

The Jamaica Social Investment Fund: Contributing to Sustainable Development in Jamaica

Keisha A. Mitchell

(Research Consultant, Jamaica Social Investment Fund)

Abstract: Sustainable development offers a vision of progress that integrates social, economic and environmental issues for nations as they set short and long-term goals for human progress. To this end Jamaica, as a small island developing state, has attempted to attain social and economic progress while protecting the environment. The Government of Jamaica (GoJ), through the Planning Institute of Jamaica, has partnered with the Jamaica Social Investment Fund to ensure that while development occurs across the island that the most vulnerable are not left behind. The Fund was established in 1996 as part of the GoJ's National Poverty Eradication Programme. Since that time it has implemented social and economic infrastructure, and provided social services and organizational strengthening. They have focused on ten broad sectors for development, including: Education, Agriculture and Tourism, Health, Security, Water and Sanitation, Transportation and Access, Training and Certification, Community Governance, Disaster Vulnerability Reduction, and Technical Assistance to Ministries, Departments and Agencies. This article highlights some of their most significant accomplishments over the last two decades, focusing on agriculture, clean water and sanitation, and solid waste management.

Keywords: Jamaica, sustainable development, Jamaica Social Investment Fund, freshwater resources, climate change, solid waste management

"Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance (Ki-moon, 2016)."

I. INTRODUCTION

For many nations around the world, the process of development poses many challenges as the gap between the rich and the poor increases to create seemingly permanent pockets of poverty (Mitchell, 2016a). It may sound like rhetoric to some, but to leaders who have to assess the social and economic conditions of the people they lead, and partner with multilateral agencies, sustainable development is the only path to take. According to the United Nations World Commission on Environment and Development in 1987, sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs" (European Commission, EC, 2016; Soubbotina, 2004, p. 9). Ideally, this process must account for social, economic and environmental concerns of citizens. In Jamaica, we traditionally have an expression, "One han' caan' clap," meaning that no country can attempt development alone. In the integrated global community, nations must be considerate of their neighbours, and respect their rights to experience all of the above. This includes making provisions for the most vulnerable in the societies.

In charting the way forward, the Jamaica Social Investment Fund, has committed to working with the Government of Jamaica (GoJ) in poverty alleviation. To accomplish this, they prioritize a number of the 17 sustainable development goals. These include: (1) No poverty; (2) Gender Equality; (3) Clean water and sanitation; (4) Affordable and clean Energy; (5) Decent work and Economic growth; (6) Industry, innovation and infrastructure; (7) Sustainable cities and communities; and (8) Partnerships for the goals.

The following section presents an overview of Jamaica's social and economic environment, and the purpose of the Jamaica Social Investment Fund. It is followed by sections highlighting the accomplishments of the Fund since 1996 to alleviate poverty in the poorest and most volatile communities in Jamaica (Mitchell, 2016a), particularly in the areas of agriculture, clean water and sanitation, and solid waste management.

Overview: The Development of the Jamaica Social Investment Fund

Historically, SIFs began in Latin America and the Caribbean region as a result of the economic crisis of the 1980s. The crisis, along with adjustment policies and efforts made to reorganize the structure of production, imposed heavy social costs. As with such programmes, many of those who suffered the most were those in the lower-income sectors of the population as the short-term adjustment policies had a crippling effect on job creation. It correspondingly increased unemployment and underemployment. Similar to current effects being experienced

under Jamaica's International Monetary Fund (IMF) agreement, there were steep declines in real wages and nonwage income. Additionally, governments cut social spending in most Latin American countries (Wurgaft, 1995). The overall effect on social indicators such as gross-domestic product (GDP), inflation, net transfer of resources, nonagriculture employment, total unemployed persons and more, was an increase in the percentage of households falling below the poverty line, and a worsening of the degree of poverty.

Jamaica's GDP was USD 14.01 billion in 2015. Historically, GDP in Jamaica averaged USD 5.66 billion from 1960 until 2015. The highest ever was USD 14.75 billion in 2012, while the lowest was USD 0.70 billion in 1960 (Trading Economics, 2016). This reflects an annual growth rate of .70 percent. Currently, 16.5 percent of the population is below the poverty line (UNFPA, 2016). Additionally, the unemployment rate decreased to 13.30 percent in the first quarter of 2016, compared to 13.50 percent in the fourth quarter of 2015. It is important to note that from 1991 to 2016, the unemployment rate in Jamaica averaged 13.92 percent. It reached its highest of 16.50 percent in the fourth quarter of 1997 and attained a record low of 9.80 percent in the fourth quarter of 2007 (Trading Economics, 2016). As a consequence of these and other activities under threat from continuing structural adjustment policies, and a widening of the preexisting economic and social inequality between those connected to the international economy versus those trapped in an archaic economic environment, SIFs were established. Across the Caribbean,

A number of governments in the region set up social investment funds to offset, at least in part, the negative impact of the adjustment and restructuring process. Some of these funds are of a temporary nature, scheduled to last three or four years with the implicit or explicit assumption that, once the macroeconomic adjustment and the transitional period of restructuring of production are over, the development process will itself permit the reduction of the social debt. Their temporary nature determines the exceptional character of their organization and terms of reference. Most of their resources come from external donations or soft loans that will not be available on a long-term basis. Other funds, however, were set up as permanent institutions, since they are intended to be an effective means of channeling part of the social expenditure and investment, regardless of whether the economy is in a stage of adjustment or reactivation (Wurgaft, 1995, p. 220-223).

It is important to note that all SIFs have been modeled from the Bolivian SIF, the Fondo de Social Emergencia (FSE) established in 1986. It was concluded in the mid-1990s. However, the first permanent SIF was established in Costa Rica in 1974 as the Fondo de Asignaciones Familiares (FODESAF) (Wurgaft, 1995).

One of the advantages of JSIF, as with all SIFs, is its autonomy from other agencies of the Government. As a result of this autonomy, they are able to quickly respond to areas of social need. The SIF can finance and administer projects that generate employment. They can also fund social expenditure programmes not directly connected with employment like road projects, sanitation projects, community centres, and school projects, which will support community development and increase entrepreneurship activities. Generally, they are established through laws, executive acts, or decrees. As with the JSIF, which was incorporated under the Company's Act of Jamaica in 1996 and funded by the World Bank and others (JSIF, 2011; JSIF, 2016a, 2016b), SIFs are organized with the support of international financial agencies. These include agencies like the World Bank, the Inter-American Development Bank (IDB), the Organization of Petroleum Exporting Countries (OPEC), the Department for International Development (DFID), the Canadian International Development Agency (CIDA), the Caribbean Development Bank (CDB), and others. Additionally, they receive technical assistance from agencies such as the United Nations Development Program (UNDP), the International Labour Office (ILO)-Programa Regional del Empleo para America Latine y el Caribe (PREALC), the United Nations Children's Fund (UNICEF), the International Development Association (IDA), and other bilateral and multilateral bodies (Wurgaft 1995).

In sum, SIFs are characterized by rapid disbursement, institutional efficiency and a demand-driven approach (Wurgaft, 1995). According to researchers, more than 16 SIFs have operated in Latin America and the Caribbean. Some of the countries in the region (including Jamaica) which have established SIFs are: Belize (1997-), Bolivia (1987-1991 & 1991-1995), Chile (1991-1995), Dominican Republic (1995-1996), Ecuador (1991-1995), El Salvador (1990-1995), Guatemala (1992-1995 & 1991-1996), Guyana (1990-1996), Haiti (1995-1996), Honduras (1991-1996), Jamaica (1997-), Nicaragua (1991-1996), Panama (1991-1995), Paraguay (1996), Peru (1991-1996), and Uruguay (1991-1995) (Siri, 2000, p. 3). Others countries which have permanent funds are: Costa Rica (1974-), Mexico (1988-), and Venezuela (1990-) (Wurgaft, 1995).

The Jamaica Social Investment Fund

The Jamaica Social Investment Fund has been a strategic part of the Government of Jamaica's (GoJ) fight against poverty. Under the Company's Act of Jamaica, it was established in 1996 as a limited liability company. Its mandate is to channel resources to community-based projects (JSIF, 2011; JSIF, 2016a, 2016b). Initially, these projects were conducted in collaboration with schools approved by the Ministry of Education (MoE), which did not have the resources to upgrade their school plants. Additionally, they engaged in the development of community

centres, health centres, and invested in training students in a violence reduction, social skills curriculum called PALS (Peace and Love in Schools). The Fund, as a consequence of its multilateral relationships with international donors, the Government of Jamaica, and other local stakeholders, is guided in its operations by an Operations Manual. The Manual, not only facilitates transparency in the funding relationship, but it also guides the implementation process, ensuring rapid response to critical needs and efficiency.

In terms of governance, the JSIF is governed by an eleven-member Board of Directors. Directors serve for a renewable two-year term. The Board meets once per month and has overall responsibility for approving annual budgets, sub-projects and related contracts (JSIF, 2016a, 2016b). The Board is chaired by the Director General of the Planning Institute of Jamaica (PIOJ), and with the Managing Director as a Director. The sub-committees of Projects, Finance and Audit, and Procurement and Contracts, work to facilitate the work of the Fund (JSIF, 2016a, 2016b).

As with other SIFs, the JSIF was initially funded by a loan agreement negotiated between the GoJ and the World Bank. The intention was for the Fund to be temporary, lasting approximately 4 years, the length of the IMF agreement. However, it has become one of the permanent SIFs in the Latin America and Caribbean region, joining Belize, Costa Rica, Mexico and Venezuela (Wurgaft, 1995). Over the years, the Fund has benefitted from partnerships with 10 international donors. They are the:

1. Canadian International Development Agency (CIDA)
2. Caribbean Development Bank (CDB)
3. Department for International Development (DFID)
4. European Union (EU)
5. Government of Japan (GOJ)
6. Government of Netherlands (GON)
7. Government of Venezuela (GOV)
8. Inter-American Development Bank (IDB)
9. OPEC Fund for International Development (OFID)
10. World Bank (WB) (JSIF, 2016d).

JSIF's proven track record in managing the funds received from early donors, as well as an adherence to their stringent guidelines, increased the credibility of the Fund, allowing it to access increasing funds over the past 20 years. This accomplishment continues to be highlighted in the financial statements each year. Based on the JSIF Annual Report for 2014-2015, the Fund "has an active portfolio of USD 92 million, of which approximately USD 68 million or JMD 8.2 billion remains to be disbursed" (JSIF, 2016b, p. 2). In June of 2016, the World Bank committed another USD 30 million in funding to the organization for disaster risk reduction and prevention management (Gleaner, 2016).

In general, JSIF's projects fall within one of four categories, and target one of ten portfolio areas. The four categories and their descriptions are:

- Social Infrastructure - includes the rehabilitation, expansion, construction and equipping of facilities such as schools, health centres, homes for the elderly and persons with disabilities, infirmaries, community centres; it also includes the construction and rehabilitation of public sanitary conveniences, drains, canals and community-based water systems.
- Economic Infrastructure - includes the rehabilitation and up-grading of parochial, feeder and urban access roads and the construction and rehabilitation of community-based agro-processing facilities.
- Social Services - includes assistance to programmes offering services in career guidance and job placement, counselling (including conflict resolution & drug abuse), parenting and family life education, and skills training to the un-employed and under-employed, and persons with disabilities.
- Organisational Strengthening - includes technical assistance and training for community-based organisations to assist them in developing and managing community based projects and organisations, to governmental and non-governmental institutions in participatory project cycle management and improving the support they can provide to communities in managing community development initiatives (JSIF, 2011, p. 3).

The ten areas for development are:

- Education
- Agriculture & Tourism
- Health
- Security
- Water and Sanitation
- Transportation and Access

- Training & Certification
- Community Governance
- Disaster Vulnerability Reduction
- Technical Assistance to Ministries, Departments & Agencies (Jamaica Social Investment Fund, JSIF, 2016e, p. 2).

Combined, the 4 types of projects, and the 10 areas of development focus, facilitate JSIF's accomplishment of its mission to facilitate "the empowerment of communities and assists in building national capacity to effectively implement community-based programmes aimed at social development" (JSIF, 2016a, p. 2).

II. RESEARCH METHODOLOGY

In the interest of time, only 6 months to evaluate 20 years of JSIF's impact on poverty alleviation in Jamaica, a rapid desk review of existing documents and JSIF's history was conducted. Also interviews with managers, trainers and project officers served to target research in the most salient areas for the members of the JSIF community. Field visits to communities where JSIF projects are currently being implemented were also conducted. The result was a draft working document for stakeholders of JSIF's 20th anniversary committee to review. The feedback was used to focus the research areas for study, as well as capture the stakeholders' institutional knowledge. This led to preparations for the largest agricultural show in Jamaica, and possibly in the world, the Denbigh Agricultural Show. The show was held on July 30 to August 1 in Denbigh, Clarendon, and saw more than 70,000 attendants over the three days. Here, JSIF exhibited work from the following sectors, namely: education, water and sanitation, disaster vulnerability reduction (urban renewal), agriculture and tourism, and training and certification (human resource development). This involved the preparation of posters and scorecards highlighting the accomplishments of the Fund through the relevant programmes and their sponsors. Programmes highlighted were: the PetroCaribe Development Fund (GOV); the Basic Needs Trust Fund (CDB), the Poverty Reduction Programme (EU), the Rural Economic Development Initiative (World Bank), and the Integrated Community Development Project (World Bank).

At the Denbigh show, surveys were conducted among attendees regarding their knowledge of JSIF's projects. Additionally, they evaluated JSIF's community impact, and the quality of the information presented in the JSIF pavilion. Demographic data collected included gender and parish of residence, as JSIF values gender equality and has worked in all 14 parishes over the last 20 years.

Community Selection: *The JSIF Approach through Community Based Contracting (CBC)*

To ensure that the most vulnerable are targeted, social indicators are used from the Poverty Map of Jamaica (Planning Institute of Jamaica, PIOJ, 2007) and the PIOJ's Jamaica Survey of Living Conditions (JSLC) (PIOJ, 2012). Additionally, the Social Development staff conduct field visits to ensure that all communities that have pockets of poverty in their midst will be effectively served (JSIF, 2016g).

However, not every poverty-stricken community will be served by JSIF. A review of JSIF's projects revealed that more than 70% of the communities served by JSIF fall into quintiles 1 to 3 (Planning Institute of Jamaica, PIOJ, 2012). Additionally, they were equally serving males (49%) and females (51%). Projects are selected based on which of two categories they fall into: pre-selected communities or demand driven communities. Firstly, communities that are on the GoJ's list for being in the most vulnerable and volatile areas are preselected for the types of rapid interventions offered by the Fund. These communities do not need to apply for assistance, but will be granted priority service based on how rural they are, the poor or unavailable levels of social services that exist, and the high crime rates. Secondly, communities can, and are encouraged to apply to JSIF once they have identified needs that align with JSIF's mission. This demand-driven approach for development is most prized by the members of JSIF, as these communities will naturally bring more resources and insight into their development process. Additionally, through community-based contracting, communities are fully involved in identifying, prioritizing, planning, managing and monitoring their own development projects (JSIF, 2016h). Approximately 80% of all project costs are borne by the SIF, while the remaining 20% is provided by the beneficiaries in cash or kind (for example, labour, land, or meals) (Pradhan, Rawlings, & Ridder, 1997). For JSIF, the ultimate goal is to facilitate community development through involvement and empowerment (JSIF, 2016g).

The Successes of the Jamaica Social Investment Fund

The Fund has experienced success from its founding years. Notwithstanding the challenges implicit in working in the area of poverty alleviation and community development, the Fund has managed to convert dollars and cents into solid social and economic infrastructure, as well as provide a measure of social services and organizational strengthening in areas of critical need. The Fund has successfully completed more than 1600 projects across all 14 parishes in Jamaica, at a cost of J\$ 1.6 billion. The following section presents a summary of JSIF's pilot

projects in 1996, and later complements this with highlights of sectors which were exhibited at the Denbigh 2016 Agricultural show.

Pilot Projects

“There were 14 projects chosen to pilot the new and different approach JSIF was using which focused on community participation and involvement and required that communities contribute in cash and/or kind to their projects” (Gillings, 2016, p. 2). The results of interviews conducted among research officers at JSIF, revealed that basic and infant schools were initially targeted in 1996 because a large percentage of them had substandard infrastructure. The problems were apparently systemic, as many of the schools did not have the resources necessary to repair or upgrade their facilities. Funding provided by JSIF enabled the construction and rehabilitation of their buildings and acquisition of the necessary equipment and furniture. The projects were implemented in partnership with the Ministry of Education (MoE). In addition to improving the infrastructure, there were cases identified for organizational strengthening. This was also provided by the Fund to ensure efficient implementation of the project, as well as to provide for the maintenance of the facilities once the project was completed. Table 1 below lists the 14 pilot projects by type, donor, and the number of beneficiaries.

Table 1: List of JSIF Pilot Projects in 1996

| Project | Donor | Total Beneficiaries |
|---|-------|---------------------|
| Blenheim Community Centre | WB | 970 |
| Denham Town Community Centre | WB | 970 |
| Duanvale Community Centre | WB | 970 |
| Mocho Community Centre & Basic School | WB | 970 |
| Peace & Love in Schools (PALS)-Conflict Resolution | WB | 150 |
| Reach Agro-Processing Facility | WB | 116 |
| Sligoville Health Centre | WB | 2,423 |
| Bath Community Centre & Infant School | WB | 970 |
| Carron Hall All Age & Infant School Expansion | GON | 186 |
| Cold Spring Basic School Rehabilitation | WB | 186 |
| Windsor Basic School Rehabilitation | GON | 186 |
| Alligator Pond Community Centre & Basic School | WB | 970 |
| Calabar All-Age School - Rehabilitation & Equipping | WB | 186 |
| Redwood Community Centre & Basic School | WB | 970 |

Current Focus and Project Highlights

Over the last two decades, the JSIF has invested heavily over the past twenty years in many infrastructure projects. An impact evaluation conducted by ITAD (2002) reported that in places where road projects were implemented, beneficiaries experienced significant time saving benefits travelling by taxi “to secondary school (55%), shop/market (65%), nearest town (81%), first workplace for the household (34%) and second work place for the household (45%)” (p. xii). As the roads were implemented in rural areas, there were also significant reductions in vehicle maintenance costs (75%) and crop losses (80%), as farmers could now get their goods to market in a timely manner (ITAD, *ibid*). The impact of the school-based projects varied according to ITAD (*ibid*). In terms of basic schools, parents surveyed indicated that the work done by JSIF had influenced their decision to send their child to that school for the first time (62%). Of this number 31% gave the reason as being a better environment; while another 31% gave better learning facilities as the primary reason. Less than 25% thought that the school project had a direct impact upon their child’s performance at school. For those who did, 60% observed general overall improvement in performance, with 30% seeing higher grades. ITAD (*ibid*) reported a slight, but noticeable decrease in absenteeism. A similar type of response was received from those surveyed regarding the primary and All Age schools completed. One of the unexpected benefits of school projects to the wider community was the availability of the facilities for community events. This pleased the residents and also undoubtedly increased their sense of

community. Highlights from recent reports indicate that a total of 591 schools at all levels have been funded at a cost of over J\$4.46 billion (JSIF, 2016i).

Results from households surveyed indicated there was a change in their primary source of water (30%). This meant that households may have moved from well water to rainwater harvesting, from standpipes to house pipes outside or inside (Ministry of Water and Housing, 2004; Mitchell, 2016b). Other benefits included time-savings as residents spent less time in fetching water each day. Residents were also pleased with the increased number of days that they had water available than previously. However, there were challenges in several of the projects where some communities reported that they had no water in the pipes even after the pipes were laid. This resulted in an overall disappointment with the National Water Commission (NWC) for the lack of maintenance of the project. However, with the decrease in rainfall in 2015 and the severity of the drought during the summer of 2015 (Mitchell, 2016b) access to potable water is a primary concern for the GoJ. Consequently, it is also of importance to the Fund. In the last financial year,

38 contracts/projects were signed and completed. Projects implemented during this period included 19 Primary & All Age Schools, 1 Health Centre, 1 Rural Farm access Road and 18 subprojects which trained beneficiaries in Agro-Business Management and Water & Sanitation Hygiene. Additionally, the Bridge Jamaica Social Intervention (Rural) project which provided assistance to families on PATH was also completed. All projects aided over 16,000 beneficiaries across 7 parishes (Annual Report 2014-2015, p. 2).

The variety of projects being implemented by JSIF, including integrated community spaces and centres, organizational strengthening, and human resource development, serves to support JSIF's commitment to poverty alleviation among the most vulnerable in the Jamaican society.

The following sections highlight some of the successes by project portfolios exhibited at the recently held Denbigh 2016 Agricultural Show, particularly those related to the management of freshwater resources in Jamaica, namely agriculture, sanitation, and the environment (Mitchell, 2016b).

Agriculture

Research has continued to show that agriculture is the number one consumer of water in the world, and so it is for Jamaica (Mitchell, 2016b). Since 2004, the GoJ has been aware of the unmet demand for water in Jamaica and projected also for the future. Reports indicated that it was about "220 million litres per day. It is projected that by the year 2010, the un-met demand for potable water will be 320 million litres per day, if no additional capacity is put in place" (Ministry of Water and Housing, 2004, p. 37). The less than average rainfall in January 2015, combined with severe drought conditions during the summer, resulted in significant losses to the agricultural sector in Jamaica, and across the Caribbean region (Observer, 2015). Outside of the Kingston Metropolitan Area (KMA), and more specifically the farming territories, the situation was more severe. For example, Clarendon received only 8% of its normal rainfall, while St. Thomas received 16% of its normal rainfall for the month of May. "Manchester saw only 40 per cent, while St Mary recorded 30 per cent, and Portland 34 per cent. These parishes are all said to be experiencing 'severe drought' " (Observer, 2015). In order to protect the agricultural sector, immediate action had to be taken.

One of the ways in which climate change effects can be mitigated is by introducing drought resistant crops, crops that mature in a shorter time than the average variety, as well as introducing new irrigation technology (Mitchell, 2016; Williams, Mitchell & Branche, 2015). Through the REDI programme, the JSIF has invested in drip irrigation and water storage technologies for more than 552.5 hectares of farmland at a cost of more than J\$174 million. The Fund has also built approximately 178 greenhouses in 20 communities at a cost of J\$212.4 million, which produce more than 762 tons of crops annually. "This investment has translated to at least 60% higher production capacity for over 1,000 farmers" (JSIF, 2016, p. 4).

At the community level, The REDI project has made significant contributions to the lives of the farmers, who share willingly about the time saving benefits of having the drip technology and the water supply systems external to the National Irrigation Commission's (NIC) system. At a handing over ceremony for drip irrigation equipment to farmers in the New Forest/Duff House communities on the border of neighbouring parishes Manchester and St. Elizabeth, Mr. Omar Sweeney (2016), the Managing Director for JSIF, reported that, The JSIF/REDI project has provided approximately half acre of drip lines with fittings to each of the 1153 farmers in these communities as well as 1,795 one thousand gallon water storage tanks and 250 fertigation kits.

The introduction of this on-farm drip line irrigation system will address the following challenges that the farmers currently face because of low levels of rainfall:

1. The inability to plan for production leading to frequent market gluts and shortages.
2. The inability to pursue market-driven production, due to the over dependence on the rainy season.
3. Inconsistencies in the price of produce because of the dependency on rainfall.
4. Disease and pest infestation of some crops during the dry season (for example, cabbage)

5. Increase in overhead costs for the farmers who plant during the dry season and have to purchase water, therefore resulting in reduced earnings.

What has been the impact of the Drip Irrigation Intervention?

- The JSIF provided the Drip Irrigation equipment utilized in the 2015-2016 Onion Development Programme at Yallahs Agro-park, PGR and Colbeck Water Users Group. This resulted in a doubling of the yield per acre of onions. For example at Colbeck 30 farmers using the Drip irrigation provided by JSIF produced 334,200 lbs. of onion from 16 acres. This compares favourably with the world average yield of onion (30-35,000 lbs per acre).
- Farmers at Beacon Little Park using the Drip irrigation system provided by JSIF harvested in excess of 64,000 lbs. of tomato per acre and
- The escallion and watermelon farmers at New Forrest and Duff House have reported a 50% increase in yield of escallion as a result of “Fertigation” through the drip (pp. 6-8).

The results strongly support the Fund’s investing in more projects involving drip irrigation technology because it is an efficient management system of freshwater resources in Jamaica, maximizing benefits to the crops while minimizing waste. Additionally, farmers can save on the cost of production by not having to purchase water and transport it over long distances.

The PetroCaribe Development Fund (PDF)

Water is a critical element in implementing sanitation systems, ensuring the best standard of hygiene possible, as well as minimizing the risk of diseases associated with poor sanitation services. To this end, the PetroCaribe Development Fund has partnered with the MoE in an effort to replace pit latrines at educational institutions around the country. To date, more than 47 schools have been the beneficiaries of newly installed flush systems that at a cost of J\$360 million (Williams, 2016). The systems are standard 5 or 8 seater units that accommodate male and female students. They are also wheelchair accessible, have water saving devices, flowing out to a specially designed pit system that protects the groundwater resources from contamination by human waste. Additionally, to schools in rural areas that do not have any regular water supply systems, the JSIF will install a new water supply system, along with water storage capabilities and pumps to ensure that the system is fully functional (Wright, 2016). This is of great value to the schools and the surrounding communities as the health risks will be reduced significantly from the former pit latrine systems. Additionally, students will have access to running water to wash their hands in order not to transmit diseases. The school will also have its own water supply system without the need of relying on old systems that may break down frequently, or needing to pay for water to be trucked to them by the MoE or other private suppliers (Mitchell, 2016b). An added benefit of having a flush system installed by the Fund, is that where the electricity supply is unable to support the additional demands, JSIF installs electrical systems that will manage power generation for whatever infrastructure is implemented.

The Environment (Super 18)

Improper disposal of solid waste, improper drainage, and overflowing sewage are some elements that are characteristic of vulnerable rural and urban communities, such as Majesty Gardens, Ellerslie Gardens, and Russia (Mitchell, 2016a). Since May 2014, the GoJ signed a special loan agreement with the World Bank in the amount of US\$42 million for a multifaceted and comprehensive approach to community renewal (JSIF, n.d.). The Integrated Community Development Project (ICDP) has four main components, including improvement in access to basic infrastructure. Under this component, the ICDP communities have been the beneficiaries of skips for solid waste management, clean up and beautification exercises, as well as training for environmental wardens. In several communities, the ICDP has worked to improve storm water drainage, managing the flow and also channelling it appropriately.

One of the achievements of the JSIF is its ISO 14001:2004 certification in sustainable environmental development. This certification strengthens the Fund’s implementation of an internal environmental policy for how garbage is separated at the source, and plastics are recycled. The environmental policy also applies to JSIF sites to inform how soil erosion must be minimized, dust minimized through required wetting the work area, and proper disposal of waste. With the prevalence of mosquito borne diseases in the island, such as dengue, chikungunya, and now the Zika virus, the Sustainable Programme for Environmental Resilience (SUPER 18) has been active in solid waste management and generally improving the environmental conditions of the eighteen ICDP communities across the country. An excerpt from the addendum to the SUPER 18 programme states how this objective will be accomplished.

The strategies include enhancing community access to solid waste infrastructure, enforcement of solid waste management laws, capacity building, cleanup and beautification, community environmental education and sensitization, waste separation at source and strengthening of the NSWMA’s capacity to collect and dispose of waste by provision of garbage compactor trucks and other solid waste management equipment (JSIF, 2016k, p. 1).

III. CONCLUSION

The contribution of JSIF's work to sustainable development in Jamaica is significant. In the 30 communities currently being served by the Fund, residents are actively involved in the process of community development – empowering themselves and others. Across the island, the JSIF continues to be known as an entity that assists the most vulnerable sectors of the Jamaican society by providing critical infrastructure through building new schools, or rehabilitating and expanding old ones in underserved communities. Recognizing the needs of the rural population, the Fund has also assisted with the rehabilitation of farm feeder roads, increased access to water, improved sanitation for schools, and the provision of agricultural equipment for farmers, while accessing markets for their produce through promoting community tourism.

Additionally, the JSIF has worked in some of Jamaica's most volatile communities to provide access to basic services and increase the ability of the residents to develop livelihoods. Youth in technology, conducted in partnership with the Professional Development Institute (PDI), the University of the West Indies Film Project, and the University of Technology's Community Services Department showcased the products of their students at the recently held Denbigh 2015 Agricultural Show.

In concluding, it should be noted that working with vulnerable sectors of the Jamaican society means that the implementation is always ongoing. This is because on many projects, community members have to be involved in the development and management of the project through the CBC methodology. JSIF has also been involved in skills training of adults, children, and youth, through workshops, training programmes and summer camps. In an effort to support their infrastructural development programmes, the Fund supports the initial and ongoing training for environmental wardens in the ICDP communities. This is a critical component to maintain the integrity of the project and the quality of the infrastructure. Consequently, all stakeholders would be wise to harken to Mrs. Scarlett Gillings' advice of lessons learned over the 18 years of serving JSIF as the Managing Director. She said, "My advice therefore for persons working in communities is to observe four (4) cardinal rules: first, the need to show respect and appreciation; secondly, awareness; thirdly sincere partnership and fourthly, trust" (Annual Report 2014-2015, p. 2).

IV. REFERENCES

- [1] Belize Social Investment Fund. (2016). Retrieved from <http://www.sifbelize.org/Home.aspx>
- [2] Fondo de Asignaciones Familiares (FODESAF). (2016). *Programas sociales*. Retrieved from <http://fodesaf.go.cr/>
- [3] Gleaner, The. (July 3, 2016). Jamaica gets US\$30 million World Bank loan for Disaster Management [Electronic version]. Retrieved from <http://jamaica-gleaner.com/article/news/20160703/jamaica-gets-us30m-world-bank-loan-disaster-management>
- [4] ITAD Ltd. (2002). *Impact Evaluation of the Jamaica Social Investment Fund*. Kingston, Jamaica: JSIF.
- [5] Jamaica Social Investment Fund (JSIF). (2011). *A lesson in introducing change: The journey of the Jamaica Social Investment Fund to ISO certification* [Electronic version]. Retrieved from <http://www.jsif.org/sites/default/files/A%20lesson%20in%20introducing%20change%20final.pdf>
- [6] JSIF. (2016). *The Partnership between the Ministry of Education & the Jamaica Social Investment Fund: Education Sector*. Kingston, Jamaica: JSIF.
- [7] JSIF. (n.d.). *ICDP: Integrated Community Development Project. Flyer prepared for promotion*. Kingston, Jamaica: JSIF.
- [8] JSIF. (2016a). *Jamaica Social Investment Fund 18th Annual Report: 2013-2014*. Kingston, Jamaica: Jamaica Social Investment Fund (JSIF).
- [9] JSIF. (2016b). *Jamaica Social Investment Fund 19th Annual Report: 2014-2015*. Kingston, Jamaica: Jamaica Social Investment Fund (JSIF).
- [10] JSIF. (2016c). *Announcement: JSIF Board Members and Revised Letterhead. Internal e-mail notification to All Staff at the JSIF offices in Kingston, Jamaica on August 10, 2016*.
- [11] JSIF. (2016d). *Funding Agencies*. Retrieved from <http://www.jsif.org/jsif-funding-agencies>
- [12] JSIF. (2016e). *Economic Growth and Job Creation – Land, Environment and Climate Change*. Kingston, Jamaica: Jamaica Social Investment Fund (JSIF).
- [13] JSIF. (2016f). *JSIF Mission*. Retrieved from <http://www.jsif.org/content/jsif-mission>
- [14] JSIF. (2016g). *JSIF Approach*. Retrieved from <http://www.jsif.org/content/jsif-approach>
- [15] JSIF. (2016h). *Community Based Contracting Manual*. Kingston, Jamaica: Jamaica Social Investment Fund (JSIF).
- [16] JSIF. (2016i). *Costs for school projects at JSIF from 1996 to present. Internal e-mail communication received from M. Moses at JSIF on July 26, 2016*.
- [17] JSIF. (2016j). *"Drip Irrigation Systems & Water Storage Capacity Project."* Speech by MR. Omar Sweeney, Managing Director of JSIF at the Handing Over Ceremony at the National Irrigation Commission Compound, New Forrest/Duff House Manchester on Thursday July 7, 2016.
- [18] JSIF. (2016k). *3rd Addendum to Sustainable Programme for Environmental Resilience (SUPER 18) Project prepared by M. Clarke on June 13, 2016*. Kingston, Jamaica: The Jamaica Social Investment Fund.
- [19] Jamaica Water Resources Authority. (2014). *Summary of National Water Demand*. Retrieved from <http://www.wra.gov.jm/dynaweb.dti?dynamodule= videos&dynapage= videos>
- [20] Ki-moon, B. (2016). *Sustainable development*. Retrieved from http://www.brainyquote.com/quotes/quotes/b/bankimoon643741.html?src=t_sustainable_development
- [21] Ministry of Water and Housing. (2004). *Jamaica Water Sector Policy: Strategies and Action Plans*. Retrieved from mwlcc.gov.jm

- [22] Mitchell, K.A. (2016a). *The Community Renewal Programme (CRP): The Case of Majesty Gardens* [Electronic version]. *International Journal of Research in Engineering and Social Sciences*. Retrieved from http://www.indusedu.org/pdfs/IJRESS/IJRESS_823_93276.pdf
- [23] Mitchell, K.A. (2016b). *Managing Water Resources in Jamaica, the Land of Wood and Water* [Electronic version]. *International Journal of Contemporary Applied Sciences*. Retrieved from <http://ijcas.net/Files/CMSUserOwnFolder/issue/February-2016/11.pdf>
- [24] Newman, J., Pradhan, M., Rawlings, L.B., Ridder, G., Coa, R., & Evia, J.L. (2002). *An impact evaluation of education, health, and water supply investments by the Bolivian Social Investment Fund* [Electronic version]. Retrieved from <http://siteresources.worldbank.org/EXTLACREGTOPPOVANA/Resources/NewmanPradhanRidderCoaEviaAnimpactevaluationofinvestment.pdf>
- [25] *Observer*. *The Jamaica* (2015). *Parched Caribbean faces widespread drought, water shortages*. Retrieved from http://www.jamaicaobserver.com/business/Parched-Caribbean-faces-widespread-drought--water-shortages_19152797
- [26] Planning Institute of Jamaica (PIOJ) (2007). *The Poverty-Environment Nexus: Establishing an Approach for Determining Special Development Areas in Jamaica* [Electronic version]. Retrieved from http://pioj.gov.jm/Portals/0/Sustainable_Development/Poverty-Environment%20Vulnerability%20Relationship.pdf
- [27] PIOJ. (2012). *The Jamaica Survey of Living Conditions: Executive Summary* [Electronic version]. Retrieved from http://www.pioj.gov.jm/Portals/0/Social_Sector/Executive%20SummaryFinal.pdf
- [28] Pradhan, M., Rawlings, L., & Ridder, G. (1997). *Bolivian Social Investment Fund Analysis of Baseline Data for Impact Evaluation*. Retrieved from <http://papers.tinbergen.nl/97024.pdf>
- [29] Siri, G. (2000). *Employment and social investment funds in Latin America* [Electronic version]. Retrieved from <https://issuu.com/miradordelaglobalizacion/docs/employment-and-social-investment-funds-in-latin-am/7>
- [30] Soubbotina, T. P. (2004). *Beyond Economic growth: An introduction to sustainable development* [Electronic version]. 2nd Ed.
- [31] *Trading Economics*. (2016). *Trading Economics Jamaica*. Retrieved from <http://www.tradingeconomics.com/jamaica/unemployment-rate>
- [32] UNFPA. (2016). *Jamaica*. Retrieved from <http://caribbean.unfpa.org/public/Home/Countries/Jamaica> <http://caribbean.unfpa.org/public/Home/Countries/Jamaica>
- [33] Williams, B., Mitchell, K.A., & Branche, C. (2015). *Agriculture: Educational Strategies to Create Wealth in the Caribbean*. *International Journal of Education and Research*. Retrieved from <http://www.ijem.com/journal/2015/October-2015/15.pdf>
- [34] Williams, R. (2016). *Disbursed funds for PetroCaribe Development Fund*. Internal e-mail communication received at JSIF on July 22, 2016. Kingston, Jamaica.
- [35] Wright, T. (2016). *Conversation with Krystal Cameron Design Studios artist at their offices in preparation for Denbigh 2016 poster*. Kingston, Jamaica: Krystal Cameron Designs.
- [36] Wurgaft, J. (1995). *Social Investment Funds and Programs in Latin America: Their Effects on Employment and Income in Employment for Poverty Reduction and Food Security by IFPRI* [Electronic version]. Retrieved from <http://www.nzdl.org/gsd/mod?e=d-00000-00--off-0fn12.2--00-0---0-10-0--0--0direct-10--4-----0-11-11-en-50--20-about--00-0-1-00-0-4---0-0-11-10-0utfz-8-00&cl=CL1.2&d=HASH0158fd1217eca1d07fb43372a.12>=1>
- [37] Wurgaft, J. (n.d.). *9 Social Investment Funds and Programs in Latin America: Their Effects on Employment and Income* [Electronic version]. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?jsessionid=3E1A5908FD12325D1196571BA67ECF1D?doi=10.1.1.141.4117&rep=rep1&type=pdf>

Author Note

Dr. Keisha Mitchell is a research consultant with the Jamaica Social Investment Fund. She has also served as a member of the staff of the HRD Graduate Programmes Unit at the University of the West Indies. She has taught in the PhD Programme in Organisational Behaviour, having been responsible for the course Complex Organisations before assuming major responsibilities for the Unit's research into Social Affirmation.

She was educated at the University of the West Indies where she did a double major in psychology and accounting before pursuing her Doctoral studies in Social-Community Psychology at Rutgers, The State University of New Jersey in the USA. Today, her academic interests include social and emotional learning, complex organisations, organisational resilience and social affirmation.

All queries concerning this document should be sent to Keisha A. Mitchell at The Jamaica Social Investment Fund, Ground floor, *The Dorchester*, The Jamaica Social Investment Fund, 11 Oxford Road, Kingston 5, Jamaica, W.I. or Keisha.Mitchell@jsif.org