physical structure, freshly painted and doors and windows are intact
Good	Structure sound, may not be freshly painted but is in good physical condition
Fair	May or may not need painting, however, may have need for minor repairs
Poor	Damages to the structure, cracked / missing window panes / blades / doors
Very Poor	Not fit for human habitation

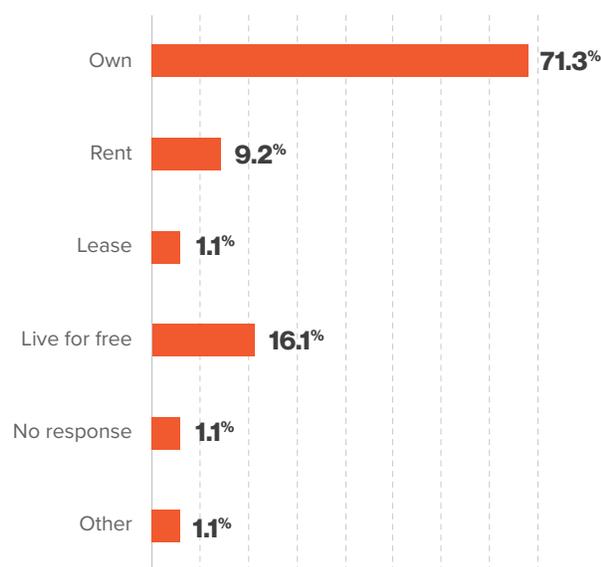
QUALITY OF HOUSING CONDITION

Figure 2.12 indicates that 34% of the houses are deemed to be in a good condition; 37% fair, 5% in a very good condition and 22% in poor condition. Only a minute percentage of the houses (2%) are considered to be in very poor condition. The poorest housing conditions are in the district of Gordon Castle while housing conditions vary within the other districts.

HOUSE AND LAND TENURE

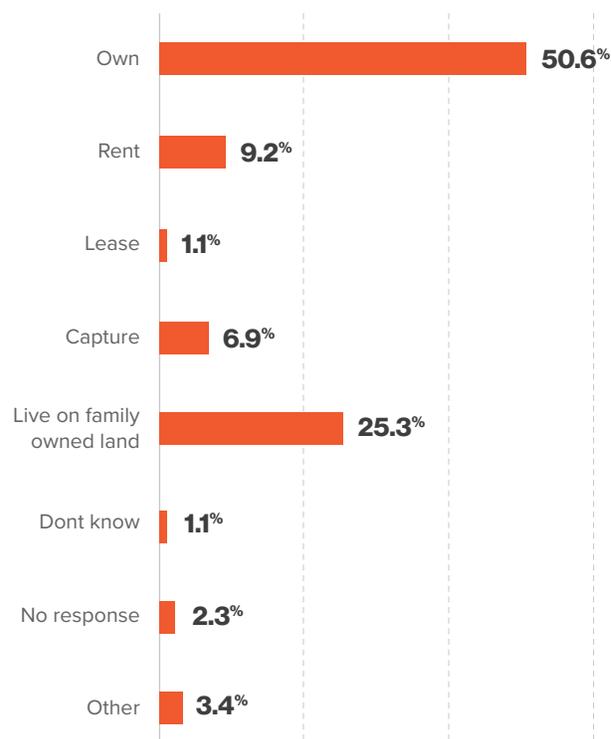
The majority of household heads (71.3%) own the house they reside in (Fig. 2.13a). The data for Llandewey community surpasses the national average where, according to the Jamaica Survey of Living Conditions 2007, 59.8% of households live in their own house and it is found to be typical that there is ownership of dwelling in which households reside. Of significance also is the 16.1% of households who “live for free” more likely in situations where they occupy family homes after migration or the death of the owner who is a relative. To a lesser extent but also significant, 9.2% of households rent the dwelling in which they reside.

Figure 2.13a: Tenure Status of House



The data captured on land tenure (Fig. 2.13b) indicates a variety of tenure statuses but significantly, 50.6% ownership. 25.3% occupy family owned land which is a prominent feature of communities in the parish while 9.2% rent the land which may be concluded as the 9.2% that rent the house in which they reside. 6.9% capture the land and the remaining 7.9% accounts for other arrangements.

Figure 2.13b: Tenure Status of Land



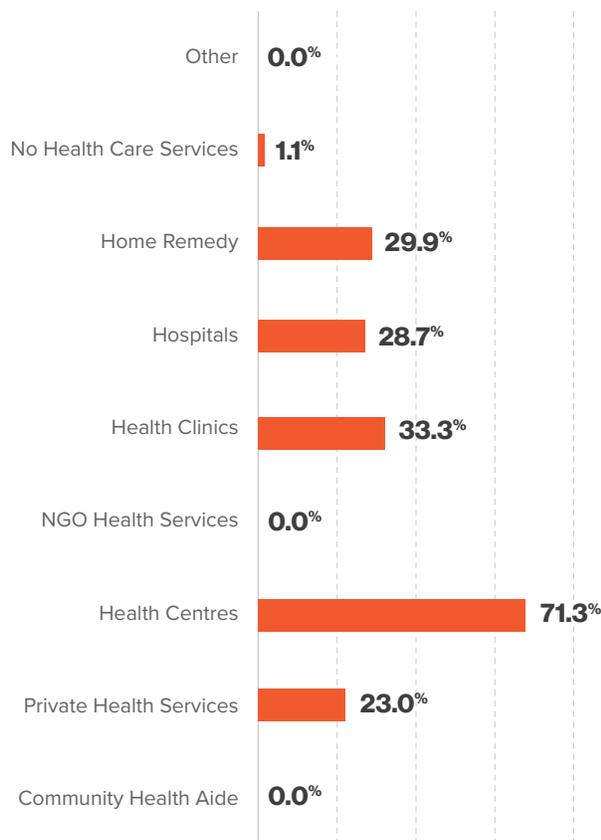
Overall, tenure of house and land are comparable in the Llandewey community. There is a positive trend of land and home ownership and the dominance of strong family ties that characterize the parish are shown not only in significant numbers of extended families but also in the practice of family-owned land and houses which are not usually sold but occupied by those family members who are in need.

2.4 HEALTH AND SANITATION

HEALTH CARE FACILITIES IN THE COMMUNITY

There is one health centre which is located in the community. The Llandewey Health Centre serves four other communities. Its services are varied and include a weekly visit by the doctor. The nearest hospital is located fifteen miles from the community at Lyssons or twenty one miles to the Kingston Public Hospital. There are no private health care providers in the community; however there is one traditional “healer” who is consulted for certain ailments.

Figure 2.14: Health Care Facilities Utilized



This question allowed for Multiple Responses

USE OF HEALTH CARE SERVICES

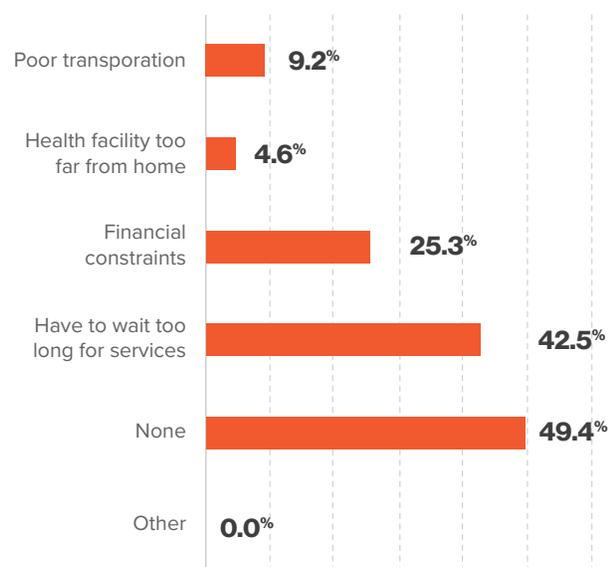
The data captured on the use of health care facilities in Llandewey community is comparable to the national data where public health care facilities are utilized by the majority of households. The national average is 40.5% (Jamaica Survey of Living Conditions, 2007) but for Llandewey it is 71.3%, 33.3% and 28.7%, respectively, for health centres, health clinics and hospitals. The percentage use of public health care facilities by residents of Llandewey community is therefore greater than the national average. It is important to highlight however that though public health services are widely used, 23% of households also utilize private health services. The wide use of the health centre reported for this community is attributable to the fact that there is a type II health centre facility present in the community.

29.9% of households utilize home remedies, a common feature of Jamaican culture and a mere 1.1% use NGO health services (Figure 2.14)

OBSTACLES FACED IN OBTAINING HEALTH CARE SERVICES

More than a half of the number of household heads indicated that they are experiencing obstacles obtaining health care (Fig. 2.15). Among the problems reported in accessing health care, the two major ones are: having to wait too long for services (42.5%) and financial constraints (25.3%). This may be due to the inadequate health facilities that serve the parish. The Princess Margaret Hospital is usually overwhelmed with the number of patients that require medical care as a result patients have to wait extremely long hours for services. To a lesser extent respondents reported that poor transportation (9.2%) and distance of the facility from home (4.6%) were obstacles in obtaining health care services. Despite these obstacles it is important to note that 49.9% of respondents had no obstacles in obtaining health services.

Figure 2.15: Households response to Obstacles in Obtaining Health Services



This question allowed for Multiple Responses

HEALTH PROBLEMS

Table 2.13 presents the types of health problems being experienced by persons within the community. Hypertension, one of the most popular health problems in Jamaica, accounts for 21.8% of the health problems reported. Respiratory problems also represent a significant number of reported cases with sinusitis accounting for 11.5% and asthma 18.3%. Other illnesses reported, namely diabetes, sickle cell disease, arthritis and hypotension had minute percentages. However, of them all arthritis and diabetes are most significant with 12.6% 10.3% respectively.

Table 2.13: Types of Health Problems Faced by Household Heads and Family Members

Health Problems	Frequency and Percentage of Household Members		Total
	Household Head	Other Family members	
Hypertension	16.1	5.7	21.8
Hypotension	1.1	3.4	4.5
Heart Diseases	1.1	1.1	2.2
Kidney Diseases	0.0	0.0	0
Asthma	5.7	12.6	18.3
Diabetes	8.0	2.3	10.3
Arthritis	9.2	3.4	12.6
Glaucoma	3.4	0.0	3.4
Sickle Cell Diseases	0.0	0.0	0
Sinusitis	2.3	9.2	11.5
Other	9.2	0.0	9.2

Importantly, a significant percentage of household heads suffer from chronic illnesses. Hypertension, though 10.4% less than the national average of 26.5%, is very significant in Llandewey. (Jamaica Survey of Living Conditions, 2007) Though household heads were reported to have all listed problems except kidney disease, family members were not reported to have Glaucoma, sickle cell disease, or kidney disease.

HOUSEHOLD DISABILITY

Data presented in Table 2.14 reveals that only 18.4% of the households in Llandewey indicated that they had members who were living with disabilities. Hearing, multiple disability and physical disability were most common with 1.1%, 3.4% and 2.3% respectively.

Table 2.14: Reported Types of Disabilities in the Community

Disability	%
1 Sight Only	12.6
2 Hearing Only	1.1
3 Speech Only	0.0
4 Physical Disability Only	2.3
5 Multiple Disability	3.4
6 Slowness of Learning	0.0
7 Mental Retardation	0.0
8 Mental Illness	0.0
9 No Response	0.0
10 Others	0.0

WATER SUPPLY

Adequate water supply is a major problem for residents in the Llandewey community though millions of gallons flow through community, through the Blue Mountain water scheme, to Kingston.

The majority (34.5%) of households in Llandewey have water supply piped into the dwelling (Table 2.15). This however in most cases represents the facility as water supply to the community is woefully inadequate. As a result, 29.9% uses the spring/ river or stream for domestic purposes, 16.1% use private catchments 11.5% depend on water being trucked to the community and 8% use purchased water.

Table 2.15: Sources of Water Supply to the Households

Sources	% of Households
Private Catchments (tanks, drums, wells)	16.1
Public Catchments	2.3
Public piped into yard	4.6
Public piped into dwelling	0.0
Purchase Water (e.g. Rapid Response)	8.0
Private piped into dwelling	34.5
Public standpipe	3.4
Spring/River/Stream	29.9
Water Trucked to community	11.5
Other	0.0
No Response	0.0

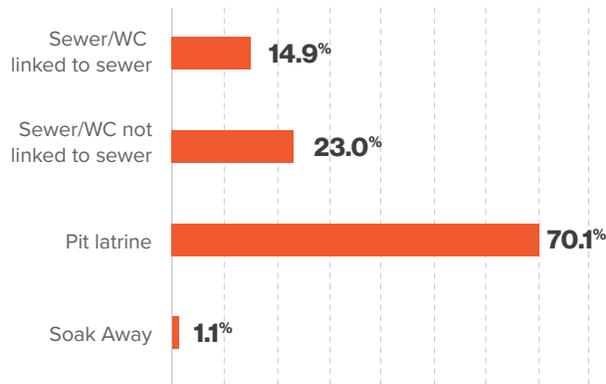
*This questionnaire allowed for multiple responses

2.5 SANITATION

TYPES OF TOILET FACILITIES USED

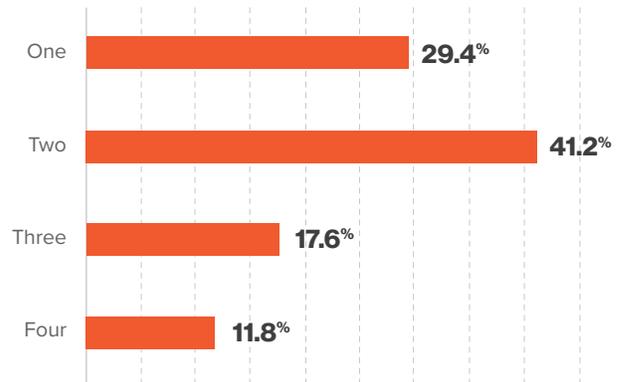
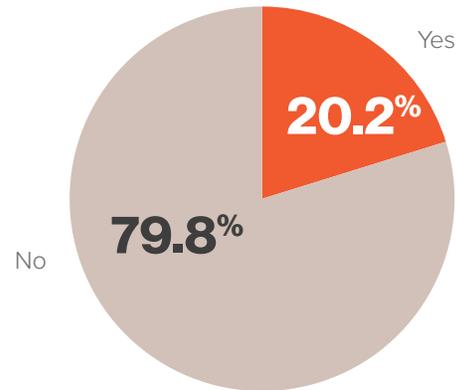
Most (70.1%) homes in Llandewey utilize pit latrine while 23% utilize water closets not linked to a sewer and 14.9% utilize water closet linked to a sewer (Fig. 2.16). Only 20.2% of households indicated that toilet facilities were shared with other households and of these households 41.2% shared with two households.

Table 2.16: Types of Toilet Facilities Used in Llandewey Community



* WC – Water Closet *The questionnaire allowed for multiple responses

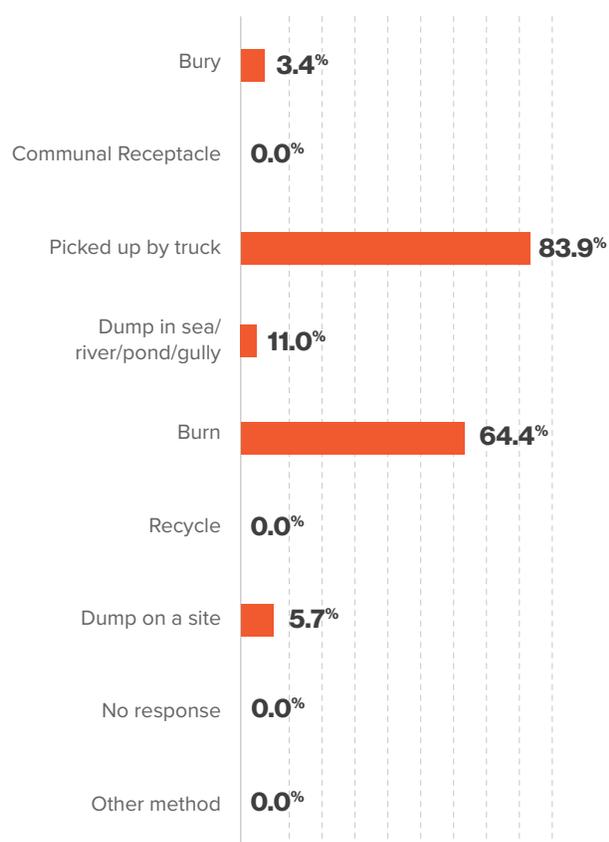
Figure 2.17: Use of Toilet Shared with other households



GARBAGE DISPOSAL

There are two main methods of garbage disposal in Llandewey: 83.9% of households reported that the garbage was picked up by the truck while 64.4% burnt their garbage. Approximately 3% of households bury their garbage while 11% dump in the river, sea or gully and 5.7% dump on site (Fig.2.18). No household recycled their garbage.

Figure 2.18: Methods of Garbage Disposal



*This questionnaire allowed for multiple responses

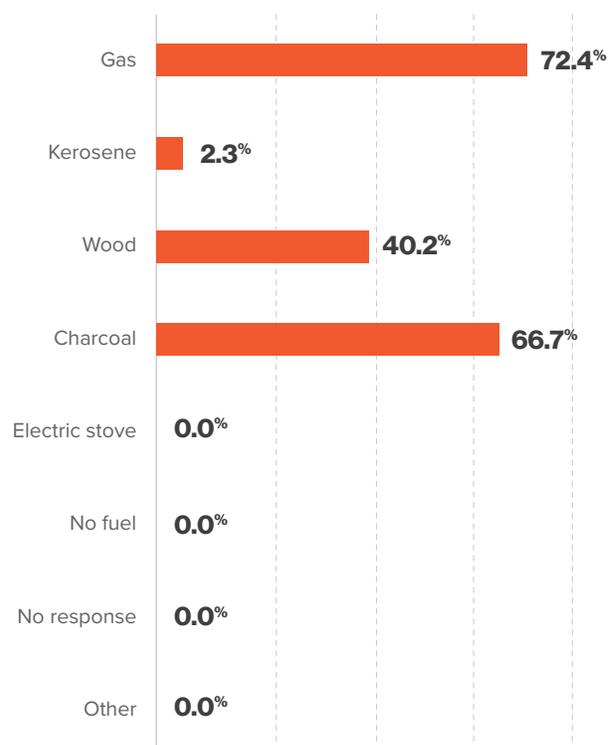
ENERGY SOURCES

The main source of energy for the community is electricity; more than 78.2% of households use electricity, 17.2% use kerosene lamps, and 4.6% use other sources of lighting such as candles, gas lamp, and battery powered lamps. The percentage use of electricity and kerosene in the community is more than 10% less for electricity and more than 11% more for kerosene to the national percentage (90.3 and 6.3 respectively) reported in the JSLC, 2007. This may be attributed to low income levels in community.

COOKING FUEL

Over 72 % of the households use gas as cooking fuel (Fig. 2.19). However, in most responses gas is not the only source of fuel, in some cases it is combined with one or two other sources. Charcoal is a very popular source of fuel utilized in food preparation and for this community accounts for 66.7%. Wood is also used by 40.2% of households while kerosene is used by 2.3% of households.

Figure 2.19: Fuel used for Cooking

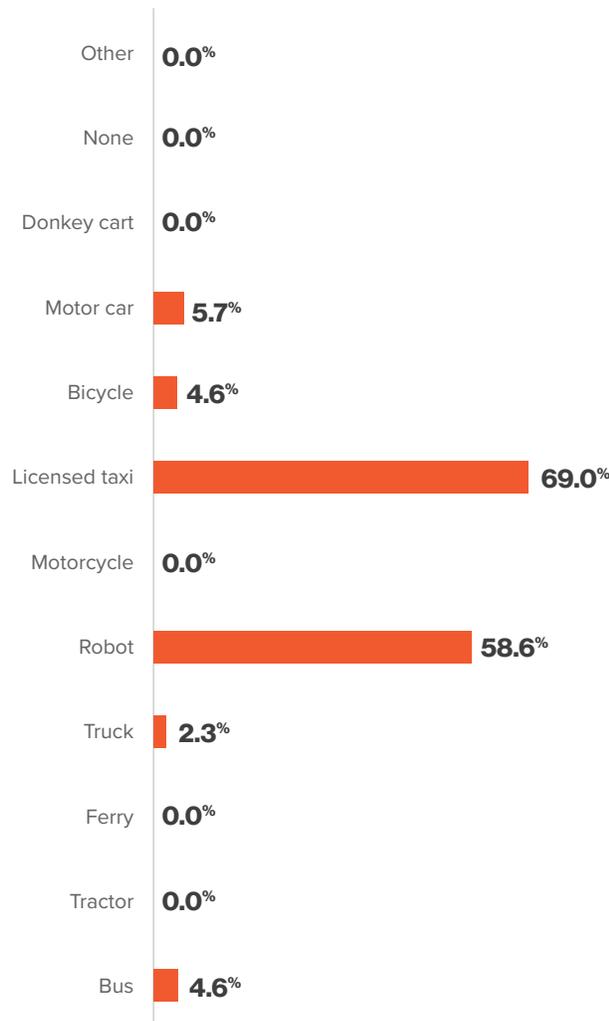


*This questionnaire allowed for multiple responses

2.6 TRANSPORTATION & ROAD NETWORK

The Llandewey community is located approximately four miles off the main roadway that links the parishes of Kingston, St. Thomas and Portland. The road surfaces are in a deplorable condition especially from Easington to Mount Sinai at the entrance of the community. Transportation is therefore not readily available from licensed buses and taxis and there are few private motor vehicles. Robots and licensed taxis are the most popularly utilized means of transportation with 58.6% and 69%, respectively, of respondents reporting usage.

Figure 2.20: Fuel used for Cooking



*This questionnaire allowed for multiple responses

Other road networks in the community include internal paved and unpaved road, tracks, lanes and pathways. Sections of the road are in serious disrepair especially the Mount Sinai and Cambridge Hill roads. Other sections of the road through the Village Hall district are in relatively good condition though there are potholes in some sections.

2.7 COMMUNICATIONS

ACCESS TO TELEPHONE AND INTERNET SERVICE

Almost all households, 89.7% in Llandewey community have telephone services (Fig. 2.21). Only 2.6% of households have landline only, while approximately eight of every ten households have both landline and cellular phones. Nine of every ten households or 89.7% of households have cell phones only. (Fig. 2.22).

Figure 2.21: Household Access to Telephone

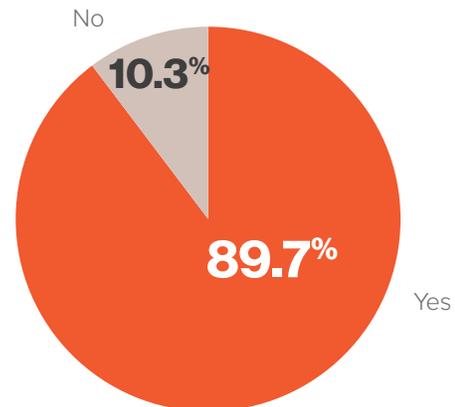
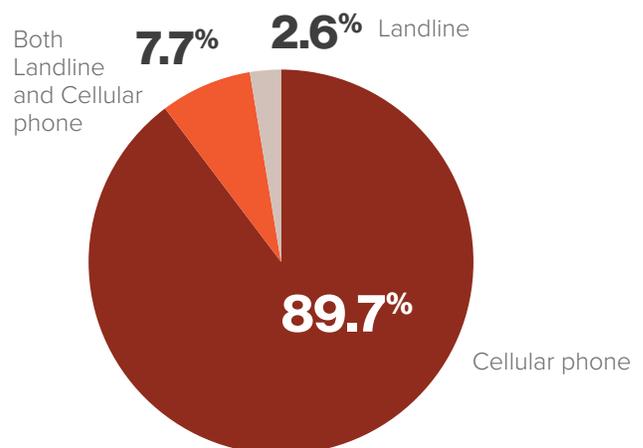


Figure 2.22: Types of Telephone used



Only 3% of households reported having access to the internet (Fig.2.23). This is less than the national percentage of 7.6 reported for Jamaica in 2007 (JSLC, 2007).



Figure 2.23: Access to Internet

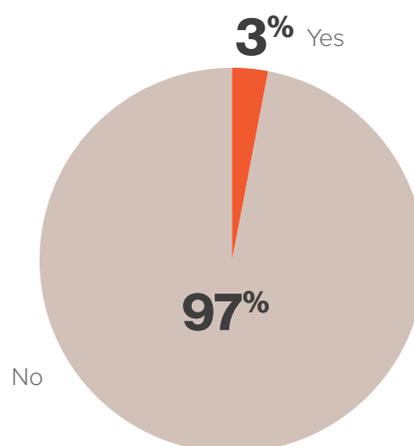


Table 2.18: Social Services Present within the Community

Locations	Types of Social Service	Number	Condition
Village Hall	Post Office	1	Fair
	Police Station	1	Very good
	Schools	2	Fair
	Churches	5	Fair
	Financial Institutions	1	Good
	Heritage Sites	1	Very poor
Cambridge Hill	Churches	1	Good
Mount Sinai	Community Centre	1	Poor
	Heritage Site	1	Good
Gordon Castle	Heritage Sites	1	Very Poor

3 Economic Data

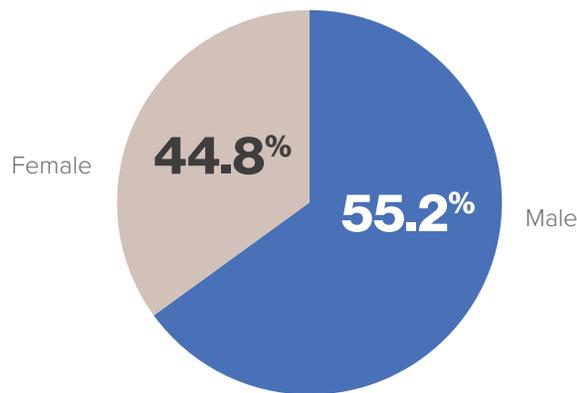


3.1 EMPLOYMENT STATISTICS

HOUSEHOLD HEAD EMPLOYMENT

Of the total number of household heads employed, 55.2% are males while 44.8% are females (Fig. 3.1). Of the total number of male household heads, 60.3% are employed and of females, 39.7 are employed.

Figure 3.1: Percentage Household Head Employed by Sex



MAIN OCCUPATIONS OF HOUSEHOLD HEAD

Of those household heads employed, 21.8% were employed in agriculture, 9.2% service workers and shop and market sales persons (Table 3.1). 4.6% had elementary jobs, while 6.9% plant and machine operators and assemblers.

EMPLOYMENT STATUS OF HOUSEHOLD HEADS

In terms of type of employment, Table 3.2 shows that the majority of household heads (51.7%) are self employed full time and 20.7% self employed part time. This self employment is mainly in agriculture as Llandewey is predominantly a farming community while other self employment comes from small scale commercial activities. 19% of household heads are employed full time and 8.6% part time.

Table 3.1: Occupational Classification of Head of Households

Occupations	%
legislators	0.0
professional	0.0
technicians and associate professionals	0.0
clerks	0.0
service workers and shop and market sales workers	9.2
skilled agricultural and fishery	21.8
craft and related trades workers	0.0
plant and machine operators and assemblers	6.9
elementary occupations	4.6

Table 3.2: Household Head Employment Status

Employment Status	%
Employed – Full Time	19.0
Employed – Part Time	8.6
Employed – Seasonally	0
Self – Employed – Full Time	51.7
Self – Employed – Part Time	20.7
Employed – Contractually	0

INCOME OF HOUSEHOLD HEAD

It can be gleaned from Table 3.3 that the majority of household heads (46.6%) earn an income of under \$40, 000.00 per month. Within this group over 20% earn under \$10, 000.00 per month, while 2.4% earn \$20,000- \$29,999 per month. Only 2.4% of the population earned between \$40000 -\$79,000. It is however, notable that 60.7% of persons provided no response/not applicable, which is not surprising as persons are usually reluctant to provide such information. The income range with the highest percentage of persons (10.6%) is the \$3,700-\$5,999 income range.

Table 3.3: Monthly income from all Employment

Income	%
Less than 3,700	5.9
3,700-5,999	10.6
6,000-9,999	3.5
10,000-19,999	8.2
20,000-29,999	2.4
30,000-39,999	2.4
40,000-79,999	2.4
Not applicable	54.1
No Response	10.6

ADDITIONAL SOURCES OF INCOME FOR HOUSEHOLD HEAD

The main source of additional income for household heads is support from state assistance (34.5%). Household heads also relied on remittances (13.8%) and local family members and friends (12.6%) for additional sources of income. 51.7% of respondents had no additional source of income (Table 3.4).

Table 3.4: Additional Sources of Income

Sources	%
State Assistance (PATH, pension etc.)	34.5
Remittances (Overseas)	13.8
SESP (Social and Economic Support Programme)	0.0
Support by local network of family members and friends	12.6
Rental of Property	0.0
Interest from Financial Investments	1.1
Others	1.1
None	51.7

This Question allowed for multiple responses

EMPLOYMENT STATUS OF ALL HOUSEHOLD MEMBERS

The majority (77.9%) of the employed are self employed, with more males being self employed than females. Full time employment is the next significant category accounting for 25.8% household members, also with 10.5% more males than female. Part time employment is equal between male and female however while there are males employed seasonally and contractually, no female household member falls within this category.

Table 3.4: Status of Employment by Age Group and Sex

Age Group	Self-Employed		Seasonal		Full Time		Part Time		Contractual		Total
	M	F	M	F	M	F	M	F	M	F	
14-19	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1
20-24	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.6
25-29	3.4	1.1	0.0	0.0	2.3	3.4	0.0	0.0	0.8	0.0	10.2
30-34	3.4	2.3	0.0	2.3	4.6	0.0	0.0	0.0	0.3	0.0	12.6
35-39	6.9	11.5	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	20.6
40-44	5.7	2.3	0.0	1.1	4.6	1.1	0.0	1.1	0.3	0.0	15.9
45-49	5.7	4.6	0.0	0.0	3.4	1.1	0.0	0.0	0.0	0.0	14.8
50-54	6.9	2.3	0.0	1.1	0.0	1.1	0.0	1.1	0.5	0.0	12.5
55-59	3.4	2.3	0.0	0.0	2.3	0.0	0.0	0.0	0.3	1.1	9.1
60+	9.2	4.6	0.0	0.0	0.0	1.1	0.0	2.3	0.5	0.0	17.2
Total	44.6	33.3	0.0	4.5	18.3	7.8	4.5	4.5	2.7	1.1	100.0

The table indicates that youth (14-24 years) employment in the community is 5.7% which is far below the national percentage (14.6%) reported by the JSLC, 2007. Among the youth, male and female employment figures are similar.

MAIN OCCUPATIONS OF OTHER HOUSEHOLD MEMBERS

Employed persons in the Llandewey community are predominantly engaged in the agriculture and fishery, service workers and shop and market sales workers, and elementary occupation groups (Table 3.5). All occupational groups recorded are male dominated with the exception of professional where there are no males and 4.6% females which may be attributed to the higher educational attainment of females than males in the community.

Table 3.5: Occupational Classification of Household Members by Sex

Occupation Classification	% Male	% Female
Legislators	0.0	0.0
Professional	0.0	4.6
Technicians and associate professionals	0.0	0.0
Clerks	0.0	0.0
Service workers and shop and market sales workers	12.6	8.0
Skilled agricultural and fishery	24.1	17.2
Craft and related trades workers	1.1	0.0
Plant and machine operators and assemblers	9.2	2.3
Elementary occupations	13.8	10.3

3.2 UNEMPLOYMENT STATISTICS

The unemployment rate was highest among persons sixty years and over; this was indicated by 9.2% (Table 3.6). The main reasons for unemployment among this age cohort is illness and retirement. Interestingly, although reasons are given, persons within this age cohort are usually engaged at least in subsistence farming to sustain their livelihood. Youth (25-29 years) unemployment follows closely with 8%, with females sharing the greater proportion of the unemployed (12.6%). See Table 3.6. The 20-24 and 30-34 age cohorts each had an unemployment rate of 5.15%.

Table 3.6: Unemployment Status of Household Members by Gender

Unemployment Status	Male	Female	Total
Unemployed 14-19	4.6	3.4	4
Unemployed 20-24	4.6	5.7	5.15
Unemployed 25-29	3.4	12.6	8
Unemployed 30-34	3.4	6.9	5.15
Unemployed 35-39	2.3	2.3	2.3
Unemployed 40-44	1.1	3.4	2.25
Unemployed 45-49	2.3	4.6	3.45
Unemployed 50-54	0.0	2.3	1.15
Unemployed 55-59	3.4	2.3	2.85
Unemployed 60+	6.9	11.5	9.2

Unemployment rates in all other age cohorts for the Llandewey community were similar and averaged approximately 3%. The most outstanding figures are for females in the 60 and over age cohort and 25-29 age cohort. It is interesting to note that no male in the 50-54 age cohort were reported to be unemployed but 2.3% of females in that cohort was unemployed. Overall trends reveal that unemployment across all age cohorts is more prevalent among females than males in the Llandewey community.

REASONS FOR UNEMPLOYMENT

School attendance, amount of pay, trying to start a business and illness are the main reasons identified for unemployment among residents in the Llandewey community. Illness and retirement are more common reasons among elderly persons, who though reported within this category, engaged in at least subsistence farming to sustain themselves and were supported by local networks of family members and friends. The other major reasons for unemployment are trying to start a business and amount of pay which is usually among middle age persons and accounts for 8% and 9.2% respectively as outlined in Table 3.7. Nothing and having to stay with sick relative or child were the other main reasons outlined for unemployment. Having to stay with sick relatives or children was usually reported among females which in some instances accounts for a higher level of unemployment.

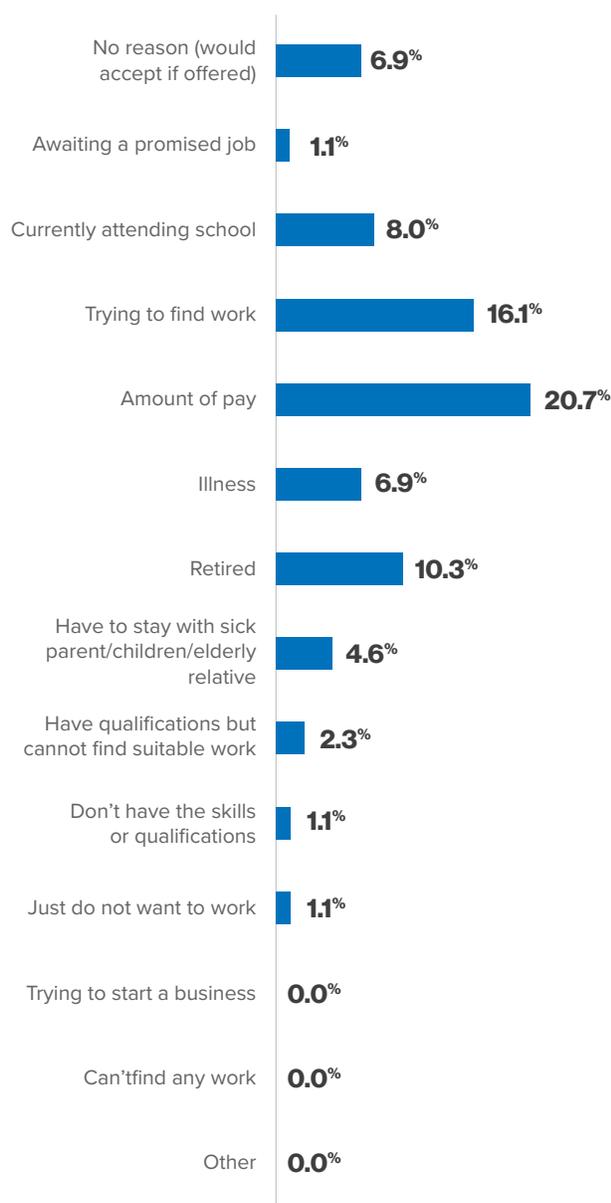
Table 3.7: Main Reasons why Household Head is Unemployed

Reasons explaining why household heads unemployed	%
Nothing (would accept if offered)	2.3
Awaiting a promise job	1.1
Currently attending school	11.5
Trying to find work	0.0
Amount of Pay	9.2
Illness	8.0
Retired	0.0
Have to stay with sick parent/children/elderly relative	3.4
Have qualification but cannot suitable employment	0.0
Don't have the skills or qualification	1.1
Just do not want to work	0.0
Trying to start business	8.0
Can't find suitable work	0.0
Other (state)	2.3

*This question allowed for multiple responses

The main reasons for unemployment amongst members of households were amount of pay (20.7%), persons trying to find work (16.1%), persons already retired (10.3%), persons currently attending school (5%), persons suffering illnesses and no reason but would accept if offered (6.9% each).

Figure 3.2: Main Reasons for Members of Household Not Working



PERIOD OF UNEMPLOYMENT

The information in Table 3.8 indicates that in the past five years there was a decrease in the percentage of unemployed males and consistent unemployment figures for females. The data also indicates a greater percentage of females without jobs than males.

Table 3.8: Period of Unemployment among Household Members

Time Frame	% Male	% Female
Never worked in my adult life	3.4	9.2
Less than 12 months	9.2	10.3
1 – 2 years	3.4	12.6
3 – 4 years	1.1	12.6
5 years and more	13.8	9.2

EXISTING SKILLS

Table 3.9 indicates that the majority of the residents have construction and cabinet making or agricultural skills, being 6.9% and 5.15% respectively. Hospitality and professional and technical skills, machine and appliance skills, apparel and sewn product skills and beauty care and service skills are the other existing skills in the community.

Table 3.9: Existing Skills in Community

Skills Areas	Number and Percentage (%)		
	Male	Female	Total
Beauty Care and service skills	0.0	1.1	0.55
Secretarial/office clerk skills	0.0	0.0	0
Hospitality skills	2.3	2.3	2.3
Art and Craft Skills	1.1	0.0	0.6
Construction and cabinet making skills	13.8	0.0	6.9
Machine and appliance skills	2.3	0.0	1.5
Computing and Information technology Skills	0.0	1.1	0.5
Apparel and sewn product skills	0.0	3.4	1.7
Commercial and sales skills	0.0	0.0	0
Professional and technical skills	1.1	4.6	2.8
Agricultural/farming skills	8.0	2.3	5.1
Skills not specified	0.0	0.0	0

3.3 INVOLVEMENT IN FARMING/ AGRICULTURE

74.4% of households in the Llandewey community are engaged in farming or other agricultural activities (Fig.3.3). Farming activities are in all the districts of Llandewey.

Figure 3.3: Percentage Distribution of Households Engaged in Farming

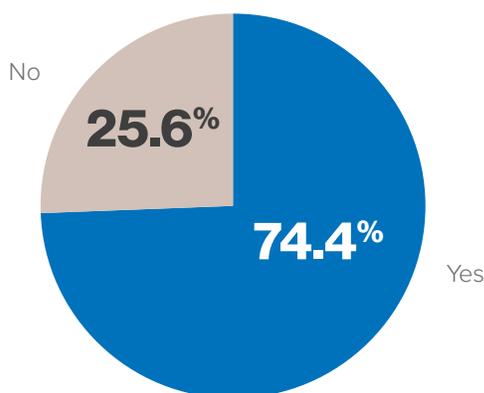
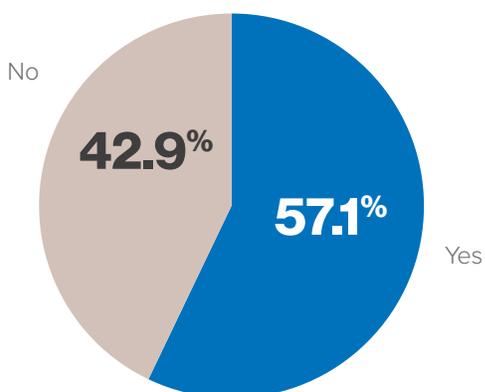


Table 3.10: Farming/Agricultural Activities in Llandewey

Type of Farming Activity	%
Ground Provision	49.4
Sugar Cane	5.7
Poultry Rearing	3.4
Cash Crop	25.3
Green Banana	55.2
Live Stock	5.7
Fish Breeding	0.0
Bee Keeping	1.1
Fruits	28.7
Other	0.0

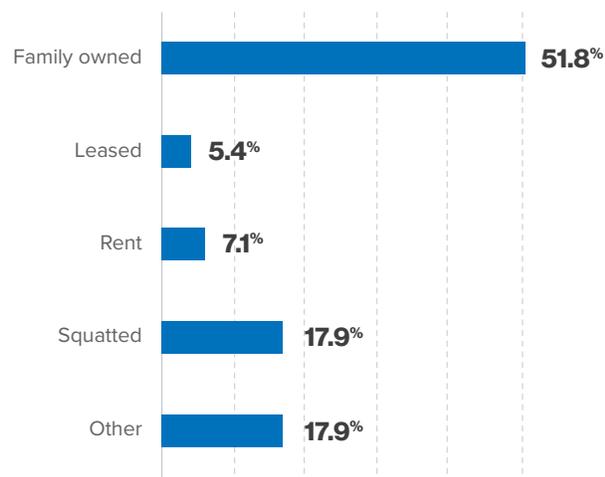
Table 3.10 above shows that the most popular farming activities in the community are the cultivation of green bananas (55.2%), ground provision (49.4), fruits (28.7) and cash crops (25.3%) which are usually sold in the local markets (Figure 3.4).

Figure 3.4: Percentage Distribution of Households with Farm Lands Situated in the Community



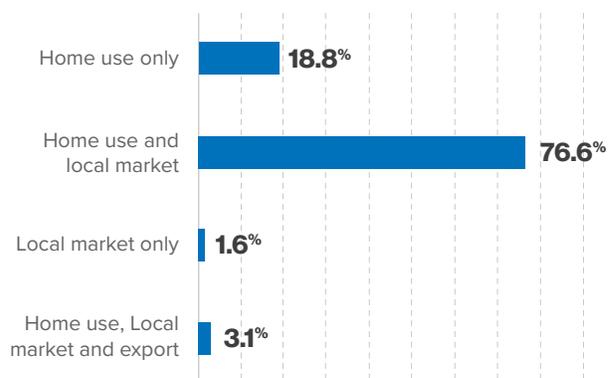
Most of the household heads (57.1%) reported that their farm lands were situated in the community while 51.8% indicated that lands are family owned. Significantly 17.9% reported squatting on the land they use for farming (Fig. 3.5).

Figure 3.5: Tenure Status of Land used for Farming



Farm produce is most often disposed of by home use and local market (76.6%). Other means of disposal are home use only (18.8%) and local market only, export and local market accounting for the remaining (4.7%). See Figure 3.6.

Figure 3.6: Common Methods of Disposing Farm Produce



FINANCIAL SERVICES USED

Most households (40.2%) used the People’s Cooperative Bank in the community for finance and banking while 39.1% utilized no financial institution. The commercial bank was also one of the major financial institution utilized (20.7%) while Credit Unions were used by 3.4% of households for finance and banking. Partners and other were less popular with 1.1% popularity each.

Table 3.10: Financial Institutions use by Residents

Financial Entities	%
Commercial banks	20.7
Merchant banks	0.0
Local government loan agencies	0.0
Credit Unions	3.4
PC Banks	40.2
Partners	1.1
No institution	39.1
Other Institution	1.1

3.4 MAIN ECONOMIC ACTIVITIES

The main economic activities in the community are:

- Small scale commercial activities grocery shops, banking, and other small businesses which are the main sources of employment for residents in the community.
- Agricultural activities which take place in all districts of the community.
- Transportation; taxis ply the Llandewey to Poorman's Corner route.

There is no major investment that has generated employment for residents in recent years. Agriculture, though the main economic activity, has in recent years suffered from the inadequate supplies of water in the community and the unavailability of market for large scale production.

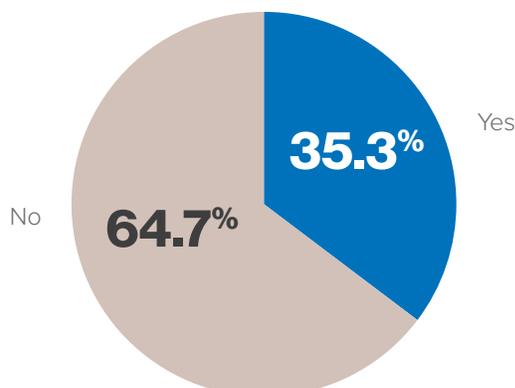
CHALLENGES AFFECTING BUSINESS ENTERPRISES

District	Main Challenges Affecting Business
All districts	<ul style="list-style-type: none"> • With a small population there is less demand for goods. • Transportation of goods is difficult as road conditions are deplorable and the transportation system is inadequate and expensive

3.5 INVOLVMENT IN SOCIAL SAFETY NET PROGRAMMES

Approximately 35.3% of household heads indicated that household members benefited from Social Safety Net Programs (Figure 3.7).

Figure 3.7: Percentage Distribution of Social Safety Beneficiaries



Of those that benefit, the PATH programme has the most beneficiaries (33.3%) while NHF had 2.3% beneficiaries. (Table 3.12) Other social safety net programmes from which household members benefit represented a miniscule 1.1%.

Table 3.12: Financial Institutions use by Residents

Safety Net Programmes	%
Poor relief	0
PATH	33.3
NHF	2.3
School Fee Assistance	0
JADEP	0
Other SSN	1.1

LAND USE

Only 55% of land space in the community is utilized as lands that were formerly estates remain unoccupied and are owned by one set of families. Of that 55%, 20% is used for agriculture, 15% for residential, 14% social arrangement and 5% for commercial purposes. (Table 3.13)

Table 3.13: Land Use in Llandewey Community

Activities	% of Land Space Utilized
Agricultural	20%
Commercial	5%
Social (green spaces, institutions)	14%
Industrial	0%
Formal (Residential)	0%
Informal (Residential)	15%
Mixed Uses (Residential & Commercial Uses)	1%

4 Livelihood and Environmental Assessment Data



This section explains the livelihood coping and recovery strategies of the people of Llandewey in the wake of natural hazards. This information is a key resource for post disaster response as it is critical to know how many people are likely to be affected and what response is needed.

The key elements of this section include hazard information and analysis, livelihood exposure and vulnerability profiling, and a contingency plan which outlines the livelihood support needed and institutions for livelihood support.

The data herein presented was collected via mixed methodology. The quantitative approach took the form of a quantitative survey which was administered to 29 individuals using convenience sampling. Additionally, an Observation Sheet which captured existing assets and businesses, and an assessment of the vulnerability of natural and man-made resources. 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 impacts 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 fundamental.

In keeping with the data found by the household survey as presented in Table 3.5, the qualitative engagement with the community identified four main types of livelihood in Llandewey. The types of livelihood found in the community are presented in Figure 4.1.

Figure 4.1: Main livelihoods present in Llandewey



FARMING



SMALL BUSINESS OPERATION



TRANSPORTATION



TRADE/CRAFT

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 Llandewey

Types of Livelihoods	Skills Needed	Tools & Equipment Needed	Natural Resources Utilized/needed
Farming: <ul style="list-style-type: none"> • Bee-keepers • Coal mining 	Knowledge of: <ul style="list-style-type: none"> • Tools required • Planting season • Weather • Coal miners: • How to cut trees • Where to cut trees (to prevent soil erosion) • What trees to cut • How to build a coal kiln 	<ul style="list-style-type: none"> • Bee-keeping: boxes, frames, foundation, gear (vane, smoker, etc), extractor • Machete, forks, picker, file, mato • Tractor Coal miners: <ul style="list-style-type: none"> • Power saw, rake, shovel, hawk, bags, string, zinc 	<ul style="list-style-type: none"> • Bees, plants, water • Coal miners: • Sandy loam soil
Small business operation: <ul style="list-style-type: none"> • Hair-dressing • Barbering • Tailoring • Dressmaking • Shopkeeping • Higglering 	<ul style="list-style-type: none"> • Customer service • Communication • Marketing • Money management • Book-keeping 	<ul style="list-style-type: none"> • Hair-dryer, chemicals, styling aids, chair, shampoo bowl, various types of scissors, sterilizing 	<ul style="list-style-type: none"> • Water
Transportation: <ul style="list-style-type: none"> • Taxi operators 	<ul style="list-style-type: none"> • Communication • Driving 		
Trade/craft: <ul style="list-style-type: none"> • Carpenters • Electricians • Plumbers • Refrigerator technicians • Cooks/chefs • Mechanics 	<ul style="list-style-type: none"> • Estimating quantities • Estimating costs • Certified training 	<ul style="list-style-type: none"> • Showels, plain, levels, square, construction cord, shovel, sieve, drill, sledge hammer, jack hammer, steel cutter, bolt cutter 	<ul style="list-style-type: none"> • Marl, sand, gravel, good forestry trees, lumber, waste wood

Sand quarrying, gambling and an entertainment-based activity called 'Round Robin' were indicated as other forms of livelihood in the community. Round Robin is an organized revolving social activity within which partakers invest a specific amount of funds at specific

intervals and obtain a 'draw' at a pre-determined date. At the 'draw' recipients host an event based on the nature of the Round Robin which, in the case of Llandewey, takes the form of a cake sale, a drink out or a 'sip-up'.

4.2 ENVIRONMENTAL PROFILE

The Llandewey community falls within the Yallahs River Watershed, which is the largest and most severely damaged of Jamaica’s twenty-six watersheds. The community has numerous natural resources which include:

- Sand
- Rivers
- Springs
- Arable land

The community is faced with environmental issues that affect the livelihood of its people. These issues, as obtained via the household survey carried out in 2009, are listed in Table 4.2 below. The data shows flooding as a prominent issue, indicated by 70.1% of respondents; 36.8% saw landslides and rock falls as an issue followed by 20.7% (each) which stated wind damage and blocked drains were also environmental issues. Approximately 18% of respondents did not observe any environmental issue.

Table 4.2: Environmental Issues Affecting the Llandewey CommunityTown

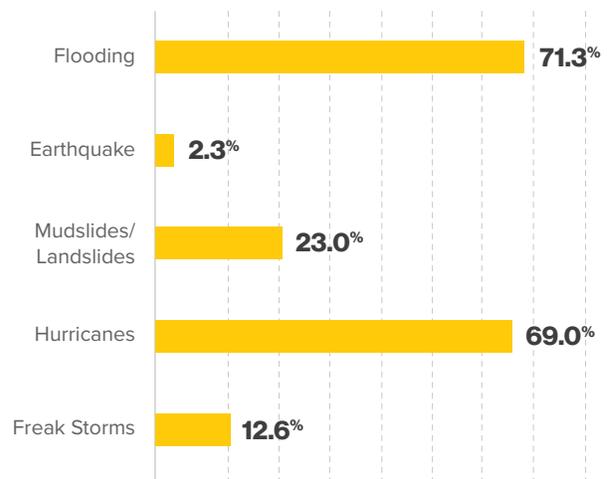
Environmental Issues	%
Landslides/rock falls	36.8
Illegal sand mining	9.2
Water pollution	11.5
Flooding	70.1
Wild fire	6.9
Deforestation	5.7
Wind damage	20.7
Blocked drains	20.7
Illegal dumping of garbage	5.7
Noise pollution	5.7
Air pollution	2.3
Soil erosion	12.6
No response to issues	1.1
None	18.4

*This question allowed for multiple responses

4.3 VULNERABILITY TO NATURAL HAZARDS

The household respondents indicated that flooding (71.3%) and hurricane (69%) are the two main natural hazards that affect the Llandewey community (Fig. 4.2). Flooding usually occurs during periods of heavy rain especially at Murray gully which is known to claim lives during periods of flooding. Landslides and mudslides were also indicated by 23% of respondents as a major natural hazard.

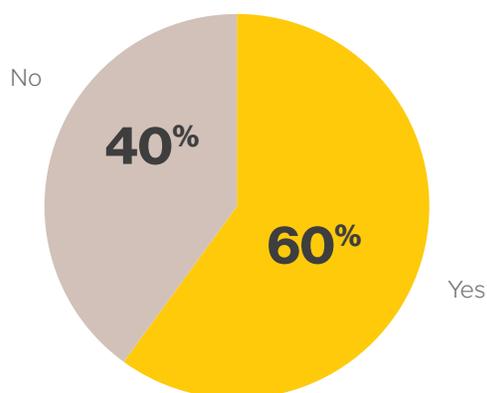
Figure 4.2: Types of Natural Hazards that affects the community



The Livelihood Baseline Assessment further details how these and other hazards impact the livelihood of residents and the response mechanisms that are already in place, as well as those needed to sustain livelihoods.

Linked to the responsiveness of residents to hazards is their knowledge of the location of disaster shelters and their willingness to access them. With regard to knowledge, only sixty percent of respondents (60%) were aware of the location of the emergency shelter in the community. See Figure 4.3.

Figure 26: Percentage Awareness of Disaster Shelters



With regard to willingness to access the shelter, only 31% of respondents perceived their shelter to be accessible and were willing to go in the event of natural hazard; 11.5 % were unwilling to leave their homes and personal belongings while 16.1% did not know how accessible the shelters were. See Table 4.3.

Table 4.3: Willingness to access to disaster shelter

Perception Of Shelter Accessibility	%
Do not know	16.1
Not accessible, limited by absence of Transport to go to facility	2.3
Not accessible, terrain prevents easy access to disaster facility	0.0
Not accessible, unable to cross internal community borders	0.0
Accessible, willing to go in event of natural disasters	31.0
Accessible, unwilling to leave home/ personal belongings	11.5

*This question allowed for multiple responses

Based on the community consultation held, it was recognized that only one shelter, the Bethesda Primary School, is available in the community. Residents were of the view that an additional facility is needed. Locally, residents employ an informal internal communication system to sensitize residents in more vulnerable sections of the community about impending hazards,

particularly heavy rains. Messages are sent to residents living in Orange River, Gordon Castle and Guinea Corn Piece in particular to ensure their awareness of impending weather and to advise them to relocate to the shelter since the river often overflows its banks leading to those areas being cut off from the wider community.

4.4 HAZARD ANALYSIS

One function 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. Consistent with the findings of the household survey in identifying hazards against which the community was vulnerable (as presented in Figure 4.2 above), the community consultation indicated six (6) hazards against which the main livelihoods in Llandewey are most vulnerable. They are:

1. Bushfires
2. Drought
3. Hurricane/ “big breeze”
4. Landslides
5. Flooding
6. Freak Storms

Table 4.4 presents the four 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 being most severe. In determining the overall impact both physical and financial losses were collectively taken into consideration.

Flooding and bushfires result in the most severe physical losses while all four hazards have highly severe financial impact. Of note, bushfires tend to have long-lasting negative impacts as crops, such as pimento, have a long recovery time. On the other hand, bananas – which are cultivated by approximately 55% of households (Table 3.11) - have a much shorter recovery time. Climate change was cited as the reason for seasonal drought periods. Droughts are considered very impactful and the extent of impact dependent on type of crop.

Table 4.4: Hazard Matrix of the community

Types	Frequency	Season	Geography	Total Physical Damage (max = 5)	Total Loss Score (max = 5)	Overall Impact
Bush Fire	Twice per year	March/April July/August	Hillside Subana (Monkey Hill, Cambridge Hill) Mount Sinai	5	5	Very High destroys trees, crops
Drought	Twice per year	March/April/ May June-Aug	All Areas	4	5	High
Landslide	Twice per year	May/June, August, October	All Areas	3	4-5	High
Flooding	Once per year	September – November	Orange Tree, Guinea Corn Piece, Gordon Castle,	5	5	Very high

While the hazards listed impact all livelihoods in the community, hereon, the focus of this chapter is farming as it is the pre-dominant livelihood of residents and most susceptible to natural hazards.

4.5 SEASONAL CALENDAR

A wide variety of crops are produced across Llandewey. This is particularly so during years deemed ‘normal’; that is, where no hazard or severe impact of a hazard occurs. The presence of adequate amounts of rainfall also impacts productivity. Among the popular crops planted are sweet pepper, onion, mango, ackee, soursop and pineapple. Vegetable crops are also planted in abundance. Ackee and soursop are available year-round; the former peaks from September to November while the latter peaks June to July or November through to January.

During an ‘abnormal’ year, there is usually excessive rainfall or drought. In such instances, the approaches include planting crops on top of trenches or planting staple instead of cash crops. Cherries and apples are unfortunately affected by fungi during rainy periods while gungo peas suffer immensely during drought.

Table 4.5 indicates the various activities carried out by farmers during a calendar year. It factors both usual activities and those required when there is a hazard. The key below the table further helps to understand the information.



Table 4.5: Seasonal Calendar of Activities during a Normal and **Abnormal** Year

Description of Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Effects of Hazards
Occurrences of hazards affecting livelihoods		Ra/F	D/B	D/B		FS/D	D/B	D/B	Ra/F	Ra/F		Ra/F	<ul style="list-style-type: none"> •Crop rotation or diversification •Planting of crops on top of trenches •During droughts, there is a dependence of some form of irrigation system (not necessarily formal; e.g. using drums) •Landslides occurring during rainy season impact the movement of goods outside the community
Planting	Mango Ackee Soursop Pear Onion Pepper	Mango Ackee Soursop Pear Onion Pepper	Gungo peas Carrot Mango Ackee Soursop Pear	Gungo peas Carrot Mango Ackee Soursop Pear	Gungo peas Carrot Mango Ackee Soursop Pear	Gungo peas Carrot Mango Ackee Soursop Pear	Mango Ackee Soursop Pear	Mango Ackee Soursop Pear	Carrot Mango Ackee Soursop Pear	Gungo peas Mango Ackee Soursop Pear	Gungo peas Mango Ackee Soursop Pear	Gungo peas Mango Ackee Soursop Pear	<ul style="list-style-type: none"> •Dig ditches around farm to divert the water during periods of heavy rainfall •Flooding wipes out entire crop planted
Harvesting	Soursop (HS)	Onion Pepper	Pear Cherry Apple Onion Pepper	Carrot Mango Pear Cherry Apple Onion Pepper	Carrot Mango Cherry Apple	Carrot Pineapple (HS) Honey Plum	Pineapple (HS) Honey Plum	Plum	Ackee (HS) Plum	Gungo peas Ackee (HS)	Ackee (HS) Pineapple (HS)	Pear	<ul style="list-style-type: none"> •Cherries and apples affected by fungi during rainy season •Crops are destroyed •Drought periods – mangoes are small in size; cucumbers are white colored rather than green
Livestock rearing	✓	✓ X	✓ X	✓ X	✓	✓ X	✓ X	✓ X	✓ X	✓ X	✓	✓ X	<ul style="list-style-type: none"> •Move animals from fields to homes or safer grounds •Animals unable to find feed (grass dried up) •Water levels low in springs (farmers have to transport in buckets)
Engagement in supplementary activities			X	X		X	X	X					<ul style="list-style-type: none"> •During drought periods an event known as 'River Bash' is held more regularly to assist in generating income
Trade/craft		X							X	X		X	<ul style="list-style-type: none"> •Rainy seasons – minimizes construction work but peaks response-type work

Key: D – Drought Ra – Rainy season FS – Freak Storm H – High Season P – Plant R – Reap B - Bushfire

4.6 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 4.6 also presents the top four hazards most regularly affecting livelihoods in Llandewey and the attendant strategies at coping. However, the strategies

presented relate primarily to farming, as of the five main types of livelihoods identified (see Fig. 4.1), it is the one most susceptible to natural hazards. As seen in the table, a range of coping strategies are employed; the community was, very optimistic irrespective of the situations they often face. A quote from one member adequately summarizes their outlook: “Things happen; but we are not ungrateful to our own land.” This quote speaks to residents’ recognition that despite the challenges they face they must remain thankful for what they have already benefitted.

Table 4.6: Coping strategies in response to hazards

Likely Climate Impact	Positive Coping Strategies and Practices	Negative or Harmful Coping Strategies/ Practices
Bush Fire	<ul style="list-style-type: none"> • Pray • Utilize burn out areas for planting pumpkin and new crops • Utilize savings • Begin new livelihood (or crop type) 	<ul style="list-style-type: none"> • Pushes out persons to do new livelihoods that they do not like • Crediting of goods (some don't repay) • Use of sugar to feed bees (produces honey of less quality)
Drought	<ul style="list-style-type: none"> • Utilize the period to clean land • Plant drought-resistant crops 	<ul style="list-style-type: none"> • Reduce the quantity of input
Flooding	<ul style="list-style-type: none"> • Hope and pray • Just wait out the period • Bring animals indoors or put in pens • Depend on remittance • Utilize savings (this is good as savings were set aside for times of need) 	<ul style="list-style-type: none"> • Use of savings (causes reduced wealth and vulnerability to being unable to respond to illness)
Landslides	<ul style="list-style-type: none"> • Use of soil to make mounds to spur growth and maintenance of mango trees 	

4.7 RESPONSE TYPOLOGIES

While individuals employ their own response mechanisms/coping strategies, external interventions are usually required for the effective and efficient restoration of livelihoods. The response strategies consist of both immediate relief activities and early recovery and rehabilitation actions. For Llandewey, critical agencies that would need to respond in the event of the occurrence of a natural hazard include the Social Development Commission (SDC), Rural Agricultural Development Agency (RADA), National Water Commission (NWC), National Works Agency (NWA), Jamaica Defence Force (JDF) and the Jamaica Agricultural Society (JAS). Importantly, the elected representatives were also deemed as being crucial to the response process.

Table 4.7 indicates the types of response the community deems necessary in response to the four regularly occurring hazards. It further indicates the specific areas of need and likely quantities along with costs. Importantly, the data presented relates to both the Ramble and Llandewey communities which form part of the Caribbean Development Bank's Project Area being supported under its Community Disaster Risk Reduction Fund. Of the 245 households indicated, Llandewey accounts for 129 while Ramble accounts for 116. The number of households identified were obtained from findings of the SDC Household Survey indicating the number of households engaged in farming and validated via the community consultations (noted by the column 'Extent of Impact across Households').

Table 4.7: Responses required by hazard type

Type of Hazard	Geographic Area	Extent of Impact	Type of Response Needed	Quantity	Cost (JMD)	Duration	Responsible entities
Bush fire	All Areas	4	Seedlings/Miscellaneous Fruit Tree Plants: Pumpkin, Irish potato, string beans, carrot, corn, cucumber	245 HH (Average 200 assorted seedlings/suckers/plants each)	363,000.00	One month	• Forestry Department • RADA • JAS
			Fertilizer	245 HH (Average 110lbs per household)	735,000.00	One month	• RADA • JAS
			Pesticide	245 HH • 250ml container per HH for 100 HH	120,000.00	One month	• RADA • JAS
				• 500ml container per HH for 145 HH	435,000.00		
			Financial Assistance	245 HH @ \$30,000.00 each	7,350,000.00	One month	• MOA • MP • ODPEM
			Water	5 truckloads per day @ \$20,000 per truckload	200,000.00	2 days	• Fire Department • JDF • MP
				Aerial sprays/fire department response	No cost assigned (natural disaster response based on availability and critical need)		
Technical support: a) information and guidance on immediate next steps – cooling down, crop restoration, etc) b) bush fire control – creation of barriers to prevent spread, etc	5 Field Days (2 Officers @ 80km each @ \$56 per km for 5 days)	44,800.00	5 days	• RADA			

Type of Hazard	Geographic Area	Extent of Impact	Type of Response Needed	Quantity	Cost (JMD)	Duration	Responsible entities
Landslides	<ul style="list-style-type: none"> •Murry Gully •Springfield •Longwall •Rock Bump •Samson Stream •First Bridge •Mount Sinioni •Behind RADA Office •Allen Spring 	5	Clearing of debris from roads	<ul style="list-style-type: none"> • 2 dumper trucks @ \$6600 per hour per truck @ 10 hours • 2 back hoes for 10 hours @ \$6000 per hour 	264,000.00	2 days	<ul style="list-style-type: none"> • NWA • Citizens • JDF • Police
			Food supplies (by air or land at nearest point)	340 HH @ \$5000 per package	1,700,000.00	Dependent on how quickly debris is cleared	<ul style="list-style-type: none"> • Food for the Poor • Municipal Corporation • JDF • Red Cross • Ministry of Labour
			Construction of Gabion Walls	•45 cubic metres @ \$20,222.00 per cubic metre	909,990.00	2 weeks	• NWA
			Impact Assessment to determine cause to prevent future occurrences	N/A	1,200,000.00	One week	• Mines & Geology
			Seedlings/plants: <ul style="list-style-type: none"> • Lemon grass • Matte grass/vetiver • Pine 	<ul style="list-style-type: none"> • 100 HH @ 400 plants per HH @ \$20 per plant • 45 HH @ 10 bags each @\$250 per bag • 100 HH @ 50 per HH 	800,000.00 112,500.00 375,000.00	Two weeks	<ul style="list-style-type: none"> • RADA • JAS
			Creation of foot path to allow access to surrounding areas	N/A	N/A	N/A	• Citizens
			Transportation support for emergency and routine travel	N/A	N/A	2 days	<ul style="list-style-type: none"> • Taxi (local) • Police • MOH/SERHA

Type of Hazard	Geographic Area	Extent of Impact	Type of Response Needed	Quantity	Cost (JMD)	Duration	Responsible entities		
Drought	All Areas	5	Provision of drought resistant seeds/crop plants: • Pumpkin, corn, red peas, cassava	245 HH	300,000.00	One month	• RADA • JAS		
				• 50 HH @ 1000 dips per HH @ \$6 per dip	250,000.00				
				• 100 HH @ 10lbs red peas @ \$250 per lb	150,000.00				
				• 100 HH @ 1lb pumpkin per person @ \$1500 per pound	375,000.00				
				• 150 HH @ 1 tin corn per HH @ \$2500 per tin					
				Fertilizer	245 HH (Average 110lbs per household)			735,000.00	One month
				Pesticide	245 HH				One month
	• 250ml container per HH for 100 HH	120,000.00							
	• 500ml container per HH for 145 HH @ \$3000ea	435,000.00							
	Provision of black tanks for irrigation	Ten 1000gal tanks; tank bases; pipelines & installation costs @ \$85000 each	850,000.00	6 months					
	Trucking of water to community	2 truckloads twice per week @ \$20000 per load	1,280,000.00	6 months					
	Alternative food for bees	1lb per box per 2 weeks @ 75 boxes	9,000.00	3 months					

Type of Hazard	Geographic Area	Extent of Impact	Type of Response Needed	Quantity	Cost (JMD)	Duration	Responsible entities
Flooding	<ul style="list-style-type: none"> • Gordon • Castle • Gini Cross Piece • Orange Tree 	3	Building of temporary bridge	1	1,000,000.00	2 months	<ul style="list-style-type: none"> • Municipal Corporation • Ministry of Agriculture • MOH • NWC • MP • Red Cross • ODPEM • SDC • Elected Representatives • Ministry of Labour • Food for the Poor
			Treatment of water supply	N/A	N/A		
			Prevention of mosquito breeding & control spread of disease (MOH)	N/A	N/A		
			Food supplies	15HH	300,000.00		

4.8 RECOMMENDED MITIGATION STRATEGIES

In recognizing their vulnerability to landslides, farmers have employed mitigation techniques such as contouring and crop inter-mixing. For example, pines are planted in a triangular pattern to keep the soil together and cassava is interspersed with other crops. A special variety of grass is also planted for this reason. Some farmers, in particular those with the financial means, are also able to implement irrigation systems to minimize the impact of droughts.

Other needed strategies as identified by the community are:

- Bush fire prevention and mitigation techniques including how to burn the fires properly. While the community is aware of the dangers of bush fires, it also believes that burning can take place within limitation. In identifying strategies, it is recognized that “fire have tender foot’ and “once earth hot fire walk”.
- Education on alternatives to burning
- Water harvesting
- Introduction of an irrigation system for farmers
- Securing of drums and tanks for water storage

5 Social Environment



NATURE OF COMMUNITY

The community of Llandewey displays low levels of volunteerism. Though there are five active community based organizations, there is need for greater collaboration in the community development process. Succession planning has been observed to be a major challenge in community-based organizations in this community as well as the lack of interest and cooperation from the youth. Those that possess the capacity to maintain these organizations usually migrate either for educational or career pursuits.

The farming community and Parent Teachers' Organization are the most active organizations, but are based on particular interests that do not necessarily address a wide range of issues facing the community or needed to support the community development process. The Community Development Committee therefore suffers greatly from this lack of cooperation and participation among community members generally.

Despite these challenges, civic pride is demonstrated in the care and protection of the community's assets especially its institutions and Llandewey is comparably a very clean community.

5.1 CRIME & PUBLIC SAFETY

HOUSEHOLD VICTIMS OF CRIME

Only 9.2 % of respondents indicate that they or other members of their households have been victims of crime in their lifetime. The most frequently occurring crimes are praedial larceny (5.7%) while sexual assault, assault with weapon and murder accounted for 1.1% each. Of all the crimes committed only 54.5% took place in the community. 23.1% of the crimes have been committed in the past twelve months with praedial larceny being the most frequently reoccurring crimes.

REPORTING OF CRIME BY VICTIMS

100% of the victims did not report the crime as they either felt that the crime was not serious enough, the perpetrator was a relative, family member or friend or the respondent did not want to be an informer.

REPORTED CRIME STATISTICS FOR THE COMMUNITY

An examination of selected crime statistics from the major police station serving the area (Table 5.1) reveals that praedial larceny, assault and break-ins dominate the reported serious crimes in the community in 2009.

Table 5.1: Reported Crime Statistics by Types of Crimes Committed

Districts	Main Crimes Committed	Frequency of Reports*
All districts in Llandewey	Praedial Larceny	3 or 4 per month
All districts	Assault	2 per month
Mount Sinai	Break-ins	1 for the year

SECURITY PERSONNEL AND INFRASTRUCTURE

Llandewey police station is one of four sub stations of the St. Thomas Police area. The station is located within the community square centre and serves three

other communities. The number of officers was not disclosed for security reasons however there is one (1) motor vehicle in good working condition (Table 5.2).

Table 5.2: Security Personnel and Infrastructure

Police Stations/ Posts within	Communities served	# of Personnel	# of Vehicles in working order	Condition of Building
One	Four	Could not be disclosed	One	Very good

PERCEPTIONS OF SAFETY

Most respondents (46.3%) felt that it was unlikely that they could be a victim of crime over the next year, 10.3% felt it was impossible and 12.6% gave no response; 24.1% felt it was very likely and 2.3% that it was inevitable that they would become victims of crimes within the next twelve months. Respondents indicated that 56.3% of persons feel very safe and 29.9% feel safe in the community (Fig. 5.1). 88.5% view the levels of crime as being low while 8% see the crime rate as being moderate (Fig. 4.2).

Figure 5.2: Perception of the Level of Crime

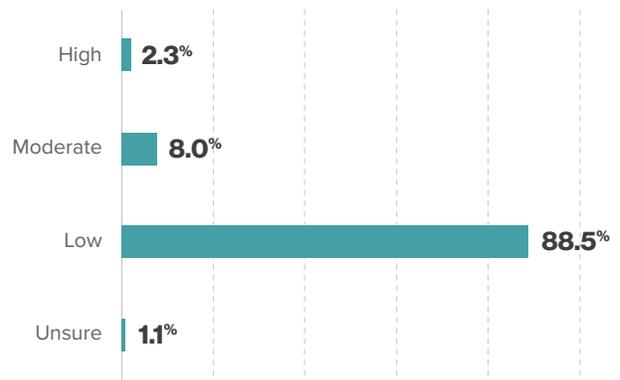
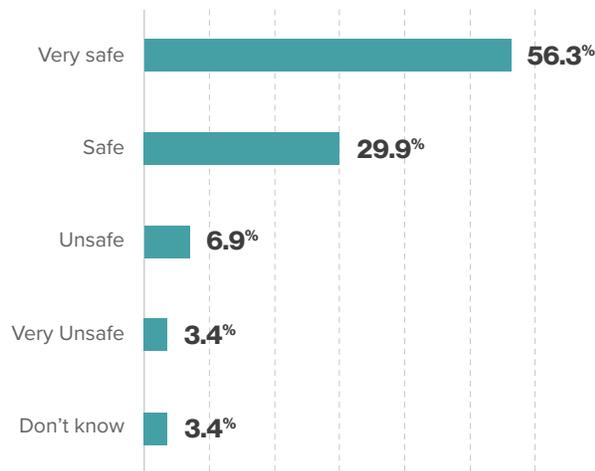


Figure 5.1: Perceptions of Safety



PUBLIC SAFETY ISSUES AFFECTING LLANDEWEY

More than half the respondents indicated that there were no public safety issues affecting the community of Llandewey. 49.4% however indicated that there were inadequate street lights and 28.7%, overgrown lots. Other public safety issues highlighted were no street lights and improper disposal of solid waste (Table 5.3).

Table 5.3: Public Safety Issues in Llandewey

Safety Issues	% Distribution
Gangs and gang warfare	0
Derelict buildings	1.1
Overgrown Lots	28.7
No street lights	10.3
Inadequate street lights	49.4
Improper disposal of solid waste	8.0
Failed infrastructure	2.3
None	56.3

This Question allowed for multiple responses

EFFECTS OF CRIME ON THE COMMUNITY

Almost all respondents 90.8% indicated that crime had no effect on their lifestyle. The remaining approximately 10% also included 6.9% of respondents who did not state the effect of crime on their lifestyle while 2.3% indicated that their social life was curtailed and 1.1% indicated restriction in movement late evenings and nights. See Table 5.4.

Table 5.4: Crime and lifestyle changes

Response	%
Social life is curtailed	2.3
Restriction of movement in and out of the community at late evenings/nights	1.1
Restriction of movement within the community	0.0
Fear to go to work and school	0.0
Area stigma affecting chances of getting jobs outside of the community	0.0
Afraid to show any sign of wealth or economic activity	0
Crime has no effect on my lifestyle	90.8
Not stated	6.9

This Question allowed for multiple responses

6 Governance Data



6.1 POLITICAL DIRECTORATE



Constituencies:
Western St. Thomas
PC Divisions:
Llandewey



Member(s) of Parliament:
James Robertson
Councillor: Garey Lee Henry
Caretakers: Rose Shaw

6.2 SOCIAL/CIVIC ORGANISATIONS

All five community-based organizations within Llandewey were participating in the Llandewey Community Development Committee (see Table 6.1) and were active organizations (see Table 6.2).

Table 6.1: Types of CBOs and participation in CDC

Types of CBO	Number of CBOs	Number Participating in the CDC
JAS	1	1
Women's Group	1	1
PTA	2	2
Bee Farmers Association	1	1

Table 6.2: Types and statuses of CBOs

Name of Group	Number of CBOs by Status			
	Active	Partially Active	Dormant	Defunct
JAS	1	0	0	0
Women's Group	1	0	0	0
PTA	2	0	0	0
Bee Farmers Association	1	0	0	0
Youth				1
Community Club				1

ORGANIZATIONAL AWARENESS AND PARTICIPATION IN LLANDEWEY COMMUNITY

A small percentage of respondents reported awareness of the various types of community based organizations in the community and participation is equally low. While 35.6% are aware of church groups, 32.2% participate. 13.8% of respondents are aware of the JAS but only 9.2% participate. Though 16.1% is aware of the youth club, only 4.6% participate. Interestingly, a minute 10.3% indicated awareness of the PTA and only 8% participate.

EXISTING PROJECTS

There are no existing projects in the community at this time

LOCAL GOVERNANCE

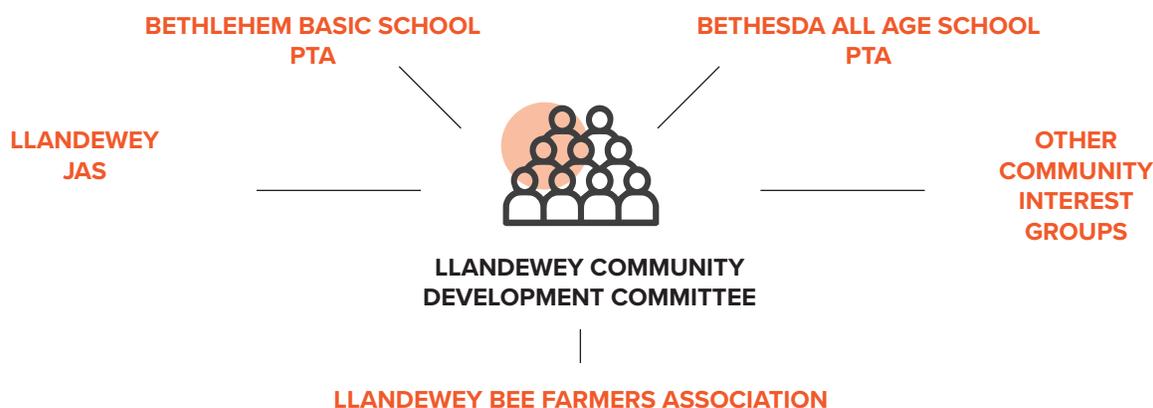
The Llandewey Community Development Committee (CDC) is comprised of a number of stakeholders. Figure 6.1 illustrates the CDC's composition. According to the constitution of the Yallahs Development Area Committee under which the CDC falls, would include three representatives of each of the member organizations shown above.

Table 6.3: Organizational Awareness and Participation

Type of Organization	Percentages	
	Awareness	Participation
Church Groups	35.6	32.2
Neighborhood Watch	0.0	0.0
JAS	13.8	9.2
CDC	1.1	1.1
Returning Residents Association	0.0	0.0
Civic Organization	1.1	1.1
Citizens Association	0.0	0.0
Benevolent Society	0.0	0.0
PTA	10.3	8.0
DAC	0.0	0.0
Sports Clubs	6.9	0.0
Youth Clubs	16.1	4.6
Senior Citizens Association	0.0	0.0
None	1.1	1.1

This Question allowed for multiple responses

Figure 6.1: Composition of the Llandewey Community Development Committee



6.3 STAKEHOLDER ANALYSIS

Table 6.4 illustrates the various stakeholders recognized by the community, their level of importance, involvement and impact and influence.

Table 6.4: Stakeholder Analysis of Llandewey

Stakeholders present within the Community	Level of importance to Development Processes in Community (Key, Primary, Secondary)	Interest / Mandate of Org.	Level of Present Involvement	Level of Potential Impact & Influence (Outcome)
Member of Parliament	Secondary	Political representation	Low	Very High
Ministry of labor and Social Security (PATHE Program)	Secondary	Social welfare	Fair	High
Blue Cross	Secondary	Health insurance	Fair	Very high
PC Bank	Secondary	Financial Services	High	High
National Health Fund	Secondary	Elderly health care	Fair	High
JAS/Bee Farmers	Primary	Agricultural development	High	Very high
Jamaican Constabulary Force	Primary	Public safety	Very High	Very high
National Water Commission	Key	Water supply	Low	Very high

Stakeholders present within the Community	Level of importance to Development Processes in Community (Key, Primary, Secondary)	Interest / Mandate of Org.	Level of Present Involvement	Level of Potential Impact & Influence (Outcome)
Churches	Key	Spiritual development	High	Very high
Justice of the Peace	Key	Civil responsibilities	High	Fair
Postal Service	Key	Communication	Very High	Fair
Jamaica Public Service	Key	Energy / electricity	High	Very high
Primary and Basic School	Key	Education 3-12 years	High	Very high
Ministry of Health	Key	Health care	High	Very high
RADA	Key	Support to Agriculture	Very High	Very High

DEVELOPMENT CHALLENGES

The top five development challenges for the Llandewey community are highlighted in the table below.

Table 6.4: Priority Development Challenges by Percentage of Households

Development Challenges	%
1 High level of adult (25 yrs and over) unemployment	65.3
2 High level of Youth (15-24 years) unemployment	65.0
3 Limited access to required amenities and services	49.0
4 Poor Roads	48.0
5 Limited or no opportunities for training and employment	29.0

As indicated in the table, the community's development is hampered by unemployment both in the adult and the youth population. This may be due in part to the challenges of limited access to required amenities and services, and limited or no opportunity for training and employment. As Llandewey is a rural community, facilities to advance educational/training pursuits are located far from the community, thus presenting the challenges of high costs of transportation. The ability to take up opportunities for training and education is, however, likely to be impeded by the low literacy levels and low number of passes indicated by the education statistics (see Tables 2.7 and 2.8).

Appendices

COMMUNITY AND DISTRICT LISTING FOR LLANDEWEY

Parish	Development Area	Community	District
St. Thomas	Yallahs	Llandewey	Cambridge Hill
			Garden Castle
			Village Hall
			Mount Sina(4)

COMMUNITY BASED ORGANIZATION LISTING

Development Area	Community	District	Name of CBO	President	Contact Number	Address	Meeting Place	Meeting Time	Status of Organization
Yallahs	Llandewey	Village Hall	Llandewey JAS	Horace O'Gilvie	449-6958	Llandewey PO St Thomas	RADA Office	2nd Wednesday 6:00pm	Functional
Yallahs	Llandewey	Village Hall	Bethesda All Age PTA	Sharon Barclay Bennett		Llandewey PO St Thomas	Bethesda All Age	1st Monday 1:30pm	Functional
Yallahs	Llandewey	Village Hall	Llandewey Bee Farmers Association	Malachai Morgan	373-6260	Llandewey PO St Thomas	RADA Office	2nd Wednesday at 6pm	Functional

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