



**JAMAICA SOCIAL INVESTMENT FUND**

*“Investing for Community Development”*

**INTEGRATED COMMUNITY DEVELOPMENT PROJECT (ICDP)**

**TERMS OF REFERENCE**

**CONSULTANCY**

**GIS SPECIALIST TO SUPPORT THE JAMAICA CRIME OBSERVATORY  
INTEGRATED CRIME AND VIOLENCE INFORMATION SYSTEM (JCO-ICVIS)**

**1.0 BACKGROUND INFORMATION**

**BENEFICIARY COUNTRY**

Jamaica

**CONTRACTING AUTHORITY**

Jamaica Social Investment Fund

**BENEFICIARY MINISTRY, DEPARTMENT, AGENCY**

Ministry of National Security

**JAMAICA SOCIAL INVESTMENT FUND**

The Jamaica Social Investment Fund (JSIF) is a limited liability company incorporated under The Company’s Act of Jamaica. It was established in 1996 as a component of the Government of Jamaica’s (GoJ’s) national poverty alleviation strategy. The Jamaica Social Investment Fund (JSIF) mobilizes resources and channels these to community-based socio-economic infrastructure and social services projects. Through a national partnership between central and local government, communities and private and public organizations, the JSIF addresses the immediate demands of communities in a manner that is quick, efficient, effective, transparent and non-partisan.

**MINISTRY OF NATIONAL SECURITY**

The Ministry’s aim is to contribute towards creating a safe and secure Jamaica by the effective enforcement of law, order and maintenance of secure borders.

The Ministry of National Security (MNS) was established as a single Ministry in 2001 following the separation of the Ministry of National Security and Justice to form two separate Ministries. The current MNS mandate is to:

- Facilitate the maintenance of law and order;
- Protect Jamaica against internal and external threats;
- Ensure the safety of Jamaica's borders and;
- Punish and rehabilitate offenders

## **2.0 BACKGROUND TO THE INTEGRATED COMMUNITY DEVELOPMENT PROJECT (ICDP)**

The Government of Jamaica (GoJ) signed a loan valued at US \$42M with the World Bank for the funding of the ICDP, with JSIF as the Implementing Agency. This project commenced in May, 2014 and will be implemented over six (6) years to May, 2020. The ICDP will build on the successful activities completed under a project previously implemented by JSIF, the Inner City Basic Services for the Poor Project (ICBSP), which benefited over 60,000 people in 12 inner city communities. The ICDP will empower 18 inner city communities to participate in and benefit from the development process; the Project Development Objective is to enhance access to basic urban infrastructure and services, and contribute towards increased community safety in selected economically vulnerable and socially volatile inner city communities of Jamaica. The ICDP has three (3) main components i. **Component 1:** Basic Infrastructure and Access to Services ii. **Component 2:** Public Safety Enhancement and Alternative Livelihoods and iii. **Component 3:** Institutional Strengthening for Urban Management and Public Safety.

The support to the Ministry of National Security (MNS) falls under Component 3 i.e. **Institutional Strengthening for Urban Management and Public Safety** and will support the improved coverage, range and distribution of data collected by the Jamaica Crime Observatory, including, *inter alia*: (1) expanding coverage, (2) improving the software to analyze data collected and (3) carrying out capacity building activities for staff to analyze and disseminate a greater volume of information.

## **3.0 PROJECT CONTEXT**

Consistently high rates of crime and violence, particularly in urban areas, have posed a serious obstacle to the formation of social and human capital, and contributed to limiting economic growth in Jamaica. The cost of productivity losses, for example, due to interpersonal violence-related injuries accounted for 4 percent of Jamaica's GDP. The profile of those directly involved and affected by violent crime – perpetrators and victims alike – are typically young, unskilled, unemployed, and undereducated males between 15-

29 years, who are from vulnerable urban neighborhoods, which are affected by higher rates of poverty, unemployment, lower educational attainment, low social capital, and low levels of investment in public space.

Vision 2030 Jamaica– National Development Plan (Vision 2030 Jamaica), highlights sustainable urban development as a key outcome in striving for a healthier environment. The plan calls for a holistic approach in national crime reduction efforts in order to address both urban development challenges and those relating to crime and violence. In tandem with the National Development Plan, **the Government of Jamaica (GoJ) developed a National Security Strategy (NSS), a National Crime Prevention and Community Safety Strategy (NCPCSS)**. The NCPCSS articulated the need for the establishment of an integrated crime and violence information system. The strategy underlines the need for reliable and timely data to set meaningful baselines for national crime and violence reduction and prevention policies.

Swift and sure justice processes are one of the five strategic pillars the Ministry of National Security has identified to propel its crime and violence reduction interventions. This is supported by several purpose driven indicators such as having a: reduced murder rate per 100,000 population; reduced major crimes per 100,000 population; reduction in the number of police fatal shootings; and improved citizens perception of safety. The ability to use data to assist in responding to the who, what, where and why of emerging crime and violence across parishes, communities and localized *hot spots* is valuable in identifying strategies, preventing victimization, and assisting in reducing crime.

### **3.1 OVERVIEW OF THE JAMAICA CRIME OBSERVATORY INTEGRATED CRIME AND VIOLENCE INFORMATION SYSTEM (JCO-ICVIS)**

The Jamaica Crime Observatory Integrated Crime and Violence Information System (JCO-ICVIS) is an instrument that brings together all primary data sources to improve the quality of crime and violence statistics that directly influence the design and implementation of evidence-based strategies and policies to boost peaceful co-existence and citizen security in Jamaica. The JCO-ICVIS allows for comparisons of incidence and prevalence of crime and violence events over time, between places or between different groups of the population and contributes to the identification of changes in trends of certain events.

Since its inception in 2011, the JCO-ICVIS has operated out of the Research and Evaluation Unit, now the Monitoring & Evaluation, Research & Data Analytics Branch at the Ministry of National Security (MNS). Its main objective is to provide reliable and timely crime and violence information that permits the characterization and monitoring of high impact events such as external causes of injuries and deaths (homicides, suicides), traffic fatalities and sexual assaults with the purpose of designing actions to deal with these

problems, as well as evaluating the impact of these actions. Specifically, the system: (a) supports and keeps up to date, reliable data so as to promote transparency, security and safety in the national interest, (b) establishes valid and consistent crime and violence related statistics for each community as well as the corresponding geo-reference maps of the incidents, and (c) uses the validated data to inform policy and decision making towards the development of improved citizen security and prevention measures.

The JCO operates through a Technical Committee which consists of seventeen (17) stakeholders. Of these stakeholders, the following institutions operate as a sub-technical committee in the provision of data: the Jamaica Constabulary Force (JCF), the Ministry of Health (MOH), the Institute of Forensic Science & Legal Medicine (IFSLM) and the Registrar General's Department (RGD). These stakeholders provide the statistical data and technical advice necessary for the proper collection and validation of the various incidences of crime captured by the system.

Since 2015, the JCO-ICVIS collects data on seven crime and violence incidences (Murder, Shooting, Sexual Offence, Robbery, Fatal Shootings, Traffic Fatalities and Suicide) in 10 of the 14 parishes. These parishes are Kingston, St. Andrew, Clarendon, St. Catherine, St. James, St. Ann, St. Mary, Westmoreland, Hanover and Manchester. Data on the additional four parishes have been collected since 2018.

### **3.2 OBJECTIVE OF THE CONSULTANCY**

Since 2006 the issue of crime reduction has been prioritized by the Government of Jamaica as a mechanism for achieving growth and by extension, poverty reduction. The GOJ through the MNS has sought to develop and maintain the JCO in order to use crime related data to inform policy decisions. Currently, the JCO collates mostly primary data and undertakes the associated data analysis; this consultancy will strengthen the output produced.

The main objective of this consultancy is to:

- (1) Enhance the analytical outputs generated from the JCO via spatial mapping products.
- (2) Raise awareness of MNS/JCO and stakeholder staff on GIS applications and usage.

The consultancy will direct attention at all 18 ICDP and 12 Inner City Basic Services Project<sup>1</sup> communities and a representative sample of interventions being undertaken by

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<sup>1</sup> Previously funded World Bank project

major social intervention programmes (COMET, CRP, CSJP etc). The existing databases from these and other stakeholders will provide some of the data to facilitate mapping.

## **4 SCOPE OF THE WORK**

### **4.1 GENERAL WORK:**

The Consultant will produce materials to enhance the analytical capacity of the JCO, particularly in spatial analysis of crime trends generated by the JCO-ICVIS data and other secondary sources as relevant, and build capacity of the JCO and related stakeholder staff.

### **4.2 SPECIFIC WORK:**

The Consultant will:

- i. Develop at least two sets of maps<sup>2</sup> which display: (1) service provision for social and situational interventions based on inventory done by the Crime/Data Analyst. (2) parish and community-level<sup>3</sup> density maps illustrating incidences/types of crime and violence, temporal trends (time of incidence) where available, overlays of incidences vs interventions, proximity to security services, etc.. Where possible, show disaggregation such as gender and age cohorts for the victim.

Multiple sets of maps will be completed to reflect three periods (baseline<sup>4</sup>, 2018/19 and end of project 2020) at the parish level and cover the 18 ICDP, 12 ICBSB communities and a representative sample of interventions being undertaken by major social intervention programmes (PRP, CRP, CSJP etc.) and a selected number of control communities.

Time series analysis of hotspots per type of incidences as illustrated in (2) above, using ARC-GIS animation tool or other appropriate applications.

- ii. Conduct at least 3 training sessions in basic approaches and use of GIS mapping for 10-15 JCO personnel and relevant stakeholder staff, as well as provide basic guidelines to establish work flow processes and the documentation for metadata creation according to Land Information Council of Jamaica (LICJ) standards,

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<sup>2</sup> Before mapping, the specialist will have access to the JCO-ICVIS database. The Specialist will if necessary, clean and generate coordinate points for incidences.

<sup>3</sup> ICDP+ICBSB+control communities

<sup>4</sup> 2013 – 2017

data manipulation in ARC Map and ARC GIS online and Microsoft Excel with the end result being map generation.

- iii. Liaise with crime/data analyst, communication specialist and other relevant stakeholders to meet the objectives of the consultancy.
- iv. Submit all compiled raw data, modifications thereof, created and collected data to JSIF and MNS, particularly a spatial database of data files used for mapping and analysis by the consultant.

## 5 DELIVERABLES AND PAYMENT SCHEDULE

Deliverables under this Consultancy

Deliverables	Date to be Delivered	Linked payment
<b>PHASE 1 (April – September 2019)</b>		
1	<u>Inception Report</u> following Inception Meeting with key project staff JCO/MNS/JSIF - This report must include:  (1) approach to the Consultancy and workplan detailing methodology (including relevant timelines for mapping of the incidence of crime and violence, and mapping of social & situational interventions)  (2) Draft capacity building and training plan for JCO personnel and relevant stakeholders	2 weeks after the signing of the contract  10%
2	Baseline maps <sup>5</sup> showing the incidences of crime and violence as well as relevant spatial analysis including overlay analysis (including social interventions) and hotspot analysis. Submit draft of training guidelines.	2 months after approval of Deliverable 1  15%

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<sup>5</sup> Starting period 2013 - 2017

3	<p><u>Crime Incidences &amp; Interventions Inventory Map and Database</u></p> <p>The maps will show prior and existing social and situational interventions in ICDP and control communities outlining the initiatives and relevant donors/NGOs, Civil Society and Ministries, Departments and Agencies. Include overlay maps of incidences and interventions.</p> <p>Shapefiles for data points generated should be included.</p>	1 month after approval of Deliverable 2	20%
4  4.1	<p>Delivery of at least 3 (1 sensitization, 2 in-depth specific depending on gaps identified) in approaches and use of GIS mapping for 10-15 JCO and other stakeholder staff .This includes development of associated guidance note for delivery of similar sessions .</p> <p>Report to include capacity building engagements including details on gaps, challenges, best practices and recommendations</p> <p>(2) work flow processes template for relevant software application.</p> <p>(3) generate/create work flow processes within the available application</p>	2 weeks after approval of Deliverable 3  2 weeks after training	15% (payment after approval of deliverable 5.4.1)
<b>PHASE 2 (January – February 2020)</b>			
5	<p>Updated maps showing:</p> <ul style="list-style-type: none"> <li>• The incidence of crime and violence reflecting changes as of December 2019</li> <li>• Social and situational interventions reflecting changes as of December 2019</li> <li>• Shapefiles for data points generated should be included.</li> </ul>	1 month after commencement of phase 2 activities	10%
6	<p><u>Final Report:</u></p> <p>This report will provide</p> <p>1) an overview of the Consultancy: main tasks, outputs, challenges, lessons learned, recommendations and ensure that all final versions/files of deliverables are submitted</p>	1 month after completion of Deliverable 5	30%

<p>together</p> <p>2) a review of all community, parish and density maps covered over the period, including metadata and how map-related deliverables were derived.</p> <p>PowerPoint presentation of findings is to be made to relevant stakeholders.</p>		
<p><b>TOTAL CONTRACT PERIOD</b></p>	<p><b>Phase One – 4 months (Aug – November 2019)</b></p> <p><b>Phase Two – 2 months (January – February 2020)</b></p>	

**5.1 Work Presentation for all the above-mentioned deliverables is incomplete without submission of the following:**

- a. Three hard copies and one electronic copy of reports (on CD or jump drive).
- b. One electronic copy (on CD or jump drive) of PowerPoint documents.

**Note: Payments are contingent on the Monitoring and Evaluation, Research and Data Analytics Branch’s approval of the satisfactory completion of deliverables in keeping with the guidelines for ‘Work Presentation’ in section 5.**

**Ownership of deliverables**

The outputs/deliverables of this Consultancy will be considered the property of the Government of Jamaica, specifically the Jamaica Social Investment Fund and the Ministry of National Security.

**6 PROJECT MANAGEMENT**

The recipients of the services are the Jamaica Social Investment Fund and the Monitoring & Evaluation, Research & Data Analytics Branch at the Ministry of National Security and the Statistics and Information Management Unit of the Jamaica Constabulary Force. The Ministry of National Security, the Monitoring & Evaluation, Research & Data Analytics Branch in particular, will manage the consultancy, provide office accommodation and accessibility to the system. Administrative support such as meeting bookings, logistical arrangements, and production of reports will be the responsibility of the Consultant.

**7 LOGISTICS AND TIMING**

**7.1 COORDINATION**

The Jamaica Social Investment Fund will have contractual responsibility for the consultancy, while the Crime/Data Analyst will liaise with the Monitoring & Evaluation,

Research & Data Analytics Branch at the Ministry of National Security. The Consultant will report to the Chief Technical Director in the Ministry of National Security through the Senior Director, Monitoring & Evaluation, Research & Data Analytics Branch.

**Note: Remote access to the JCO-ICVIS database is not currently possible. Additionally, the incumbent will need to be in a position to facilitate close interaction with the Crime Prevention and Community Safety Branch at the Ministry of National Security and other key stakeholders of the Ministry’s social intervention programmes; therefore, being domiciled in Jamaica for the duration of the consultancy is a requirement.**

## 7.2 COMMENCEMENT DATE AND DURATION

The intended commencement date is August 2019 and the period of engagement will be for six (6) non-consecutive months ending February 2020. Phase 1 is expected to commence in August 2019 and end in November 2019. Phase 2 of the assignment is expected to commence in January 2020 and end in February 2020.

## 8 QUALIFICATIONS AND EXPERIENCE

The consultancy will be conducted in the specific context of Jamaican volatile and vulnerable communities and as such the Consultant should have a strong and demonstrable background in the conducting of social scientific research in these settings, as well as key technical skills in spatial analysis and GIS application. The specific requirements are as follows:

- i. Possess a Master's or a Bachelor's in Geography, Urban Planning, Surveying and any other relevant studies.
- ii. Certification in ArcGIS suite (ESRI certificates, GISP etc.)
- iii. Possess at least 5 years' experience using GIS technology, including performing geospatial analysis and creation of maps
- iv. Ability to present on GIS technology and spatial analysis to different audiences, evidenced by at least 3 presentations and/or training sessions.
- v. Experience working on crime and violence issues is an asset.

NB: The contact information of two (2) work references who can attest to ability and quality of work must be submitted with the application.

## **9 SELECTION**

The Consultant will be selected in accordance with the Individual Consultant methodology set out in the World Bank’s ‘Selection and Employment of Consultants’ guidelines.

**Appendix A: Membership of the Technical Committee for the JCO-ICVIS**

Bureau of Gender Affairs (BGA)

Child Development Agency (CDA)

Institute of Forensic Science and Legal Medicine (IFSLM)

Jamaica Constabulary Force (JCF)

Jamaica Social Investment Fund (JSIF)

Ministry of Education, Youth and Information (MOEYI)

Ministry of Health (MOH)

Ministry of Justice (MOJ)

Ministry of Local Government and Community Development (MLGCD)

Ministry of National Security (MNS)

Ministry of Transport and Mining (MTM)

Planning Institute of Jamaica (PIOJ)

Registrar General's Department (RGD)

Statistical Institute of Jamaica (STATIN)

Violence Prevention Alliance (VPA)