# **ANNEX 5**

# Social Impact Assessment Report

For Tropical Sugar Company Limited Factory

May 2025

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### OBJECTIVES

The objective of the social impact assessment (SIA) is to undertake the identification, assessment, evaluation and reporting of the potential socio-economic impacts associated with the construction and operation of a new agro-processing and manufacturing factory in Lionel Town, Clarendon, Jamaica. The assessment will provide a description of:

- 1. The social setting in which the proposed factory and supporting infrastructure are being considered for construction and operation
- 2. The potential impacts the proposed construction and operation of the factory are anticipated to have on the existing social setting in the short to long-term within the area of project occurrence
- 3. The mitigation measures recommended to prevent, reduce and/or eliminate potential adverse impacts, and enhance potential positive effects associated with the operation of the factory
- 4. The social monitoring programme(s) to be adopted in the management of associated and residential socio-economic effects

# METHODOLOGY

This social impact assessment was conducted using a mixed-method approach, involving quantitative and qualitative research and participatory approaches. The methodology is in line with the general requirements of the Terms of Reference approved by the National Environment and Planning Agency (NEPA), the World Bank Environmental and Social Framework and standards for conducting environmental and social impact assessments, the International Finance Corporation (IFC) performance Standards on Environmental and Social Sustainability and the International Association of Impact Assessment (IAIA). Relevant data for the impact assessment was identified, reviewed and gathered using the following methods:

- Quantitative method involved the administration a socio-economic and beneficiary perception survey to households within the communities located in the designated project site study area.
- Qualitative methods included a desk review, focus group discussion and key informant interviews.

### SPATIAL BOUNDARY

The spatial boundaries for the social impact assessment study area included a site study area and a local study area. For the assessment, the site study area, which is the anticipated area of direct social disturbance and influence associated with all phases of the agro-processing facility (sugar factory) project, was defined as all lands, water and valued social components within a 3km radius of the project site. The local study area, which encompasses the site study area, included all lands, water and valued social components located within a 10km radius of the site study area.

# QUANTITATIVE APPROACH

The quantitative data collection consisted of the administration of a socio-economic and community perception survey (Appendix 1). The survey was executed in three phases:

- 1. Design and development of instrument and data collection procedures, including recruitment and training of interviewers.
- 2. Data collection and Processing
- 3. Analysis of data

The socio-economic and community perception survey was designed to capture data on key priority socio-economic variables and indicators related to respondents, their prior experiences and interaction with sugar manufacturing operations, project knowledge and attitude, as well as their overall perception of the proposed project.

### Sampling and Target population

The sample frame for the survey design was based on data from the 2011 Population and Housing Census. The target population for the study was households located within the defined spatial boundaries of the SIA. The perception survey was administered to household representatives (18 years and over, and who are usual residents) found in the communities located within the site study area.

# Sample Size (Perception Survey)

The sampling frame for the study was the 2011 Population and Housing Census. The census identifies 1,995 eligible households stratified by communities located within the site study area (Table 1). The sample size for the study was 80 households calculated with a margin of error of 10.5% with a confidence level of 95%. The sampling allocation for the study was calculated proportional to the number of households in the communities located within the site study area. The survey data was collected using a convenience-based sampling technique.

Community	Household	% of total	Survey distribution
		households	
Lionel Town	1,207	60	48
Perrins/Monymusk (Lionel Town)	136	7	5
Chesterfield (Lionel Town)	123	6	5
Alley / Amity	529	27	22
	1,995	100	80

### Table 1: Distribution of Sample by community

### Survey Response

The socio-economic and community perception survey was completed by 86 households, resulting in a survey response rate of 100 %. All respondent data was included in the analysis.

### QUALITATIVE APPROACH

### Desk Review

A comprehensive literature review was conducted of national demographic, labour, economic, and parish/community specific research documents to review key socio-economic development indicators for communities in the project area to better understand existing the socio-demographic development context. The review also assisted in the identification of socio-economic development issues of concern.

### Focus Group Discussions

Although it is not intended to be representative of the general population, qualitative data must be adequate enough to provide an in-depth analysis of the varied dimensions related to beneficiaries' experiences and perceptions of the proposed project.

A focus group session was held with community members residing in the site and local study areas. Participants were recruited from communities outlined in Table 2. The FGD session was completed on April 11, 2025. A total of twelve (12) persons participated in the session from the following communities.

No.	Community Name	Participants
1	Lionel Town	2
2	Amity Hall/Alley	2
3	Hayes	1
4	Hunter's Village	1
5	Longwood	1
6	Mitchell Town and Morelands	1
7	Portland Cottage	1
8	Race Course	1
9	Rocky Point	1
10	Salt Savanna	1
	Total	12

### Table 2: Focus Group Discussion Participants by Community

A focus group guide was used in steering the discussion with attendees. The FGD served to gather more detailed information and get deeper insights into the factory interactions and experiences of the resident population. Participants were engaged in discussions around ten

main questions outlined in the guide. The themes explored from these questions included: livelihoods and employment, factory interaction and experiences, and project perceptions.

# Key Informant Interviews and Consultations

Key informant interviews (KIIs) and consultations were held with government stakeholders, private sector entities, civil society organisations (CSOs), and non-governmental organisations (NGOs) to get a more comprehensive understanding of socio-economic and cultural landscape of communities within the project area. A total of thirteen (13) KII were conducted. The list of organisations and institutions participating in interviews is presented in Appendix 1. Consultations were held with representatives of the Lionel Town and Milk River Development Area Committees. Interviews and consultations were held to:

- (i) identify and gain insights on organisational interactions and experiences with manufacturing operations within the project area
- (ii) understand the role of the state machinery, including their capacities in facilitating the implementation and monitoring of project activities
- (iii) identify opportunities and constraints associated with the proposed project, and
- (iv) gather recommendations on measures and areas for intervention to ensure potential adverse impacts are mitigated and monitored.

### Gender Analysis

A gender analysis was undertaken to assess the impact the proposed development activities may have on females and males. Using the Gender-Based Analysis Plus (GBA+) approach, the study assessed how females and males might be affected by proposed plans to restore sugar manufacturing in Southern Clarendon.

### LIMITATIONS

### Sample size and representativeness

Due to financial constraints, the sample size for the survey data was not statistically representative. Project funding timelines also limited the data collection period for the assessment. Nevertheless, the data collected from the survey provided updated demographic and economic baseline data for residents in the site study area, and was essential given the absence of recent national demographic data for the communities in the project area. Key and meaningful insights were also gleaned regarding the proposed project. The data collected as part of the social assessment was also not limited only to survey data, but included interviews, consultations and focus group sessions to capture the full complexity of the project's potential impacts from the perspective of key stakeholders and groups.

# HUMAN (SOCIAL) ENVIRONMENT SETTING

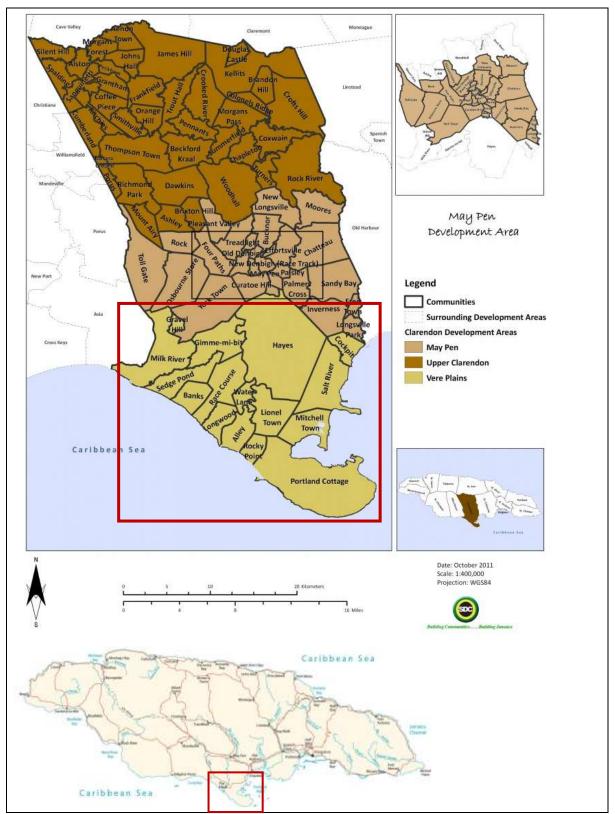
### SOCIO-ECONOMIC BASELINE

The project is located within the boundaries of the Vere Plains (Figure 1), which includes two Development Areas- Lionel Town and Milk River.<sup>1</sup> There are sixteen communities located within the boundaries of the project (Table 3).

DEVELOPMENT AREAS AND COMMUNITIES			
LIONEL TOWN	MILK RIVER	MAY PEN	
Alley Halse Hall Hayes Lionel Town Mitchell Town Portland Cottage Rocky Point Salt River Water Lane	Gravel Hill Gimme Me Bit Milk River Race Course Longwood	York Town	

Table 3: Communities Located within Project Boundaries

<sup>&</sup>lt;sup>1</sup> Note: One parcel of cane field, located in the south-eastern section of the York Town community, falls within the project's boundaries. York Town is part of the May Pen Development Area. Some socio-economic baseline information is included in this report for the community.



### Figure 1: Project Boundaries and Location

Source: Social Development Commission, 2011<sup>2</sup> with modifications by EEM, 2025

<sup>&</sup>lt;sup>2</sup> https://earnwhileyouonline.wordpress.com/wp-content/uploads/2015/07/clarendon\_communities-791x1024.jpg

In 2011, the population of the Vere Plains was estimated at 50,591 people (STATIN, 2019) [Table 4]. Disaggregation of the population data by sex shows males represented 50.1 per cent of the total population within the project's boundaries. By age, the data shows children (0-14 years) accounted for approximately 28 per cent of the total population.

	DEVEL	OPMENT AREA AN	D COMMUN	NITIES	
LIONEL TOWN		MILK RIVER		MAY PEN	
Alley	1,582	Gravel Hill	1,896	York Town	3,593
Halse Hall	5,089	Gimme Me Bit	1,675		
Hayes	11,241 Milk River 2,701	Milk River Race Course Longwood			
Lionel Town	4,419		5,195		
Mitchell Town	1,743		999		
Portland Cottage	4,502				
Rocky Point	2,936				
Salt River	1,007				
Water Lane	2013				
Sub-total	34,532		12,466		3,593
Grand Total					50,591

Table 4: Total Population by Community and Development Area

Source: Statistical Institute of Jamaica and Planning Institute of Jamaica, 2019<sup>3</sup>

### Housing

Housing statistics from the 2011 census showed the communities within the project's boundaries had 13,157 dwelling units and 14,312 households (Table 5).

### Table 5: Overview of Housing Characteristics

DEVELOPMENT AREA	DWELLING UNITS	HOUSEHOLDS
Milk River <sup>*</sup>	3,505	4,956
Lionel Town	9,652	9,356
Total	13,157	14,312
*Includes York Town		

Source: Clarendon Municipal Corporation, 2016<sup>4</sup> and Planning Institute of Jamaica, 2025<sup>5</sup>

Small pockets of informal settlements are also situated within the project's boundaries in the communities of Lionel Town, Salt River, Hayes (Corn Piece and Raymonds), Rocky Settlement and Portland Cottage.

<sup>&</sup>lt;sup>3</sup> <u>https://statinja.gov.jm/pdf/Mapping%20Poverty%20Final%2013.5.2019%20-%20Disseminated.pdf</u>

<sup>&</sup>lt;sup>4</sup> Clarendon Local Sustainable Development Plan. https://ubwp.buffalo.edu/foodlab/wp-

content/uploads/sites/68/2019/04/Clarendon-Local-Sustainable-Development-Plan-Clarendon-Parish-Jamaica-English\_forwebsite.pdf

<sup>&</sup>lt;sup>5</sup> https://goj.maps.arcgis.com/apps/StoryMapBasic/index.html?appid=3ec0ff9c25534912af0bef66d48f3d14

# MUNICIPAL SERVICES Health

Residents in the Vere Plains are served by six (6) health centres and one hospital (1). The Lionel Town Hospital, a Type C facility, is a 47-bed facility providing services to more than 36, 000 persons in Clarendon.<sup>6</sup> There are four (4) health centres in the Lionel Town Health District and two (2) in the Race Course Health District.<sup>7</sup>

# Education

There are fifteen (15) public educational institutions from the early childhood to the secondary educational level in the project Development Areas.

# Utilities and Sanitation

Communities in the project area are supplied with domestic water from groundwater sources. Water is supplied to the Development Areas via eight (8) systems, which include the Kemps Hill, Lionel Town and Hayes Treatment Facilities operated by the National Water Commission (NWC).<sup>8</sup> The NWC owns and operates six (6) sewage treatment plants in the Lionel Town Development Area.

Electricity to the communities is supplied by the Jamaica Public Service Company Limited via the Parnassus and Monymusk Substations. In 2016, 87 per cent of households in the Milk River Development Area had access to electricity and 71 per in the Lionel Town Development Area.<sup>9</sup>

# Protection and Emergency Services

The Lionel Town Police Station and May Pen Fire Station provide policing and fire services for communities located in the project area.

ECONOMIC DEVELOPMENT: LABOUR MARKET AND ECONOMIC ACTIVITIES

Agriculture is the main economic activity in the project area. Other economic activities in the project area are linked to the mining, service, and retail and wholesale sectors.

<sup>&</sup>lt;sup>6</sup> https://www.srha.gov.jm/chd.html

<sup>&</sup>lt;sup>7</sup> Lionel Town, Mitchell Town, Raymonds, Rocky Point, Milk River and Race Course

<sup>&</sup>lt;sup>8</sup> https://www.nwcjamaica.com/uploads/document/Draft%20%20Clarendon%20%20PPlan%20-%20October%2012%202011.pdf

<sup>&</sup>lt;sup>9</sup> Clarendon Local Sustainable Development Plan. https://ubwp.buffalo.edu/foodlab/wp-

content/uploads/sites/68/2019/04/Clarendon-Local-Sustainable-Development-Plan-Clarendon-Parish-Jamaica-English\_forwebsite.pdf

### Agriculture and Fishing

The agricultural and fishing sector accounted for 7.7 pr cent of Jamaica's gross domestic product (GDP) in 2023. The sector earned US\$90.6 million in 2023, an increase of 11.4 per cent over 2022 earnings. An estimated 183,000 persons are employed in the sector (Planning Institute of Jamaica, 2024). Nearly three-quarters, 74.1 per cent, of all workers employed in the industry are males.

As at May 15, 2025, there were 5,259 farmers registered in the farming extension of Lionel Town, accounting for 12.9 per cent of Clarendon's registered farmers (Table 6). Males represented 58.1 per cent of the total share of registered farmers in the Lionel Town extension (Rural Agricultural Development Authority, 2025)<sup>10</sup>.

### Table 6: Farmer Registration by Sex

Farmer Registration Information			
Males Females Total			
26,446	14,446	40,892	
3,058	2,201	5,259	

Source: Rural Agricultural Development Authority, 2025<sup>11</sup>

The Portland Cottage and Rocky Point communities located south of Lionel Town are major fishing villages in the parish of Clarendon. In 2021, there were 2,390 registered fishers in the parish of Clarendon, representing 9.8 per cent of the total number of registered fishers in Jamaica. The parish had 707 registered fishing vessels, accounting for 9.9 per cent of the total number of registered fishing vessels operating on the island (Wade et al., 2023). <sup>12</sup>

The most recent employment data for the development areas showed employment rates of 48 per cent in the Milk River Development Area, and 58 per cent in Lionel Town in 2016.

# Sugar Industry

In 2023, approximately 14,000 hectares of land was dedicated to sugar cultivation in Jamaica, a 41 per cent reduction compared to 2018, when 24,000 hectares of land area was cultivated. The industry earned US\$4.4 million in 2023, a 56.8 per cent reduction compared to 2019 when the industry earned US\$10.2 million.

### Mining

The mining and quarrying sector accounted for 1.8 per cent of Jamaica's gross domestic product (GDP) in 2023. The sector earned US\$ 551.5 million in 2023, a 68.2 per cent increase in export earnings over 2022 earnings (Planning Institute of Jamaica, 2024). Based on the

<sup>&</sup>lt;sup>10</sup> https://abis.gov.jm

<sup>&</sup>lt;sup>11</sup> https://abis.gov.jm

<sup>&</sup>lt;sup>12</sup> https://link.springer.com/article/10.1007/s10745-023-00444-

<sup>7#:~:</sup>text=The%20fishing%20industry%20is%20primarily,Authority%20of%20Jamaica%2C%202021).

industrial classification there are 3,200 people in the Mining and Quarrying industry labour force.<sup>13</sup> Males account for higher share of workers in the Mining and Quarrying Industry, accounting for 90.6 per cent of all workers.

### LAND USE

The Clarendon Sustainable Development Plan estimates that 50 per cent of land use/ land cover in the parish of Clarendon is woodlands. Agricultural land uses accounted for 18 per cent of total land use, while residential land use accounted for close to 14 per cent of land use in the parish. Woodlands and agricultural land use account for an estimated 70-75 per cent of existing land use and land cover in the Development Areas of Milk River and Lionel Town. Residential land uses in the Development Areas comprise mainly of low-density residential land uses. There are also small pockets of industrial land uses in Lionel Town.

There are several recreational amenities and facilities within the study area. These are identified in Table 7.

# Table 7: Recreational Centres in Project Area

Name	Location	Areas Served
Pawsey Park Community Centre	Lionel Town	Alley, Gayle, Alley Downer, Amity Hall, Lionel Town, Bog, Morelands, Salt Savannah
Mitchell Town Community Centre	Mitchell Town	Mitchell Town
Rocky Point Community Centre	Rocky Point	Rocky Point, Rocky Settlement, Portland Cottage, Salt Savannah, Land Settlement, Coffee Piece, Red Ground
Rhymesbury Community Centre	Rhymesbury	Rhymesbury, Land settlement
York Town Community Centre	York Town	York Town, York Circle, Parnassus

### Protected Areas

The Portland Bight Protected Area (PBPA), the largest protected area in Jamaica, is located within the Lionel Town Development Area.

### Planned Land Uses

The Government of Jamaica has approved the development of the Lionel Town Community Park and Home Work Centre Project. The parish's Local Sustainable Development Plan has outlined a list of proposed land use developments for the Lionel Town and Milk River Development Areas, which includes agricultural, industrial and tourism land use developments.

<sup>&</sup>lt;sup>13</sup> https://statinja.gov.jm/LabourForce/NewLFS.aspx

Hazards

All communities in the project area, except Salt River, Gimme me bit and Gravel Hill, are flood prone. Rocky Point and Portland Cottage are also prone to coastal flooding. Droughts and bush fires also threaten the communities within the Development Areas.

# SOCIAL CHALLENGES

High incidence of poverty is one of the main social challenges affecting the parish of the Development Areas of Lionel Town and Milk River. Prevalence poverty rates show, on average, an estimated 22 per cent of the population residing in these areas are poor (STATIN, 2019).<sup>14</sup>

The Lionel Town community, which includes the surrounding communities of Alley and Amity, has been identified by the Planning Institute of Jamaica as the 9<sup>th</sup> most vulnerable and 57<sup>th</sup> most volatile community in Jamaica. The community had a poverty rate of 16.1 per cent and 25.1 per cent in 2011 and 2016 respectively, and faces challenges related to squatting, literacy, child abuse and adolescent pregnancy, service and infrastructure accessibility and crime and violence, including presence of gangs.<sup>1516</sup>

Court statistics show in the four-year period, 2020 and 2023, the Lionel Town Police Station accounted for the second highest share of criminal charges filed at police stations in the parish of Clarendon (Table 8). The percentage share of charges filed in 2023 (11.3%), have nearly doubled the percentage share recorded in 2017 (6.2%).

Table 8: Percentage distribution of Total Parish Criminal Charges Filed at Lionel Town Police Station

Year	Total (%)
2023	11.3
2022	15
2021	17.67
2020	14.8

Source: Court Statistics Unit, Supreme Court of Jamaica, 2020-2024

<sup>&</sup>lt;sup>14</sup> Statistical Institute of Jamaica (2019). Mapping Poverty Indicators. Consumption based poverty in Jamaica. Accessed from <u>https://statinja.gov.jm/pdf/Mapping%20Poverty%20Final%2013.5.2019%20-</u> <u>%20Disseminated.pdf</u>

<sup>&</sup>lt;sup>15</sup> http://lslandr.com/crp/wp-content/uploads/sites/6/2021/05/CRP-Community-Selection-Process\_February-10-2021.pdf

<sup>&</sup>lt;sup>16</sup> http://lslandr.com/crp/wp-content/uploads/sites/6/2021/01/Volatility-and-Vulnerability-index\_Top-100-Communities.pdf

# STAKEHOLDER ENGAGEMENT AND PERCEPTION FINDINGS

### SOCIO-DEMOGRAPHIC PROFILE

### SEX AND AGE

Males represented nearly two-thirds, 62.8 per cent, of survey respondents.

Disaggregation of the demographic data by age showed more than half, 59.8 per cent, of household respondents were aged 45 years and over. The highest share of respondents, 40.2 per cent, were aged 45 to 64 years, while the smallest share belonged to the youth age group category, 18-24 years, with a total share of 6.9 per cent (Table 9).

### Table 9: Age of Respondents

AGE GROUP	TOTAL (%)
18-24	6.9
25-44	31.0
45-64	40.2
65 and over	19.5
No response	2.3
Total	100.0

Further disaggregation of age by sex showed the highest share of female household respondents (43.8%) were aged 25-44 years, while most male household respondents (44.4%) were aged 44-64 years.

### EDUCATION AND TRAINING

More than two-thirds, 71 per cent, of respondents reported secondary education as the highest level of education they had completed- most at the upper secondary level (57%). Sixteen percent (16%) reported completing some form of pre-primary (early childhood) or primary education, 1.2 per cent completed higher education at a university, and 10.5 per had not received any formal education (Table 10).

By sex, the findings on education show 78 per cent of women have completed secondary education, compared to 67 per cent of men. More women (12.5%) than men (9.3%) however reported not receiving any formal education. The data on trade certification revealed no household respondent had completed a formal trade certification programme.

While the data on respondents' educational attainment aligns with Jamaica's overall educational attainment distribution for the labour force<sup>17</sup>, key stakeholders directly engaged

<sup>&</sup>lt;sup>17</sup> <u>https://statinja.gov.jm/LabourForce/NewLFS.aspx</u>

in the communities<sup>18</sup> have expressed concerns about the populations' growing lack of proficiency in literacy and lower levels of skills, particularly among the youth aged population, which has created lower employment opportunities and outcomes for community members. Stakeholders also revealed that a significant share of the highly educated youth and adult population from the communities across the study area chose to, or were forced to migrate due to the lack of job opportunities.

EDUCATION LEVEL	TOTAL (%)	TOTAL (%)	
	Female	Male	
None	12.5	9.3	
Early Childhood/ Pre-Primary	0.0	1.8	
Primary (Grades 1-6)	9.4	18.5	
Lower Secondary/High School (7-9)	15.6	13	
Upper Secondary (10-11)	62.5	53.7	
Bachelor's Degree	0.0	1.85	

### Table 10: Education Level of Household Representative by Sex

### HOUSING AND HOUSEHOLD CHARACTERISTICS

### HOUSEHOLD COMPOSITION AND PROFILE

Analysis of the demographic profile of households showed there were 275 people living in 86 households, revealing an average household size of 3.19. The average household size represents a marked decline when compared to the average size of 4.08 recorded by the Social Development Commission in 2016. The survey findings do, however, align with information gathered from key stakeholders who reported that migration of key population groups- youth, persons with higher education and job seekers- has led to overall changes in the composition and profile of households in the study area. Household sizes have, and continue to decline, and a growing share of households are being led by the elderly or comprise only the elderly.

Based on the results of the survey, more than a third, 34.5 per cent, of households surveyed had no children living in them and adults accounted for a higher share of household occupants at 80 per cent. Less than a tenth of households (3.4%) reported having an occupant with a disability and less than a quarter (19.7 per cent) had a member who had a health problem or long-term condition.

### HOUSING OWNERSHIP

Less than half, 48.8 per cent, of surveyed respondents reported that the dwelling in which they lived was owned by a member of their current household, while 18.6 per cent reported rent or lease as the tenure status of the dwelling occupied by members of their household. This data on ownership is in line with previous housing ownership data recorded for Lionel

<sup>&</sup>lt;sup>18</sup> Employers, political representatives and community development officers.

Town area (PIOJ and STATIN, 2012). The remaining households reported rent free (8.2 per cent), other-company house (3.5 per cent) or provided no response (3.5 per cent). The total share of dwellings owned among surveyed households is below the national average of 55.6 per cent.<sup>19</sup>

# Informal Housing

From the consultations held with key community and local government representatives it was reported that informal housing and settlements are part of the housing landscape in the study area. These informal settlements are found primarily in vacant cane field areas. Local government figures estimate there are approximately 200 informal settlements in Lionel Town and an estimated 100 in the Mitchell Town community.<sup>20</sup>

### VULNERABLE GROUPS

Groups identified as being vulnerable and/or marginalized include:

- Youth age population (predominantly males)
- Elderly
- Children
- Small farmers

### LABOUR MARKET

### EMPLOYMENT

At the time of the survey, over half, 52.3 per cent, of respondents surveyed reported they were employed; either self-employed (33.7%) or working in paid employment (18.6%). Nearly a third reported they were not in paid work and were seeking a job (30.2 per cent), while the remaining respondents were not in paid work and not seeking a job (15.1 per cent), or did not provide a response (2.4%) [Table 11].

### Table 11: Employment Status of Household Representative by Sex

Employment Status	Sex		Total (%)	
	Female (%)	Male (%)		
No- not in paid work and looking for a job	40.6	24.1	30.2	
No- not in paid work and not looking for a job	9.9	18.5	15.1	
Yes- working in paid employment	18.8	18.5	18.6	

<sup>&</sup>lt;sup>19</sup> Planning Institute of Jamaica (2023. Jamaica Survey of Living Conditions 2021

<sup>&</sup>lt;sup>20</sup> Winston Maragh, Councillor Rocky Point Division, and Former Mayor of May Pen, Personal Communication, 2025

Employment Status	Sex		Total (%)
	Female (%)	Male (%)	
Yes, self-employed	31.2	35.2	33.7
No response	0.0	3.7	2.4
Total	100	100	100

Disaggregated by sex, the data did not show any significant gender gap in labour force participation. By sex, the data showed 50 per cent of female respondents were engaged in paid employment (18.8%) or self-employed (31.2%), while 53.7 per cent of males were engaged in paid employment (35.2 per cent) or self- employed (18.5 per cent). However, there was a noted gap in the proportion of women seeking employment (40.6 per cent) compared to men (24.1%).

The high level of unemployment among respondents revealed in the survey has been identified by stakeholders as a wider socio-economic issue impacting a significant share of the population both within the study area, and the wider Vere Plains region. Stakeholders have linked the high levels of unemployment directly to the closure of the Monymusk Sugar Factory in 2018, which directly and indirectly provided employment and supported most households and businesses in the Vere Plains region, particularly in Lionel Town. At its peak, Monymusk Sugar Factory is said to have directly employed 3,000 workers, and provided indirect employment for an estimated 15,000 persons.<sup>21</sup>

# OCCUPATION

The findings of the survey and stakeholder consultations revealed the majority of the working population in the study area is engaged in elementary and trade related occupations- agriculture, fishing, labourers (including construction workers), electrical and machinery workers, domestic workers, and drivers (taxi and truck). The survey results showed, at the time of the survey, all employed respondents were engaged in elementary, trade related or service and sales related occupations. The results also indicate a high proportion of respondents are part of the informal sector.

Consultation participants from the parish and local area development committees<sup>22</sup> and political directorate<sup>23</sup> identified agriculture related occupations as the main occupational category to which most (between 75-80%) of the working age population of the communities in the study area belong. Occupational fields identified, include agriculture and livestock labourers (farmers) and fishers- most of whom are small farmers and fishers.

Although both men and women are involved in agriculture, key community stakeholders highlighted that more men are involved solely in agriculture related occupations compared to women, who, in addition to agriculture, are more likely to engage in other types of

<sup>&</sup>lt;sup>21</sup> Nigel Myrie, SCJ Holdings Limited, Manager Land and Lease Management Unit, Personal Communication 2025

 <sup>&</sup>lt;sup>22</sup> (1) Clarendon Parish Development Committee Benevolent Society (2) Lionel Town Development Area
 Committee, and (3) Milk River Local Development Area Committee

<sup>&</sup>lt;sup>23</sup> Joel Williams- Mayor, May Pen; Winston Maragh, Member of Parliament; Kijana Johnson, Councillor

elementary occupations as domestic workers, vendors and labourers. Key insights from the consultations related to age group revealed there is a high level of disinterest among youths regarding careers in farming and fishing, with youth males in particular showing greater interest in construction and trade related occupations.

### **INCOME AND INCOME SOURCES**

Surveyed households reported that the main sources of income for their household were 'money earned from own work (59%), remittances from friends and family (11.6%), support from family in Jamaica (7%) and pensions (3.5%). The remaining respondents reported their household had no main source of income (5.8%) or did not provide a response (7%).

From the total share of household respondents (66) that provided a response to the question asked on monthly income, 50 per cent reported a monthly income below \$20,000 Jamaican dollars and nearly a quarter (23%) reported incomes ranging between \$20,000-\$39,000.00 monthly. Less than a tenth (3%) reported monthly income levels above \$100,000.00 Jamaican dollars (Table 12). Among respondents who reported being employed, 44 per cent reported earning less than \$40,000.00 Jamaican dollars monthly.

Income	Sex		Total (%)
	Female (%)	Male (%)	
Below \$20,000	56	46.3	50
\$20,000 - \$39,999	24	22	22.7
\$40,000 - \$59,999	12	19.5	16.7
\$60,000 - \$79,999	8	2.4	4.6
\$80,000 - \$99,999	-	4.9	3
\$100,000 to \$199,999	-	4.9	3
Grand Total	100	100	100

### Table 12: Monthly Income of Household Representative by Sex

### SUGAR INDUSTRY INTERACTION AND EXPERIENCES

Two-thirds, 66.3 per cent, of households surveyed had at least one member who was a previous employee at the Monymusk Sugar Factory (Table 13). This finding is consistent with information gathered from consultations, including the FGD, where stakeholders reported the Monymusk Sugar Factory directly and indirectly supported most, if not all, households in the communities located within the Southern Clarendon and Vere Plains region.

Nearly half, 46.2 per cent, of former employees had been employed at the factory for more than 10 years.

Table 13: Total Share of Households with at least one former employee of Monymusk Sugar Factory

	Female (%)	Male (%)	Total (%)
No	12.8	18.6	31.4
Not sure	1.2	1.2	2.3
Yes	23.2	43.0	66.3
Total	37.2	62.8	100.0

### Impact of Factory Closure

See, my community, I love it very much. But it's kind of run down since the closure of the factory. We all are suffering down here now.

Male participant, FGD

For many residents in the study area, the closure of Monymusk led to widespread adverse social and economic impacts- many of which are still being experienced today. The findings of the survey showed more than three-quarters, 76.7 per cent, of participating households reported a loss of income as the main impact the factory's closure had on their household. For nearly half, 46.5 per cent, the closure also impacted personal savings, housing expenditure on food, pension and overall livelihood security (Table 14). The loss of pension, in particular, was highlighted by participants in the FGD as one of the main challenges which adversely affected many households. Participants reported that many former Monymusk workers were not paid the pension that was commensurate with the length of their employment service following redundancy exercises and ultimate closure of the factory. It was revealed that some workers received pension payments for only a few years (1-2 years) due to potential administrative filing errors with the National Insurance Scheme (NIS), which left many without income security having entered retirement. Finding jobs have also proved challenging for former workers.

# Lack of Employment Opportunities

The survey results also showed among the total share of households with former Monymusk employees, 44 per cent reported that former workers living in their households have been unsuccessful in finding employment since the closure of Monymusk. Among those able to secure employment following the factory's closure, the data showed 41.3 per cent did so in less than 12 months, 21 per cent in 1-2 years, for 27.5 per cent it took more than 2 years and for 10.3 per cent the length of time taken to secure employment was uncertain.

Table 14: Impact of Monymusk Sugar Factory Closure on I	Households
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Types of Impacts	Total (%)
Loss of income	76.7
Loss of savings	46.5

Types of Impacts	Total (%)
Loss of livelihood security	46.5
Unable to feed family	46.5
Loss of pension	40.7
Unable to pay for child's/children's education	34.8
Emotional distress and anxiety	30.2
Loss home	15.1
Unable to pay mortgage	15.1
Loss business	5.8

A lot of people out here now, they are burning coal. Coal for fire coal. And quite a few guys go and do a little fishing, but you know, that's about it. Male participant, FGD

Many former labourers residing across the Vere Plains, including those formerly employed in non-farming roles, have engaged in animal husbandry/livestock farming (cattle, goat and pig), castor oil farming, fishing and charcoal burning to support themselves and their families. Others have migrated to other places locally (Ocho Rios and St. Mary) and overseas to gain employment in construction or other fields. Some workers have also found employment in the sugar industry in Clarendon.<sup>24</sup>

Burning of the fire coal...now gone down they don't have anybody coming in to buy the fire coals anymore. Female participant, FGD

However, stakeholders have noted the precarity of the economy and job market, which has made it difficult for community members to maintain stable employment. The impact of the COVID-19 pandemic further exacerbated economic and employment challenges.

# **Business Losses**

In keeping with the findings of the survey (Table 15), FGD participants and key stakeholders reported that the closure of the factory led to a rapid decline in community development, as the closure triggered a torrent of negative social and economic impacts. In addition to the losses of employment and income, the consultations revealed the widespread closure of businesses and the loss of critical services across many of the communities, particularly in Lionel Town, where the impact was greatest. Stakeholders shared in the consultations that banking services and facilities, provided solely by the National Commercial Bank, were permanently relocated from the community to May Pen. Many locally owned businesses, which provided goods and services to workers and community members, including gas stations, restaurants, retail stores, grocery stores, and electrical and mechanic businesses, were all shuttered. Nearly nine in ten (87.2 per cent) survey respondents reported a significant decline in economic and business activities following the closure of the factory. In recent times, businesses that were able to withstand the initial shock of the factory's closure, are on the brink of closing or have closed due to the impact of COVID-19.<sup>25</sup>

<sup>&</sup>lt;sup>24</sup> The Clarendon Chamber of Commerce estimates there are between 70-80 farmers involved in the cultivation and harvesting of sugar cane currently.

<sup>&</sup>lt;sup>25</sup> Hanif Brown, Representative, Clarendon Chamber of Commerce. Personal Communication May 2025

TYPES OF IMPACTS	TOTAL (%)
Increase in Unemployment	94.2
Increase in poverty	77.9
Increase in crime	70.9
Non-resident factory workers left the community	37.2
Improvement in the quality of water resources	10.4
Improvement in air quality	9.2

### Table 15: Impact of Monymusk Sugar Factory Closure on Community

# Declining Quality of Life

But the community really need to be developed, you know? Really need to be developed. We can't go on living like this. We are, you know, people in the community are human beings like anybody else ... We need people to come in and do something. You know? Look, the youth, they need something to do, you know? Male participant, FGD

The closure of the factory has had significant adverse impacts on health, educational attainment and outcomes, crime and community engagement and cohesion. Consultations held with health and business stakeholders in the community revealed key insights into the socio-economic challenges affecting residents. As unemployment and poverty levels have risen, health representatives have reported that the current levels of malnourishment observed in the population served at the Lionel Town Hospital is concerning.<sup>26</sup> Growing food insecurity has been identified by stakeholders as one of the challenges affecting community members, particularly children and the elderly, which has contributed to declining health status. As large segments of the population struggle with income inadequacies, their overall purchasing power has impacted their spending on essential amenities and services such as food, health and education services.

This reduction in spending has, according to feedback from stakeholders, translated into unmet nutritional needs, infrequent healthcare check-ups, lower attendance rates at the primary and secondary level, higher secondary school dropout rates and low educational performance among the youth population<sup>27</sup> and an increase in criminal activities. In the communities of Lionel Town and Rocky Point gang violence, which continues to plague the area, has been linked to the challenging social and economic conditions faced by community members- driven primarily by the lack of employment opportunities and successes for residents. Education and training intervention efforts by the Government of Jamaica,<sup>28</sup> targeting the youth population in the Vere Plains region, have not had the desired impact, as the response to the tuition-free programmes have been described by stakeholders as 'underwhelming.'

<sup>&</sup>lt;sup>26</sup> Nadine Preddie, Chief Executive Officer, Lionel Town Hospital. Personal Communication 2025

<sup>&</sup>lt;sup>27</sup> Key stakeholders reported that Alley Primary and Bustamante High School in Lionel Town have reported declines in school attendance and overall student performance.

<sup>&</sup>lt;sup>28</sup> The Government of Jamaica in 2023 removed all tuition and administrative fees for HEART-NSTA Trust programmes up to level four (associate degree). The programme became effective April 1, 2023.

Other community initiatives spearheaded by the private sector and various Nongovernmental Organisations (NGOs) and Community Based Organisations (CBOs) have sought to address some of the socio-economic challenges affecting the communities, with varying levels of success. Welfare programmes have sought to address food security issues, training programmes have been developed to help tackle literacy challenges and ongoing community engagement programmes are focused on community development, youth empowerment and crime reduction.

### **PROJECT PERCEPTIONS AND POTENTIAL IMPACTS**

### **PROJECT AWARENESS**

All key stakeholders consulted were aware of the proposed project, although the level and depth of information known about the intended development varied among stakeholders. Most survey respondents, 82.5 per cent, also reported being aware of the proposed project to resume sugar factory operation. Most had been made aware by a fellow community member (91.5%).

### **PROJECT SUPPORT**

The consultations demonstrated there is broad support for the proposed project, with no stakeholder raising an objection or opposition to the new construction and operation of the agro-processing facility (sugar factory). Stakeholders, instead, emphasised the necessity of the project in supporting the redevelopment of the local communities across the Vere Plains region, and highlighted the social and economic opportunities to be derived from the project.

The survey results showed all respondents supported the project and 99 per cent agreed the development was necessary. Overall, there was general consensus among stakeholders that the project will bring about an improvement in the quality of life for residents, create employment, provide opportunities for new business investments in the study area and wider parish, help to re-establish social cohesion, and rebuild the vibrancy of the Lionel Town area.

### **PROJECT IMPACTS AND CONCERNS**

Analysis of the perception data on project impact showed while stakeholders associated mostly positive impacts with the proposed project, there were also a few concerns expressed about the project.

### Perceived Project Benefits

For all groups engaged as part of the consultations, the proposed project represents hope and an opportunity for community renewal and development. Key stakeholders also noted the national development opportunity offered by the project, given its alignment with national development goals and priorities centred around job creation, economic diversification, modernisation of the agricultural sector and food security.<sup>29</sup>

Employment opportunities (96.5%) and potential increases in income (95.3%) were the two main community benefits survey respondents associated with the proposed project (Table 16). The project was also seen as likely to assist in the reduction of poverty (81.5%) and crime (79.1%) and lowering of the overall employment rate (59.3%).

BENEFITS	TOTAL (%)
Provide employment/create job opportunities	96.5
Increase in wages/income	95.3
Reduce poverty	81.4
Reduce crime	79.1
Lower employment rate	59.3
Support/stimulate growth of local businesses	62.8
Provide opportunities for re-establishment and growth of local small businesses	51.2
Influx of migrant workers	12.8

Table 16: Expected Community Benefits from Proposed Project

Most survey respondents also identified employment opportunities (83.7%) and potential increases in income (80.2%) as the main personal benefits they associated with the proposed project. More than half of all respondents also reported the project's potential impact in reducing poverty (74.4%) and emotional distress (66.2%). For 10.2 per cent of respondents, however, the project was not expected to have any personal impact or offer any personal benefits (Table 17).

Table 17: Expected Individual/Persona	Benefits from Proposed Project
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BENEFITS	TOTAL (%)
Provide employment/create job opportunities	83.7
Increase in wages/income	80.2
Reduce poverty	74.4
Reduce emotional distress and anxiety	66.2
No benefit	10.2

In discussing the potential impacts of the proposed project, participants in the FGD shared that community members are anxious for the project to get started. Many shared their hope that the project would finally create job opportunities for people in their communities and support the re-establishment of businesses that have been shuttered in recent years. For

<sup>&</sup>lt;sup>29</sup> Marlene Porter, Manager Agribusiness and Investment Linkages, JAMPRO, Personal Communication, 2025

others, the project presents a worthwhile opportunity for youth engagement, through the provision of training and job opportunities. Participants suggested that a successful youth engagement programme would help to keep the youth population out of illicit activities and ensure safety in the communities. With respect to community development and corporate social responsibility (CSR), many participants indicated their desire to see the new developers of the sugar factory contribute to the development of the communities by supporting local initiatives and collaborating on community projects and events.

Key stakeholders, when asked about potential impact of the project, identified similar social and economic benefits shared in the FGD and survey, including job creation, increased commercial activity, and opportunities for youth engagement. Stakeholders also reported the potential to reap broader national benefits, including generation of tax revenues, increase in exports and trade, generation of foreign exchange earnings and expansion and diversification of the agricultural sector.

It is also important to note that respondents to the survey and key stakeholders did not identify any marginalized or vulnerable groups that they believed would be disproportionately impacted by the project. Neither were any existing nor proposed industrial activity reported which could potentially conflict with the proposed development.

I think the opportunity for employment for persons in the area- that's a positive, but it has to be employment at a level that takes them out of poverty. it has to be something that has long lasting positive impact. C-CAM, consultation

Additionally, although stakeholders anticipated a number of positive outcomes from the project, for many it is important that the project offers long-term and sustainable opportunities for community members to ensure the achievement of tangible socio-economic and health outcomes for residents and potential workers.

### Perceived Adverse Impacts and Concerns

The survey found only a small share of respondents, 2.3 per cent, were 'somewhat' concerned about the adverse environmental impacts of the project. The findings showed air pollution was the main environmental concern for respondents. This finding was not particularly remarkable as when survey respondents were asked about the environmental impacts of Monymusk's operation in the community, 79.1 per cent, stated there had been none, while 95.3 per cent stated that the factory's operations had never impacted their own personal health or that of a family member.

When asked about other concerns or adverse impacts, 8.1 per cent of respondents expressed being 'slightly' concerned about potential disturbances and disruptions from construction activities and the health and respiratory effects associated with the proposed project activities. Nearly a quarter of households, 23.2 per cent, reported that at least one member of their respective household suffers from a respiratory illness or disease.

Stakeholders engaged in the consultations however identified environmental areas of concern, along with or areas of key interest and concerns. Some of the main issues identified were:

- The potential for the project to pollute groundwater resources and increase saline intrusion
- Increase in air pollution sources during construction and operation of the factory
- Proper management of waste generated from the factory
- The importance of providing adequate compensation for farmers to ensure the profitability of the venture for farmers, as well as the developers/operators.
- Displacement of livestock farmers and informal land occupants and threats to livelihoods and social cohesion
- The importance of developing innovative training and youth engagement strategies to attract and retain youth involvement.

Additional concerns provided by stakeholders are outlined in Table 18

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
Caribbean Coastal Area Management Foundation (C-CAM)	<ul> <li>Source of water for the project and the impact increased extraction of groundwater may have on increasing saline intrusion in the project areas</li> <li>The impact of waste on water sources and water quality</li> <li>The potential impact on wildlife, including birds and crocodiles</li> <li>The impact of resettlement on informal settlers and potential disruption of livelihoods</li> <li>The return of charcoal burning in the protected area due to reclamation of cane lands for project</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Provides an opportunity to support community development</li> <li>Opportunity to engage community and build community partnership</li> </ul>	<ul> <li>Develop a comprehensive water quality monitoring programme to address water pollution</li> <li>Workers should be provided with guaranteed job security, and liveable and attractive compensation packages</li> <li>Consideration should be given to allocating marginal (fringe) cane lands to community members that support their livelihoods through the burning of charcoal and will be relocated as a result of the project</li> <li>Develop tourism product by Converting the defunct Monymusk Factory and old housing barracks into a heritage museum or tour</li> <li>Identify and outline mitigation and monitoring measures to address environmental impacts</li> <li>Develop a community engagement strategy and programme</li> </ul>
JAMALCO	<ul> <li>Concerned about the long-term sustainability of the proposed project</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Provide support for local initiatives and programmes,</li> </ul>	<ul> <li>Appoint a designated community liaison officer to manage community engagement and</li> </ul>

# Table 18: Summary of Stakeholder Feedback on Potential Impacts and Recommendations

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
	<ul> <li>Impact of air pollution and proposed plans to address environmental and social impact of air pollution</li> <li>Engagement of youth population in community</li> </ul>	<ul> <li>easing the burden on existing businesses</li> <li>Provide training and upskilling opportunities for community members</li> </ul>	develop a community engagement strategy and programme
Lionel Town Hospital	<ul> <li>Handling, treatment and management of waste</li> <li>Impact of air pollution and proposed plans to address environmental and social impact of air pollution</li> <li>Engagement of young men in community</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Provides an opportunity to support Improvement of health outcomes, particularly for children and the elderly</li> <li>Provides an opportunity to support community development</li> </ul>	<ul> <li>Train and recruit locals for job opportunities, particularly young men and women.</li> <li>Provide support to local initiatives and collaborate with community on various programmes</li> </ul>
Chamber of Commerce	<ul> <li>Concerned about the length of time taken for project to be approved and started</li> <li>The importance of having proper security measures, protocols and mechanism in place to safeguard field and factory operations</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Reduce poverty</li> <li>Increase export and trade revenue (foreign exchange earnings)</li> <li>Provide training and upskilling opportunities for community members</li> <li>Provides an opportunity to support community development</li> </ul>	<ul> <li>Local contractors in the community should be given priority during the contractor recruitment process</li> <li>Develop a security management plan to safeguard field and factory operations</li> <li>Mitigation and monitoring measures to address environmental impacts should be clearly outlined</li> </ul>

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
Municipal Corporation (representatives)	<ul> <li>Concerned about the Impact and disruptions relocation of cattle farmers may have on their livelihoods</li> <li>Handling, treatment and management of waste</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Increase export and trade revenue (foreign exchange earnings)</li> <li>Increase government revenue (taxes)</li> <li>Provides an opportunity to support community development</li> <li>Create linkages across various sectors e.g., transportation, tourism.</li> </ul>	<ul> <li>Invest in community infrastructure, particularly those in the education and health sectors</li> <li>Provide support to local initiatives and collaborate with community on various programmes</li> <li>Train and recruit locals for job opportunities, particularly young men and women.</li> <li>Establish grievance mechanisms, protocols and procedures to address community concerns during construction and operation</li> <li>Develop a comprehensive relocation plan to limit disruptions of farming livelihoods</li> </ul>
Clarendon Parish development Committee and Benevolent Society	<ul> <li>Potential influx and recruitment of workers from outside the community and 'shutting out' of locals</li> <li>Pollution of water sources and overall impact on water quality</li> <li>Impact of run-off on fauna and fish species in water ways</li> </ul>	<ul> <li>Create employment/job opportunities</li> <li>Provide training and upskilling opportunities for community members</li> <li>Provides an opportunity to support community development</li> <li>Provides the opportunity to improve and develop education programmes focused on sugar</li> </ul>	<ul> <li>Develop a detailed corporate social responsibility programme,</li> <li>Develop procedures and strategy for field operations, which covers protocols, procedures, timelines and schedules for field and factory activities and operations</li> <li>Train and recruit locals for job opportunities</li> </ul>

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
	<ul> <li>Concerned about soil contamination from use of fertilisers and pesticides</li> <li>Impact of dust emission sources e.g., haulage trucks, burning of bagasse and foul odours from cane fermentation process on air quality</li> <li>Displacement of local jobs in the long-term or reduction in wages</li> <li>Occupational health and safety of field workers, including risk of loss, injury or death during construction and operation</li> <li>The importance of offering proper compensation for farmers to ensure long-term sustainability of project</li> <li>Initial start-up costs for farmers</li> <li>Concerned about farmers and workers not being properly compensated for additional value-added products</li> <li>Concerned about disaster management and safety of workers</li> </ul>	production and agricultural diversification	<ul> <li>Workers should be provided with guaranteed job security, and liveable and attractive salary packages, which include healthcare, occupational health and safety and pension benefits</li> <li>In the project's start-up phase, labourers/farmers should be assisted with initial start-up inputs e.g., fertilizer, tools</li> <li>Appoint a designated community liaison officer to manage community engagement</li> <li>Conduct 'walk-throughs' in communities where project activities will occur and engage in dialogue with residents</li> <li>Develop a comprehensive water and soil contamination monitoring plan</li> <li>Establish grievance mechanisms, protocols and procedures to address community concerns during construction and operation</li> <li>Ensure disaster management protocols, systems and services are extended to farmers and contractors</li> </ul>

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
			<ul> <li>Partner with small businesses to support entrepreneurship, using mechanisms such as grants, training etc.</li> </ul>
JAMPRO		<ul> <li>Create employment/job opportunities</li> <li>Advances technological development and modernizes agricultural production</li> <li>Create linkages across various sectors e.g., transportation, tourism.</li> <li>Increase export and trade revenue (foreign exchange earnings)</li> <li>Increase government revenue (taxes)</li> <li>Support the diversification and expansion of the agricultural sector</li> <li>Provides the opportunity to improve and develop education programmes focused on sugar production and agricultural diversification</li> <li>Promotes energy efficiency and use of renewable energy technologies</li> </ul>	

ORGANISATION	ISSUES AND CONCERNS	BENEFITS AND AREAS OF OPPORTUNITY	RECOMMENDATIONS
SCJ Holdings Limited	Concerned about the impact and damage nomadic cattle farming is having on cane lands	<ul> <li>Support bringing 15,000 acres of cane lands into productive agricultural use</li> <li>Support redevelopment and rehabilitation of irrigation infrastructure and systems</li> <li>Creates the opportunity to introduce a new approach for rearing and management of cattle</li> <li>Supports diversification of sugar industry and agricultural sector with production of a range of value-added products</li> <li>Supports expansion of new export markets for Jamaican made products</li> <li>Promotes energy efficiency and use of renewable energy technologies</li> <li>No burning of cane fields, eliminating the main source of air pollution in field operations</li> </ul>	<ul> <li>Implement security systems and measures to address protection of cultivated areas and factory operations</li> </ul>

This section identifies and assesses the potential and likely impacts and outcomes of the proposed project on the valued social-economic components<sup>30</sup> in the project area. Presented using the 'with' or 'without' scenario, the assessment examines the social baseline conditions that are likely to remain unchanged, the types of changes that are likely to occur and the resultant effects on the valued components and social receptors, including their communities, and the systems and services on which they depend, if the proposed project is implemented or there are no interventions in current baseline conditions (Table 19).

The impacts that are identified and assessed are based on the preliminary design concepts for the agro-processing and manufacturing facility. It is anticipated that final detailed designs, including detailed engineering works, may require amendments. Such amendments can be considered during the implementation of the proposed mitigation and monitoring measures, which should be responsive to changes in the project scope and activities.

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
<b>POPULATION - PUBLIC HEAI</b>	LTH, SAFETY AND WELL-BEING	
Population Dynamics- Migration	<ul> <li>Without</li> <li>No change to existing baseline conditions. The findings of the consultations revealed ongoing community migration has been a key contributing factor to the shrinking, and unchanged population sizes observed in</li> </ul>	<ul> <li><u>Construction and Operation</u>: The project presents an opportunity for local skill sets to be utilised, and local capacity developed through training and other capacity building programmes and activities. The project could</li> </ul>

### Table 19: Impact Identification

<sup>&</sup>lt;sup>30</sup> Valued social-economic components are classified as the fundamental social, economic, cultural/heritage, and environmental elements and features of a community, and its systems that are considered significant and/or valuable and may be affected by the proposed project.

ve (Without & With) ne communities across the study area. Migration m the communities has largely been driven by ividuals- mainly belonging to the youth aged pulation- leaving in search of economic portunities and improved standards of living.	Positive (With) therefore support talent retention in the community, and potentially slow or reduce the overall pace of migration.
m the communities has largely been driven by ividuals- mainly belonging to the youth aged pulation- leaving in search of economic	community, and potentially slow or reduce
ied on the findings of the survey and information hered from the consultations, most of the labour ce in the communities are low-wage workers or rkers without advanced formal educational training. e overall data suggests there is unlikely to be ficient local capacity to fill both non-technical and hnical roles during construction and for factory erations. However, it is anticipated that there will be ficient local capacity to fill more than 50% of the es required for field operations (cultivation, vesting and transportation). It is therefore icipated there will be an inflow of transient workers m outside the communities during the construction ase, mainly from across the island. This is likely to d to an increased demand for housing, and other al infrastructure and services within the Vere Plain ion and other areas providing ease of access to the astruction site. Transient workers can also change nmunity and family structures. depending on the	
h e fi i e n n n n n n n	nical roles during construction and for factory rations. However, it is anticipated that there will be cient local capacity to fill more than 50% of the s required for field operations (cultivation, vesting and transportation). It is therefore cipated there will be an inflow of transient workers n outside the communities during the construction se, mainly from across the island. This is likely to to an increased demand for housing, and other l infrastructure and services within the Vere Plain on and other areas providing ease of access to the

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	origin (i.e., foreigners and non-residents). Workers will be hired for the project during the construction phase. During the operational phase an estimated 10 per cent of workers are expected to be foreigners. Locals from outside the study area are also likely to seek and benefit from employment and other business opportunities.	
Noise and Vibration	<ul> <li>Without</li> <li>No change to existing baseline conditions. anthropogenic sources (conversations, music etc.) and road traffic are the main noise emitting sources across the project area. The baseline noise assessment (Annex 4) results showed average ambient noise levels ranging between 30-74 decibels (dBA) during the daytime. Readings recorded at the project site above the 70dBA safe limit for environmental noise were associated with the intermittent movement of vehicles (cars and motorbikes) and elevated wind conditions.</li> </ul>	• <u>Construction</u> : The construction period is relatively short, given the scale of the project, and is not expected to exceed 14 months. This will reduce social receptors' length of exposure to noise nuisances. Additionally, construction activities will not be concentrated or take place near community service facilities where vulnerable and key sensitive receptors are located e.g., schools, health centres, day cares etc.
	<ul> <li>With</li> <li><u>Construction</u>: Given the rural nature of the project area, pre-construction and construction activities (excavation, earthworks, land stripping and clearance, road works and the operation of construction vehicles and equipment) will generate noise emissions that exceed current ambient noise levels within the project area.</li> </ul>	• <u>Operation</u> : Sound barrier walls will be erected along property boundaries bordering residential communities. Green spaces/areas will also be created along the roadsides and areas bordering the communities to help in deflecting and absorbing noise.

VALUED SOCIAL AND ECONOMIC COMPONENT	ІМРАСТЅ	
	Negative (Without & With)	Positive (With)
	<ul> <li>Negative (Without &amp; With)</li> <li>Construction related activities are expected to increase noise levels above the discomfort level of 80dBA, reaching between 115-120dBA, based on the typical noise measurement levels for construction vehicles and equipment. However, noise levels are expected to fall to approximately 55-60 dBA in areas located at least 100m from the central construction area. Construction workers are therefore expected to be the main social receptors to face direct exposure to construction related noise emitting sources for an extended period and are also the most likely to face the most severe public health threats such as hearing loss. Similarly, informal settlers located on the eastern boundary of the project site are also likely to be impacted by the increase in nuisance noise, if they are not relocated prior to the start of construction, along with the residential population of the Alley community situated on the immediate south and south-western boundary of the site. Sensitive receptors such as children, the elderly and persons with auditory sensitivities, are expected to be the most impacted by changes baseline noise levels in these areas.</li> </ul>	Positive (With)
	institutions e.g., schools and healthcare facilities (Alley Primary School, Lionel Town Hospital, Bustamante High School) are unlikely to be significantly impacted by	
	noise pollution, given the distance of these institutions	

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	<ul> <li>(&gt;500m) from the central construction area, where ambient noise levels associated with construction activities are expected to decline below 50dBA at these locations. The Lionel Town Hospital's location along the main access route to the site is however likely to expose receptors using that facility to temporary noise nuisances caused primarily from the movement of equipment and materials during the construction period.</li> <li>Noise emissions are not expected to pose long-term adverse risks to social (human) receptors in the residential and community facilities found within the project area given: <ul> <li>No blasting is anticipated to be required</li> <li>The distance of the receptors from the construction period (13-14 months)</li> <li>The availability of noise mitigation and best practice options and techniques to minimise noise</li> </ul> </li> </ul>	
Air Quality	<ul> <li>Without</li> <li>No change to existing baseline conditions. There are no major existing sources that emit the main air pollutants of concern- particulate matter, carbon monoxide, sulfur dioxide and nitrogen dioxide.</li> </ul>	• <u>Operation</u> : The agricultural practice of sugarcane burning will not be used for the harvesting of cane. Green cane harvesting is the harvesting method that will be used, and will involve the use of mechanical harvesters. This approach will lead to the reduction in air

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS		
	Negative (Without & With)	Positive (With)	
	<ul> <li>With</li> <li>Construction: Pre-construction and construction activities (, excavation, earthworks, land stripping and clearance, vegetation clearance, the construction of road infrastructure, and the operation of construction vehicles and equipment) will increase the volume of particulate matter and chemicals of potential concerns in the project areas. Construction workers and other workers at the sites are expected to be the most affected by changes in air quality given their direct involvement in construction related activities, and general proximity to dust generating activities. Public health issues of concern associated with fugitive dust and reduced air quality may include irritation of eyes, asthma attacks and other respiratory induced effects such as wheezing, difficulty breathing and coughing.</li> <li>While no adverse health effects related to poor air quality are anticipated for the residential population located within the study area during pre-construction and construction, the increased presence of fugitive air emissions and air emissions from construction and land preparation activities (cane fields) may lead to negative health impacts, particularly for sensitive social receptors with existing respiratory health concerns. Other sensory</li> </ul>	pollutants and exposure to air pollution by social receptors located within the study area.	

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	emissions such as odours may also have a similar impact on vulnerable groups.	
	• <u>Operation</u> : During the operational phase, human exposure to air pollution emissions, including fugitive emissions will be primarily from the Bagasse Boiler, Diesel Generator and Bagasse Storage and Handling System. Particulate matter from the bagasse stockpile is expected to be the primary source of air pollution which may pose an adverse threat to human health. The use of electrostatic precipitators for particulate removal from the boilers (wood chip firing and bagasse firing) will reduce particulate matter from 2,200 mg/Nm <sup>3</sup> to 100 mg/Nm <sup>3</sup> (a 95.5% removal efficiency for PM/TSP), controlling the stack PM emissions. Air emission reduction measures will need to be put in place for the generator to ensure compliance with the legal requirements of 0.5% maximum sulphur content	
Occupational health and	<ul> <li>(Annex 2).</li> <li>Without</li> <li>No change to existing baseline conditions.</li> <li>With</li> </ul>	<u>Operation</u> : The project is likely to support the introduction of improved operational health and safety standards in the sugar industry with the automation and adoption of advanced
safety	<u>Construction</u> : There is the potential for work place and occupational risks and accidents during the undertaking of pre-construction and construction activities. It is expected that construction workers will	technology. Automation will help to reduce the use of manual labour in tasks and areas with increased exposure to occupational risks, such as harvesting and fertilization.

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	face the greatest threats given their direct involvement in project related activities, and also the length of exposure time to potential safety risks during the construction period. Injuries from the operation of machinery and equipment, working at elevated heights, handling various types of chemicals and waste materials and vehicular accidents are the occupational hazards and threats most likely to pose health risks to workers. Users of the roadways leading to the project site, which includes pedestrians, motorcyclists and cyclists, may also face potential health and safety risks. Road accidents can occur during the transportation and movement of construction materials and equipment.	
	<ul> <li><u>Operation</u>: Occupational accidents during field and factory operations are likely. Potential risks to workers may include, but are not limited to:         <ul> <li>physical injuries from the operation, maintenance and repair of machinery and equipment, and falls associated with working at elevated levels and heights,</li> <li>increased risks of chemical injuries due to exposure to chemical hazards e.g., chemical burns</li> <li>Increased risks of hearing loss due to exposure to high noise levels</li> </ul> </li> </ul>	

VALUED SOCIAL AND ECONOMIC COMPONENT	ΙΜΡΑCTS	
	Negative (Without & With)	Positive (With)
	<ul> <li>Increased risks of eye injury from exposure to bagasse and operation of machinery and equipment</li> <li>Biomechanical injuries associated with lifting heavy loads or overextending of muscles and ligaments in arms, legs, shoulders etc. during land preparation, harvesting etc.</li> <li>Road accidents and risks of physical, and psycho-social injuries during transportation of sugar cane.</li> <li>Members of the local population are also likely to face potential occupational health risks associated with the transportation of sugar cane and the movement of heavy equipment.</li> </ul>	
Road Access and Safety	<ul> <li>Without</li> <li>No change to baseline conditions. Some of the roadways previously used by Pan Caribbean are overgrown, and/or in poor condition.</li> <li>With</li> <li>During pre-construction and construction, all materials and equipment will be transported via existing access routes within the study area. Disruptions to the existing transportation service network are expected mainly in the community of Lionel Town- mostly in the</li> </ul>	• <u>Operation</u> : Rehabilitation of access roads is expected to improve the overall capacity of the road infrastructure network to support the movement of materials and equipment. Additionally, upgrading of the road infrastructure can help to improve overall access for other users of the local roadways.

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	main business centre. While periodic and temporary disruptions are expected for road users in the communities where cane fields are situated, these disruptions are not expected to be significant given the volume of traffic and users on the roadways, and the smaller volume of materials and equipment to be transported in those areas. The use of appropriate transportation equipment and adherence to safe loading standards must be met to reduce the likelihood of infrastructure deterioration, and ensure the safety of other users of roadways in the study area.	
Gender based violence and human trafficking	<ul> <li>With</li> <li>Construction is considered a high-risk environment for gender-based violence and harassment (GBVH). The industry remains a largely male-dominated industry, and can attract significant numbers of foreign workers. Incidents of violence within the industry affect workers, community members and service users. Similarly, construction workers are also vulnerable to exploitation and harassment.</li> <li>Labour trafficking remains a concern in Jamaica (US State Department Trafficking in Persons Report, 2024),<sup>31</sup> and therefore, keen attention will need to be paid to the recruitment and employment procedures used in securing workers.</li> </ul>	<ul> <li>There is an opportunity for information to be disseminated throughout the communities via (i) workers who have undergone training in GBV, sexual harassment and trafficking as part of the project and (ii) the distribution of information leaflets.</li> <li>Jamaica has also recently passed the Sexual Harassment (Protection and Prevention) Act (2021), mandating preventative policies in workplaces.</li> </ul>

<sup>&</sup>lt;sup>31</sup> https://www.state.gov/reports/2024-trafficking-in-persons-report/jamaica/

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
Population Health	<ul> <li>Without</li> <li>No change to baseline conditions. High unemployment rates, high prevalence of poverty and inadequate sources of income have significantly impacted the health outcomes of the resident population in the study area. Food insecurity, concerning levels of malnourishment among the elderly and child-aged population, and mental health challenges-mostly affecting the youth population- are likely to increase in the absence of comprehensive intervention measures and support mechanisms.</li> </ul>	• <u>Construction &amp; Operation</u> : The proposed project will create direct and indirect job opportunities and improve income for the resident population in the study area. This is expected to provide individuals and households, particularly vulnerable groups, with the resources to better afford food and healthcare services to meet their basic needs, improve health outcomes, and enhance their way of life.
Social Amenities and Services	<ul> <li>Without</li> <li>No change to baseline conditions. Most of the residential population in the study area has access to basic social services and amenities including healthcare, education, and infrastructure. The provision of services and amenities are however inadequate and have not kept pace with the needs of the population. Issues of access and distribution, scarcity of varying types of resources and insufficient investments in the upgrading and expansion of social amenities, services and infrastructure have contributed to the inadequacy of current social services and amenities.</li> <li>With</li> <li>During the construction and operation phase there will be an increased demand on existing social amenities and services. Current inadequacies may impact the</li> </ul>	<u>Operation</u> : TSCL has made a commitment to work with local communities through their corporate governance support programmes to identify areas of priority and assist, where possible, in contributing to the sustainable development of the communities.

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	quality of life and well-being of some workers due to access constraints and other limiting factors. It is therefore important that the relevant services and support that may be needed for workers be identified prior to the start of construction works and coordinating mechanisms put in place to ensure workers can readily access the relevant services, as may be required.	
ECONOMY		·
Socio-economic Livelihood and Security	<ul> <li>Without</li> <li>Lack of economic opportunities, inadequate income and increasing poverty have led to a deterioration of socio-economic livelihoods within the communities. The inadequacy of household and individual financial resources has also impacted access to food and key social services, including healthcare and education, which in turn, has adversely affected the well-being of the population. Based on the socio-economic survey 30% of respondents to the survey are seeking employment and more than a half of those employed, are in low-wage jobs, and in some instances vulnerable (informal) jobs. Without intervention, these existing baseline conditions are likely to be exacerbated.</li> </ul>	<ul> <li>The project is expected to have a significant impact on the economy and labour force in the communities in the study area and is expected to directly support the socio-economic livelihoods of more than half of the population residing in the study area as a result of direct and indirect employment and business opportunities.</li> <li>The resumption of sugar manufacturing and the inclusion of new value-added products will also provide an opportunity for diversifying and broadening the economic opportunities that can be derived from the project to support and sustain livelihoods.</li> <li>In the first year of factory operations, TSCL has committed to providing some of the essential inputs needed by farmers to begin</li> </ul>

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
		the cultivation of sugar cane. This will include such items as fertilizer and equipment, which will help to lower the start-up costs for farmers engaged indirectly.
Employment and Business Opportunities	<ul> <li>Without</li> <li>Unemployment, poverty levels and business closures are expected to continue rising sharply, if long-term and sustainable economic opportunities are not created.</li> <li>With</li> <li>Construction projects generally attract a large number of migrant workers, which can limit the opportunities available for local labourers. Given the concerns regarding the literacy and skill level of the local population, it is unlikely, without training and capacity building, locals will be recruited for high-skilled jobs and may have to compete for low-skilled jobs.</li> </ul>	<ul> <li>Employment is a major policy priority of the Government of Jamaica, and the project is expected to create employment and business opportunities for residents and other stakeholders across multiple sectors and industries during the construction and operational phases. The estimated 750 jobs to be supported in the operational phase will increase the employed labour force by 0.05%, based on current total employment nationally (1,473,900). While the impact of the development's operational phase on employment nationally is expected to be negligible, the impact on local employment is expected to have a more significant impact. A maximum of 200 persons will be employed directly at the factory and an estimated 500 labourers and other workers will be employed indirectly for field operations through third party contractor arrangements with four (4) contractors. Ninety percent. (90%) of all workers will be local. In the construction phase employment</li> </ul>

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
		<ul> <li>opportunities will be created. Both skilled and unskilled workers are expected to benefit from employment opportunities. It is also expected that workers will be chosen on merit, with opportunities also offered/ extended to women and persons with disabilities.</li> <li>Other Indirect employment opportunities wil also be created as a result of the project during the construction and operation phase. Based on the magnitude of the impact of Monymusk's direct employment on indirect employment opportunities, it is anticipated that direct employment opportunities created by the project could lead to the creation of twice as many indirect employment opportunities.</li> <li>Local businesses are expected to accrue revenues and other benefits as a result of the procurement of materials, goods and services. Local suppliers, manufacturers and companies who produce and/or distribute construction materials, goods and services benefit from the project, and extend the socio-economic benefits of the project</li> </ul>

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS		
	Negative (Without & With)	Positive (With)	
		beyond the study area. Local community businesses are also likely to receive some benefits from the proposed project as workers on site are likely to patronize nearby community businesses.	
Revenue and Tax	<ul><li>Without</li><li>No change to baseline conditions</li></ul>	<ul> <li>Operation: The GOJ will earn increased revenue through taxation due to the increase in economic activity</li> </ul>	
Skills Development and Training & Knowledge Sharing	<i>Without</i> • No change to baseline conditions.	<ul> <li><u>Construction and operation</u>: TSCL has committed to providing training and capacity building opportunities aimed at equipping locals to benefit directly and indirectly from the project. This will include training for field and factory workers, which will be done in partnership with HEART-NSTA Trust. Commitments have also been made to implement knowledge sharing programmes aimed at engaging and teaching children about modern agricultural technology and practices.</li> <li>SCJ Holdings Limited as part of its relocation plans for livestock farmers, will undertake training with local farmers, introducing new, and more land efficient animal husbandry farming techniques and practices. Approximately 60-70 farmers will benefit</li> </ul>	

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
		from the training in the first phase of the relocation plan.
LAND RESOURCES		
Use, Rights and Access	<ul> <li>Without</li> <li>No change to baseline conditions. SCJ Holdings Limited is the owner of all the lands designated for the proposed project. Presently, pockets of cane field lands are being used informally by farmers to rear animals and by locals to grow castor oil and burn coal. Small areas of land for the proposed project are also occupied by informal settlers.</li> <li>With</li> <li>Informal users and occupants of lands designated for the project will be relocated. Relocation is expected to cause temporary disruption to the livelihood of farmers. However, there is expected to be no long-term access restrictions for farmers, who are currently engaged in stakeholder consultations with the SCJ Holdings Limited regarding the use of other lands owned by the entity for animal rearing.</li> </ul>	<ul> <li>Presently, there are no developments approved and/or being proposed on the lands designated for the project. There are also no existing commercial nor industrial land users and uses that are likely to create potential sources of conflicts.</li> <li>The project will not result in any significant changes to current land use activities and patterns within and immediately surrounding the project areas based on the current tenure status of the lands for agricultural development is expected to continue in the long-term.</li> <li>The proposed development aligns with the land use designation established by the Clarendon Parish Development Order (CPDO). The lands proposed as the location for the sugar factory has been designed for heavy industrial use in The Lionel Town Local Planning Area Land Use Plan. All land areas identified for sugar cane cultivation by the project are land areas designated for agricultural use in the CPDO.</li> </ul>

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
INFRASTRUCTURE AND SEE	RVICES	
Access Road infrastructure	<ul> <li>Without</li> <li>No change to baseline conditions</li> <li>With</li> <li>None</li> </ul>	<ul> <li>Construction: The project will result in the rehabilitation of access roads within the study area, which could support and improve the overall accessibility and safety of the road network for other users of the local roadways.</li> </ul>
Water Supply	<i>Without</i> • No change to baseline conditions	<ul> <li><u>Construction and Operation</u>: There will be no demand on existing potable water supplies provided to the communities by the National Water Commission to support the operation of the factory. Forty-three (43) wells and four (4) pumps owned by the SCJ Holdings Limited/National Irrigation Commission, and previously used by the defunct Monymusk Sugar Factory, will be rehabilitated to meet the water needs of the project in the construction and operation phases (factory and field operations).</li> </ul>
Waste Management	<ul> <li>Without</li> <li>No change to baseline conditions.</li> <li>With</li> <li><u>Construction</u>: During the pre-construction and construction phases of the project, varied types, and fairly moderate volumes of solid waste are likely to be</li> </ul>	<ul> <li><u>Operation</u>: Several treatment plants will be constructed and operated onsite at the factory. This will include         <ul> <li>an effluent treatment plant to treat wastewater generated from the industrial processes</li> <li>sewage treatment plant to treat domestic wastewater</li> </ul> </li> </ul>

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS	
	Negative (Without & With)	Positive (With)
	<ul> <li>generated. Solid waste will be generated as a result of civil construction/works, earth works and domestic activities. Solid waste is likely to include: Construction debris: vegetation, soil, rocks and other excavated materials; construction materials and packaging; cardboard, plastics, paper, wood, Styrofoam, metals etc.; food waste; Organics (food), recyclables and food packaging. Poor containment and stockpiling of solid waste can result in the pollution of land and water resources, which is also likely contribute to a reduction in the visual aesthetics of the landscape.</li> <li>The operation of construction facilities for workers e.g., shower and bathroom facilities, if put in place, will lead to the generation of wastewater, including sewage. Additionally, activities involving the use of water for equipment and vehicle (fleet) maintenance and dust control will lead to wastewater generation. Measures and facilities must be put in place to ensure wastewater is not released in any surface water sources.</li> <li>Rehabilitation of access roads will require the use of hazardous materials. Petroleum products and other chemicals are expected to be the most utilised hazardous materials. Hazardous materials can also be generated as a result of the use of chemicals, oils and equipment e.g., oily rags, chemical and fuel containers, scrap metals etc. Spills and/or leaks from hazardous</li> </ul>	This is expected to reduce the volumes of hazardous pollutants and contaminants released into the environment.

VALUED SOCIAL AND ECONOMIC COMPONENT	ΙΜΡΑCTS						
	Negative (Without & With)	Positive (With)					
	materials have the potential to result in contamination of soil and the terrestrial and marine environments, resulting in pollution of water and resources, and possibly public health impacts for community members.						
Renewable Energy (Irrigation and Water Supply System)	<i>With and without</i> <ul> <li>No change to baseline conditions</li> </ul>	<ul> <li><u>Operation</u>: TSCL will undertake the rehabilitation of the irrigation and water supply system used previously by Monymusk. As part of the rehabilitation, the proponents will install wind and solar powered pumps. The use of renewable energy to support agricultural production is in line with previous policy commitments by the Government of Jamaica.<sup>32</sup> The construction and operation of solar and wind farms are also being considered for future investments in the project area.</li> </ul>					
Housing and Resettlement	<ul> <li>Without</li> <li>No change to baseline conditions. Former worker housing and accommodations (sugar barracks) remain in a desolate state, and have been deemed unsuitable for human occupation.</li> </ul>	<ul> <li><u>Construction</u>: SCJ Holdings Limited will be undertaking a relocation programme that is expected to result in the relocation of seventeen (17) families currently informally occupying lands which have been designated as the proposed site for the sugar factory. Inventory assessments conducted by the SCJ have shown restoration of the former sugar</li> </ul>					

<sup>&</sup>lt;sup>32</sup> https://www.moa.gov.jm/node/1332

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS			
	Negative (Without & With)	Positive (With)		
	<ul> <li><u>Construction</u>: The proposed project is expected to lead to the resettlement of seventeen (17) families from the community of Lionel Town. The community of Springfield, Clarendon, has been identified as the resettlement site, a former resettlement under the Sugar Barracks Relocation Programme. Limited access to critical services- water, electricity, transportation and education- and lack of economic opportunities have been identified by community members as challenges faced by families resettled in the community under the previous relocation programme. Faced with these challenges, some families returned to areas where they originally resided, leaving behind vacant houses- some of which have been subjected to vandalism. To support the successful integration of families to be resettled, mechanisms must be put in place to address issues related to service accessibility, economic opportunities and housing security.</li> </ul>	barracks is not cost-effective, and the dilapidated state of the houses (sugar barracks) have made them unsuitable for human occupation. SCJ Holdings Limited is seeking to partner with Food for the Poor to provide housing assistance and/or support to the families. Although relocation plans and arrangements have not yet been finalised, the resettlement exercise is expected to improve housing standards for the impacted families. Access to other essential services will be needed to ensure successful integration of the families. <u>Operation:</u> If necessary, TSCL has indicated a small number of housing units will be constructed and provided for technical staff at the factory.		
Agriculture Infrastructure	<i>Without:</i> No change to baseline conditions	<ul> <li>Construction: The proposed project will see US\$40 million invested in the development of the factory. This investment will serve to enhance and modernize agricultural facilities and infrastructure, increase food processing capacity, promote and diversify agri-</li> </ul>		

VALUED SOCIAL AND ECONOMIC COMPONENT	IMPACTS					
	Negative (Without & With)	Positive (With)				
		businesses, create jobs, and build capacity and competitiveness of local small farmers.				
SECURITY AND VIOLENCE						
Crime (gang activity)						
	Gang activity and incidents of violence are issues in the community of Lionel Town. Incidents of gang violence and crimes have been occurring with greater frequency in the community in the past 5 years. High prevalence of poverty and high levels of unemployment have been identified as two of the factors driving the surge in criminal and gang- related activities.	• <u>Operation: The</u> project provides an opportunity for additional corporate governance support in the communities. The overall support can assist in (i) improving and enhancing community engagement, (ii) increasing support for local initiatives that can address community needs (iii) increasing support for education and social service interventions and (iv) promoting sustainable development practices to benefit the long- term well-being of the community and its members. It also presents various social and economic opportunities that could support youth engagement.				

Presented in Table 20 and Table 21 is a classification of the impacts in the construction and operational phases of the project. The impact analysis examined the relative importance of the issues through the application of an impact matrix, and presents the significance rating for each impact identified from the reference scenario in Table

There are three (3) major/high social negative impacts associated with the construction phase of the project and one in the operational phase. There are two (2) major/high positive impacts identified in the construction phase and five (5) in the operational phase.

## Table 20: Significance Social Impact Classification in the Construction Phase

SOCIAL- ECONOMIC COMPONENT	DIRECTION	MAGNITUDE	GEOGRAPHIC EXTENT	DURATION	FREQUENCY	REVERSIBILITY	SIGNIFICANCE/IMPACT RATING
POPULATION -PU	BLIC HEALTH, SAF	ETY AND WELL-BI	EING				
Population dynamics- migration	Negative	Low	Local	Short-term	Infrequent	Yes	Minor
Noise Nuisances & Emission	Negative	Low	Local	Short-term	Continuous	Yes	Minor
Air Quality	Negative	Moderate	Local	Short-term	Continuous	Yes	Minor to Moderate
Road Access and Safety	Negative	Medium	Local	Short-term	Continuous	Yes	Moderate
Waste	Negative	Medium	Regional	Short-term	Continuous	Yes	Moderate
Occupational Health and Safety	Negative	High	Local	Long-term	Continuous	No	Major
Gender-Based Violence and Sexual Harassment	Negative	High	Regional	Long-term	Infrequent	Yes	Major
Population Health	Neutral	low	Local	Short-term	continuous	Yes	Minor
ECONOMIC			A	<b></b>	da		
Socio-economic Livelihood and Security	Positive	Moderate	Local	Short-term	Continuous	Yes	Moderate (locally)

SOCIAL- ECONOMIC COMPONENT	DIRECTION	MAGNITUDE	GEOGRAPHIC EXTENT	DURATION	FREQUENCY	REVERSIBILITY	SIGNIFICANCE/IMPACT RATING
Employment and Business Opportunities	Positive	Moderate	Regional	Short-term	Continuous	Yes	Major (locally)
Skills Development and Training	Positive	High	National	Long-term	Continuous	No	Major
LAND AND RESOU	IRCE USE						
Use, Rights and Access	Neutral	Low	Local	Short-term	Infrequent	Yes	Negligible
INFRASTRUCTURE	AND SERVICES	<u>.</u>	<u>.</u>	<u>.</u>	<u>.</u>	<u>.</u>	
Water supply	Neutral	Negligible	Local	Short-term	Continuous	Yes	Negligible
Waste	Negative	Moderate	Local	Short-term	Continuous	Yes	Major
Housing and Resettlement	Neutral/Negative	Low	Local	Short-term	Infrequent	No	Minor to Moderate
SECURITY AND VI	OLENCE		da	â			
Crime	Negative	Low to medium	Local	Short-term	Infrequent	Yes	Minor-Moderate

Table 21: Significance Social Impact classification	n in the Operational Phase.
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SOCIAL- ECONOMIC COMPONENT	DIRECTION	MAGNITUDE	GEOGRAPHIC EXTENT	DURATION	FREQUENCY	REVERSIBILITY	SIGNIFICANCE/IMPACT RATING
POPULATION -PU	BLIC HEALTH,	SAFETY AND WE	LL-BEING				
Population dynamics- migration	Positive	Low to moderate	Local	Medium term	Continuous	Yes	Minor to moderate
Noise Nuisances & Emission	Neutral	Low	Local	Long-term	Continuous	Yes	Minor
Air Quality	Neutral	low	Local	Long-term	Continuous	Yes	Minor
Road Access and Safety	Positive	Low	Regional	Long-term	Continuous	Yes	Minor
Waste	Negative	low	Local	Long-term	Continuous	Yes	Minor to Moderate
Occupational Health and Safety	Negative	High	Local	Long-term	Continuous	No	Major
Population Health	Positive	High	Local	Long-term	Continuous	Yes	Major
ECONOMIC	·	·		·			
Socio-economic Livelihood and Security	Positive	High	National and Local	Short-term	Continuous	-	Negligible (nationally) Major (locally)
Employment and Business Opportunities	Positive	High	National and Local	Long-term	Continuous	-	Negligible (nationally) Major (locally)
Revenue and Tax	Positive	Low	National	Long-term	Continuous		Minor to Moderate

SOCIAL- ECONOMIC COMPONENT	DIRECTION	MAGNITUDE	GEOGRAPHIC EXTENT	DURATION	FREQUENCY	REVERSIBILITY	SIGNIFICANCE/IMPACT RATING
Skills Development and Training	Positive	High	National and Local	Long-term	Continuous	-	Negligible (nationally) Major (locally)
INFRASTRUCTUR	E AND SERVICE	S					
Water supply	Neutral	Negligible	Local	Long-term	Continuous	Yes	Negligible
Waste	Negative	Low	Local		Continuous	Yes	Minor
SECURITY AND VIOLENCE							
Crime	Positive	High	National	Long-term	Continuous	Yes	Major

# MITIGATION AND MONITORING

#### STAKEHOLDER ENGAGEMENT

Communication and information sharing with stakeholders is a very critical component of the project. Information regarding the project should be clear, concise and easily accessible. The information shared should include at a minimum, project activities to be undertaken, the potential negative and positive impacts of the proposed project, and the available mitigation options to address adverse impacts. This communication process is important in keeping stakeholders, and community members engaged throughout the project development process. A stakeholder engagement plan should be prepared for the preconstruction, construction and operational phase of the project to facilitate ongoing dialogue between the developers, key stakeholders, community members and the general public on the benefits and challenges of the project. The plan, in addition to describing the types of engagement strategies to be employed, the resources and responsibilities required for implementation, should also outline a grievance mechanism that will be implemented to receive, record and address complaints which may arise during construction of the project, and if required, the operational/maintenance phase.

Prior to the start of construction, a construction schedule should be made available to the public.

### AIR QUALITY

To offset and alleviate public health threats associated with reduced air quality, steps must be undertaken to manage the various types of air emissions. Proposed measures to protect community members and workers against adverse threats should include at a minimum.

- The provision of approved personal protective equipment for workers e.g., N95 masks
- The use of dust screens to section off work areas and the covering and periodic wetting of excavated areas soil, aggregates and other earth and construction materials on site
- The covering of vehicles transporting aggregates and other earth materials to prevent exposure along the network of access routes leading to the project areas. During dry periods, the wetting of access roads and disturbed areas is recommended to reduce dust generation.
- Inspection of project construction vehicles to ensure engines and exhaust systems are functioning and have been properly maintained. It is recommended that vehicles and equipment showing excessive emissions of exhaust gases do not operate until repairs are carried out.
- Timely disposal of waste
- Suspension of construction activities during periods of excessive winds, if dust suppression measures are inadequate
- During operation, trucks transporting ash from the factory should be properly covered to minimize the erosion of fugitive dust along transport routes.

#### NOISE

Construction noises are expected to exceed baseline conditions and it is therefore proposed that noise barriers and/or temporary sound walls be erected to reduce noise nuisance exposure, where necessary. The construction schedule should take into consideration traditional sleep hours and aim to carry out construction activities during reasonable hours. This can be determined following further consultation with locals and based on the requirements outlined in local laws.

To protect workers, all requisite personal protective equipment (PPE) e.g., noise cancelling earphones and/or ear plugs must be provided. The contractor in charge should also ensure all PPE are worn properly and at all times.

During operation, factory operations should implement OSHA's recommended permissible exposure limits for noise to minimize hearing losses.<sup>33</sup>

#### WASTE MANAGEMENT

It is expected that site preparation and other construction related activities can result in the pollution of the physical and biological environment and the surrounding land areas within close proximity to project site. Increased run-off also has the potential to increase the presence of polluting agents within these environments, posing a direct public health threat to residents who are users of these resources.

Proper waste management is therefore crucial for limiting land and water pollution at the project sites. It is therefore recommended that a Waste Management and Pollution Control Plan be prepared. The plan should outline the methods and procedures that will be employed to address the proper containment and safe disposal of polluting agents that will be generated as a result of construction. This includes land clearance residue (soil and vegetation), solid waste (construction materials, packaging materials, food items etc.), liquid waste (wastewater) and hazardous waste (fuels/oils, chemicals, flammable materials etc.). Specific mitigation measures to be considered in protecting human health include:

- The separation of solid waste materials into organics, recyclables and garbage on site, prior to disposal. Recyclables can be disposed of at approved recycling centres, if available.
- Containment of garbage and construction debris onsite until disposal at an approved local disposal site using receptacles/bins with lids that can be secured to prevent unwanted intrusion by feral animals
- Periodic emptying of waste bins/receptacles to prevent the overflow of solid waste
- Prohibiting burning of solid waste on project site.
- Providing portable sanitary conveniences and showers onsite for workers. Portable toilets and showers should be connected to an onsite drainage system attached to

<sup>&</sup>lt;sup>33</sup> **OSHA PEL:** OSHA's permissible exposure limit for noise is 90 dBA averaged over an 8-hour workday. **NIOSH REL:** NIOSH recommends limiting noise exposure to 85 dBA over an 8-hour workday

temporary wastewater storage tanks or utilise the services of a reputable company that should only dispose of sewage at an approved municipal treatment plant. In the absence of approved treatment systems, alternative arrangements should be made with the local authorities for the safe disposal of effluent/liquid waste

- Clear labelling of all facilities designated for the storage of hazardous waste and separation and storage of hazardous according to manufacturing requirements.
- Training of all workers in the handling, use, care, storage and disposal of hazardous materials
- Hazardous materials must be separated and stored according to manufacturers' requirements
- Prior to construction and in consultation with residents and key government stakeholders, develop an Emergency Preparedness and Response Plan and training plan for all emergencies, including responding to spills

#### ROAD ACCESS AND SAFETY

Construction vehicles and equipment should aim to limit the use of the local roadway during peak periods when pedestrians are frequenting the roadways to ensure minimal disruption to community members. This includes early morning between 7:30-8:00am when children are walking to school and afternoons, between 3:00-4:00p.m. when children are leaving school. Persons who will be tasked with operating construction vehicles and equipment should be properly trained, with designated drivers and operators mandated to provide official proof of their qualifications to operate construction related vehicles and equipment before being hired. Speed limits of no more than 30 kilometres per hour should be implemented on controlled roads for construction to limit noise, fugitive dust, and reduce risks of accident. It is also recommended that safety and traffic signage be erected along access routes leading to the construction sites, alerting both locals and visitors of ongoing roadway use. Flag persons should also be designated to assist with coordinating vehicular and pedestrian movements. It is also recommended that safety and traffic signage be erected along and pedestrian movements. It is also recommended that safety and traffic signage be and visitors of ongoing roadway use.

Finally, it is recommended that a road usage and safety plan be developed by the contractor and reviewed by the relevant authorities to support the project. The plan should outline safety measures and the type of alternative access routes which will be put in place to ensure there are access restrictions for current users and no threats to the overall safety of residents. The timing of construction activities and the utilisation of the roadways for the movement of materials and equipment should also be included.

#### **EMPLOYMENT OPPORTUNITIES**

A job recruitment programme should be developed for the project to identify locals who may possess the requisite skill sets required by the project. Though all qualified candidates should be considered under the programme, preference should first be given to qualified candidates who are residents within the study area. As part of a broader social responsibility platform, training and skills development opportunities being offered as part of the project, should also give first priority to residents in the study area. These requirements should be included in any agreement made between the agency with responsibility for project implementation and the selected contractor.

The programme should also prioritise diversity and inclusivity to reach a broader pool of candidates. Gendered descriptions which have traditionally been used within the construction industry should be eliminated. This will help to ensure locals and members of both sexes, including persons with disabilities are given priority consideration for job opportunities. It is proposed that locals, both men and women, with the requisite skill sets be offered, where possible, specialised training prior to the start of the project that can help them to secure employment in the construction phase of the project, and if required, for the monitoring and management phase of the coastal infrastructure.

#### TRAINING AND CAPACITY BUILDING

It is important that local skilled and unskilled labourers are actively recruited and engaged in capacity building exercises, which will provide them with an opportunity to benefit both directly, and indirectly from the proposed project.

#### SAFETY AND SECURITY

Security measures, procedures and protocols should be established to help safeguard field and factory operations, protect against threats and ensure the protection and safety of workers. Consideration should be given to the following security features:

- Surveillance systems for monitoring, including motion detectors, cameras
- Security fencing: gates and barriers
- Access control systems to control entry and exits
- Anti-climb devices, such as spikes and thorny bushes/shrubs
- Security guards

#### MONITORING PROGRAMME

It is the responsibility of the project manager and contractor to ensure all mitigation measures recommended during the pre-construction and construction phase are implemented and monitored to ensure compliance and reduction in the potential severity of negative impacts on social receptors, particularly vulnerable groups. Periodic audits of construction activities are to be undertaken, and identified issues resolved in a timely manner. During the operational phase of the project, Tropical Sugar Company Limited, through its designated representative(s), has responsibility for the monitoring and management of factory and field operations to ensure continued functionality and safety for workers and community members. The representative(s) should develop a monitoring (follow up) Plan to monitor the effects of the project on the socio-economic conditions of residents in the study area as a result of field and factory operations, and where required, develop measures if any adverse effects of the project are noted. The results of all monitoring exercises should be communicated according to reporting procedures outlined in the communication plan established for project monitoring.

#### RESETTLEMENT

A resettlement plan and community engagement programme should be prepared, outlining the approach to managing the relocation of families in Lionel Town. The plan should include but not limited to: overview of persons to be impacted by relocation, compensation and rehabilitation measures, resettlement schedule, grievance mechanism and community engagement strategy. The plan should also be developed with a human rights and gendersensitive approach to ensure the equitable treatment of marginalized and vulnerable groups.

### RECOMMENDATIONS

- Conduct community walk-throughs/walk abouts and engage residents in dialogue regarding the proposed project. This is important to get buy in and local support, and to gain a more in-depth understanding of community structures, priorities and areas for further development. It is also recommended that dialogue and consultations be held with other business operators in the area to garner additional insight on community structures, dynamics, decision-making processes, and development initiatives, interventions and challenges.
- Develop a corporate social responsibility framework and policy to guide operations and establish a committee to manage and oversee social risks and opportunities
- Appoint a designated community engagement/liaison officer to help drive CSR efforts in surrounding communities.
- Develop a Security Management Plan

## CONCLUSIONS

Project aligns with the Government of Jamaica's economic priorities of achieving sustained economic growth and long-term development through economic diversification.

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### Appendix 1: Proposed Interviewees

Name	Position	Contact Information
Municipal Representatives	5	
Joel Williams	Mayor- Clarendon	Email: <u>j.williams.78@hotmail.com</u> Phone: 876-582-0967 (876-353-2058, Ms. Mitchell-Asst)
Kijana Johnson	Councillor-Race Course Division	Email: <u>kijanajohnson47@gmail.com</u> Phone: 876-426-9875
Winston Maragh	MP-	Email: <u>wmaragh@hotmail.com</u> Phone: (D)876-375-0139 (F) 876-781-2632 (Whatsapp) 876-582-1352
Nearby Businesses		
Clarendon Distillers Ltd- Suzette Latchman	AEHS Officer	Email: slatchman@monymuskrums.com Phone: 876-407-2673
Jamalco- Andrea Spence	EHS Director	Email: <u>andrea.spence@jamalco.com</u> Phone: 876-986-2561
Jamaica Aggregates- Junior Subratie	Senior Supervisor	Email: <u>subratiejun@yahoo.com</u> Phone: 876-599-0265 (O); 876-362- 3970 ( C)
New Yarmouth Estate- Sean Davis	Distillery Manager	Email: <u>Sean.Davis@campari.com</u> Phone: 876-471-6352
SCJ Holdings- Nigel Myrie	Manager, Land and Lease Management	Email: <u>nmyrie@scjholdings.gov.jm</u> Phone:876-360-6828
Clarendon Chamber of Commerce- Winsome Witter	President	Email: maypenchamberof <u>commerce@gmail.com</u> Phone: 876-871-8960
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NGO's		
C-Cam*- Ingrid Parchment	Executive Director	Email: <u>iparchment@yahoo.com</u> Phone: 876-986-3344 (O); 876-383- 2184 ( C)
Clarendon Parish Development Committee- Eurica Douglas	General Manager	Email: <u>clarendonpdcbs@yahoo.com</u> Phone: 876-876-442-3007/ 876 430 - 0347(Digi); 876-898-5570
Hospital		1
Lionel Town Hospital- Nadine Preddie	CEO	Email: <u>Nadine.preddie@srha.gov.jm</u> Phone:876-986-3226 (O); 876-318-0470 (CUG)

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		Phone: 876-832-7868
Dr. Edward Wright		Email: <u>edwardlc6@msn.com</u>
Beverly Boothe	Parish Coordinator- Milk	Email: <u>beverlyboothe2020@gmail.com</u>
	River/Springfield Area	Phone: 876-396-4062