STRENGTHENING THE ENTRETRENEURIAL SPIRIT OF CARIBBEAN YOUTH:

Regional Market Analysis 2018











REPORT ON MARKET ANALYSIS CONDUCTED IN BARBADOS, JAMAICA AND TRINIDAD & TOBAGO TO INFORM MAPPING OF THE CARIBBEAN ENTREPRENEURSHIP LANDSCAPE

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Submitted to:

Barbados Youth Business Trust

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Executive Summary

The Caribbean region has among the highest rates of youth unemployment in the world. According to the International Labour Organisation, in 2014, the average youth unemployment rate in Barbados, Jamaica and Trinidad and Tobago stood at 25%, almost twice the average for Latin America and the Caribbean as a whole (13%). In fact, Barbados (26.8%) and Jamaica (30.5%) are among the Caribbean countries with the highest youth unemployment figures. As a result, youth unemployment has taken centre stage on the agendas of Caribbean governments, especially those in Barbados, Jamaica and Trinidad and Tobago. Entrepreneurship, in particular, has been flagged as an alternative means toward economic self-sufficiency for youth in the region.

The purpose of this market study is to provide an analysis of the current market in Barbados, Jamaica and Trinidad and Tobago, highlighting available opportunities for young entrepreneurs to start sustainable businesses. In addition to producing a list of the resources available across the region for persons wishing to start a new business and strengthen existing ventures.

The market study engaged in primary research through stakeholder consultations in each country and secondary research of author-practitioners to inform the analysis of the dynamics observed in each market. Some of the key findings of the study are summarised below.

Productive entrepreneurial ecosystems are characterized by a prevalence of ambitious entrepreneurs and an equilibrium of attributes and/or organisms that promote self-perpetuating enabling factors. The study examined the extent to which these key success factors were present and active in Barbados, Jamaica and Trinidad and Tobago.

The legislation reviews highlighted that the countries, under study, provide primarily tax relief based incentives, and funding to pitching competitions within the school system. The effectiveness of tax incentives to pre-start-up, start-up and early growth stage entrepreneurial ventures has been deemed to be nominal by global experts and regional stakeholders. The regional stakeholders harmoniously echoed the position that the governmental policies and support must be appropriate for the needs of entrepreneurship.

Nine business segments were identified from global trend analysis and validated by the stakeholders' outlook on industries where entrepreneurs have not yet fully developed and can achieve productive outputs. The skills required to operate in those nine segments were identified and compared to the skills available in the countries. A quantitative and qualitative assessment was made of the skills gap as well as how these gaps could be filled; in an approach that would redound to the ecosystem's central function of sustainability.











The recommendations on the path towards a thriving entrepreneurial ecosystem, where youth entrepreneurs can achieve personal and economic success, were posited in relation to the stage of the existing ecosystem.











GUIDING PRINCIPLES OF ENTREPRENEURSHIP ECOSYSTEMS

The phenomenal evolution of the technology start-ups from ideas birthed in coffee shops and dorm rooms, to global enterprises has been scholastically studied to extricate modalities, contributing factors and best practices. The guiding principles contained in this review are drawn from the research and expertise of Ben Spigel, Erik Stam and Brad Feld.

Spigel (2015) defines entrepreneurial ecosystems as 'combinations of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures'. This research also observed that entrepreneurs repeatedly report that *conventional tools of business-friendly policy*, such as tax incentives, grants, and local regulations, have little relevance to their success or to the vitality of local entrepreneurial ecosystems. The emerging understanding regarding entrepreneurship ecosystems is that the "place" (region) is critical to entrepreneurial success – the social and cultural elements have been key determinants of the kind of entrepreneurs produced.

Additionally, there is growing recognition that not all types of entrepreneurship are equally important for economic growth (Henrekson & Sanandaji ,2014; Stam et al., 2009; Wong et al., 2005). These researchers posit that entrepreneurial ecosystems are a <u>set of interdependent actors and factors coordinated</u> in such a way that they <u>enable productive entrepreneurship</u> within a particular territory. It is productive entrepreneurship that redounds to increased economic growth of a country or region. In order for productive entrepreneurship to evolve, the ecosystem must support the emergence of ambitious entrepreneurs. These are individuals exploring opportunities to discover and evaluate new goods and services and exploit them in order to add as much value as possible (Stam et al., 2012). In practice, ambitious entrepreneurs are more likely to achieve substantial business growth, innovation or internationalization than the 'average' entrepreneur.

The importance of the place in which entrepreneurship occurs is seen as having a crucial impact over the entire entrepreneurship process, from the ability and willingness of nascent entrepreneurs to start a firm, to their ability to find venture capital and eventually structure an exit from the firm. It is this understanding that underpins the market study of the entrepreneurship ecosystems in **Barbados**, **Jamaica and Trinidad and Tobago**. The outcomes produced will be directed towards identifying the extent to which the "places" provide the vital resources for productive entrepreneurship. The study will also map the sources and connectivity, where it exists, of said resources.











Literature review

Stam and Spigel (2016), in the book Entrepreneurial Ecosystems, states that entrepreneurial ecosystems focus on the cultures, institutions, and networks that build up within a region over time rather than the emergence of order within global markets. The market study encompasses three countries within the CARICOM region with a youth entrepreneurship development agency, named the Youth Business Programs. This approach will facilitate vital regional knowledge sharing and empowerment through wider understanding of which ecosystem factors to engage at various stages of the entrepreneurial journey.

For example, Mack and Mayer (2016), explored how early entrepreneurial successes in Phoenix Arizona, has contributed to a persistently strong entrepreneurial ecosystem based on visible success stories, a strong entrepreneurial culture, and supportive public policies.

Start-up Communities: Building an Entrepreneurial Ecosystem in Your City, (2012) by Brad Feld who is the co-owner of The Foundry Group, Boulder Colorado and the founder of TechStars, identified nine attributes of the ecosystem that have been observed in highly productive entrepreneurial ecosystems.

The **nine (9) attributes** by Brad Feld (2012) are

- Diverse pool of human capital inclusive of the technical and business oriented skills and knowledge. The business oriented skills such as salespersons, marketers, business development professionals possess the ability to get the product/service in the hands of the target consumers. Universities and colleges are deemed as a good source of talent for start-ups.
- 2. Financial capital from investors is the second most critical factor the nature of entrepreneurship requires venture capitalist, angel/seed investors and the like who are visible and accessible. This form of capital is best suited to support the entrepreneurial endeavour through conceptualization, testing and launch.
- 3. Leadership in the ecosystem by successful entrepreneurs who are visible, accessible, available to mentor or advise start-ups and scale-ups.
- 4. Effective and well-integrated accelerators and incubators which function as network brokers and connect the actors in the ecosystem.
- 5. Affordable professional service providers who are knowledgeable of the needs of the entrepreneurial ventures.
- 6. Large anchor firms which create opportunities through outsourcing to entrepreneurs.
- 7. Governmental support for start-up and scale-up requirements, protection of intellectual property, regional trade (goods and services) facilitation
- 8. Frequent events for engagement and networking such as meet-ups, pitching events, start-up weekends, boot camps and competitions.











9. Sustainable pool of start-ups and entrepreneurs who are vigorously developing the value creating opportunities that will contribute to economic growth.

This market study will pair the Feld (2012) attributes with the best practices that support productive entrepreneurship as recommended by Isenberg in the article "How to start an Entrepreneurial Revolution, Harvard Business Review, (2010)".

Isenberg (2010) posited nine (9) best practices that would increase the likelihood of an infancy stage entrepreneurial ecosystem developing into a measurably, significant contributor to a country's economic growth. Isenberg states that these principles will result in venture creation and a vibrant ecosystem:

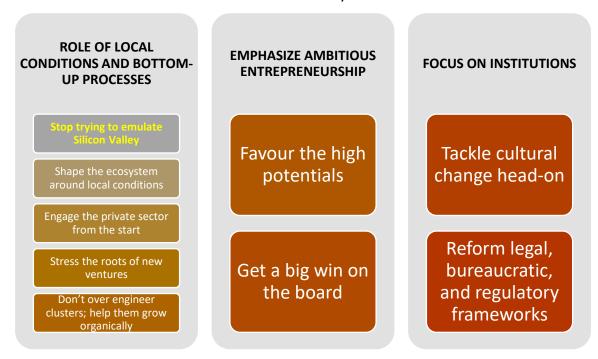


Figure 1 Best practices for entrepreneurial ecosystems

The extent to which these attributes are present and best practices are employed will provide an approach to determine the areas within the Caribbean entrepreneurial ecosystem that are relevant, those which require enhancement or elimination of those which are least aligned.











THE CARIBBEAN ENTREPRENEURSHIP ECOSYSTEM

This study of the Caribbean entrepreneurship ecosystem with an emphasis on factors which target young entrepreneurs, has identified that the enabling environment is evolving from small business support to that of entrepreneurship stimuli. In essence, the Caribbean entrepreneurship ecosystem heavily supports small businesses while seeking to nurture productive entrepreneurship and give rise to ambitious entrepreneurs.

Legislation and Incentives for Small Business and Entrepreneurship

The infrastructure and legislation/regulation that exists in the study countries are more directed towards concessions on inputs and incentives for tax reductions.

Barbados

Small Business Development Act (1999)

- Exemption from the payments of import duties and stamp duty on plant and equipment for use in their businesses
- Exemption from withholding tax on dividends and interest earned on any investments
- Exemption from the payment of stamp duty on all documents related to the business where registration of the document is required by law
- A deduction of corporate tax of an amount equal to 20% of actual expenditure incurred in respect of use of technology, market research and any other activity that is in the opinion of the Commissioner of Inland Revenue directly related to the development of the business
- Payment of corporate tax at a rate of 15% on profits

Special Technical Assistance Programme

This programme seeks to address inherent problems associated with high costs of production, inappropriate technology and management or production systems and other associated problems. This fund, administered by the Barbados Investment and Development Corporation (BIDC), is intended to assist in helping companies to become globally competitive and to improve their level of exports.

Innovation Fund

The Innovation Fund provides seed capital and technical expertise to entrepreneurs who have innovative ideas and are in need of funds to commercialise their ideas. The Innovation Fund provides assistance to businesses with an innovative and marketable idea, the project must be majority owned by residents of Barbados and must have the potential to earn or save foreign exchange. Applications are welcomed, but your company must be incorporated to receive funding. Seed capital financing is available from BB\$25,000 to \$250,000.











Applicants for the Enterprise Growth Fund Limited (EGFL) grant financing are required to submit a comprehensive project proposal including details of the project's contribution to the development of new or expanded export markets and their long-term sustainability; potential foreign exchange earnings; employment creation and project costs. The maximum funding per application has been set at BB\$1 million. Qualifying private companies are required to contribute 20% of the total cost of the project to be financed. That contribution may, in exceptional cases, be waived by the fund's management committee.

The Barbados Income Tax Act - Green Business and the Renewable Energy Sector

- Where green business is the taxpayer's main business activity, additional incentives are available. For example, under section 12 of the BITA, companies which have invested money in machinery or plant can claim an initial allowance of 20% of this capital expenditure. These businesses can also claim an annual allowance of 150% of capital expenditure incurred in the income year for the purchase of machinery and plant.
- Also allows for an income tax holiday of 10 years for developers, manufacturers or installers of renewable energy systems and energy-efficient products.
- For those green businesses which have not been granted a tax holiday, there
 are several other new incentives available for marketing, research and
 development and staff training.

Cultural Industries Act and Incentives

The Cultural Industries Development Act also provides an incentive for investment in a cultural practitioner or an approved cultural project. Section 31 of the Act states that if an investor invests in a cultural practitioner or an approved project, 100% of the amount the investor invests shall be deducted from their assessable income, and that investor can claim that same amount each year for up to five years

Cultural practitioners who wish to benefit under the Act must apply for any of the incentives offered for projects aimed at stimulating economic activity in the cultural industries. Only cultural projects which are approved will be able to access the incentives of income tax and duty-free concessions, VAT exemption and access to funding.

The Cultural Industries Development Fund provides grant funding for creative/cultural projects. The practitioner engages in a guided process and submits a proposal for the project which is evaluated by the Board of the fund.











Jamaica

The MSME & Entrepreneurship Policy was adopted by Parliament in 2013 to serve as a comprehensive framework for the implementation of strategies to support the growth and development of the MSME sector. This calls for a comprehensive approach and strategy that addresses the needs of businesses over the entire investment lifecycle. It involves a structured approach to business plan development and project design, the screening and evaluation of business plans and rigorous risk-management assessments, buttressed by a window for financing that includes various forms of debt as well as equity facilities.

The Security Interest in Personal Property (SIPP) Act makes it possible for entrepreneurs to use moveable assets such as livestock, motor vehicles, agricultural products, stocks and securities to secure business loans. Owners of creative works, innovators and inventors can also leverage their intellectual property, such as copyright, patents and trademarks to be used as collateral in the process of securing loans.

The establishment of a Collateral Registry, which forms part of the secured transactions framework, is also important in facilitating entrepreneurial development, by expanding access to credit, while minimizing the risks of loan default. The Registry, administered by the Companies' Office of Jamaica, is a repository of information on non-real estate assets being tendered as collateral for securing loans.

The Insolvency Act provides for the rehabilitation of the insolvent debtor under court protection, and will help to remove the stigma and constraints associated with bankruptcy in Jamaica. The ultimate goal is that entrepreneurs will not be stigmatized for taking risks, nor left without remedies when normal business failures occur.

Integrated Service: In an effort to provide a more integrated service to the Micro, Small & Medium-sized Enterprise sector, the Minister has initiated efforts to consolidate the services of the Jamaica Business Development Corporation, Micro Investment Development Agency, and the Self Start Fund. In this regard, all these agencies are now governed by one single board. This move is to allow for a more efficient and structured approach in the provision and delivery of the advisory, developmental and financial services required to address the investment life cycle of the MSMEs.

Small Business Development Centres: The Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF) is engaged in implementing a plan to roll-out a national network of Small Business Development Centres (SBDCs) across the island. The goal is to put in place the necessary arrangements to ensure the effective delivery of business development and advisory services to MSMEs at world-class industry standards and in a consistent manner.











The Mobile Business Clinic Initiative is part of a larger effort to remove barriers to growth, to unlock investments, get businesses started and to strengthen the capacity of Jamaica's micro, small and medium sized enterprises (MSMEs).

Trinidad and Tobago

The Venture Capital Tax Credit allows for a company which invests in shares in a Venture Capital Company to be entitled to a tax credit, for the year of income in which the shares were purchased, equivalent to the rate of tax of the amount received by the Venture Capital Company for those shares.

Approved Small Company Status is a designation granted to a Limited Liability Company, allowing it to derive a tax relief for a period of five (5) years. An approved small company is entitled to a tax credit equal to twenty-five percent of its chargeable profits. Eligibility Criteria are, the company must:- (i) be a limited liability company; (ii) be locally owned and controlled; (iii) have machinery, equipment and working capital valued at \$TT1.5m or less; (iv) be incorporated on or after 08 Jan 1988 and is not the result of the splitting or the reconstruction of an existing company; (v) not hold shares directly or indirectly through its nominees in another company; (vi) maintain accounts which are audited by an Accountant who is a member of the Institute of Chartered Accountants of Trinidad and Tobago (ICATT); (vii) employ at least five permanent employees; (viii) make optimum use of locally produced raw materials.

Enterprises engaged in the film industry are allowed duty free concessions on machinery, equipment and materials for the production of motion pictures. Terminal equipment or other equipment to be installed or used for a public telecommunications network, service or radio service are also eligible for import duty concessions based upon the provisions of the Third Schedule of the Customs Act, Chapter 78:01. The service must be certified by the Telecommunications Authority of Trinidad and Tobago.

The Micro-Enterprise and Training grant is offered to needy persons who are interested in undertaking a small business venture or skills training. This grant is intended to assist in empowering and transforming the lives of citizens of Trinidad and Tobago, allowing greater self-sufficiency and financial independence. An officer from the Ministry of Social Development and Family Services is assigned to work with the recipient of the grant to ensure the success of the business. On the island of Tobago an officer from the Tobago Health Authority's Division of Health and Social Services executes this function. The maximum amount of the grant is TT\$5,000.00. The grant is paid directly to the supplier or suppliers of the goods or services required to start the business.











The Micro Enterprise Loan (MEL) Facility, managed by Ministry of Social Development and Family Services and the United Nations Development Programme (UNDP), offers assistance to under-privileged persons who wish to establish a micro business but are unable to do so due to limited financial resources. This service is administered by various community-based organisations in a professional, personalised and supportive atmosphere. Persons applying for this facility are offered assistance in business plan development as well as training in entrepreneurial skills. A maximum loan of TT\$15,000.00 is available.

The Enterprise Investment Fund (EIF) provides support for public-private partnership initiatives related to strengthening the ecosystem that supports micro and small enterprise development. It is noted that the fund is undercapitalized.

Mapping the Caribbean Entrepreneurial Ecosystem by Feld's Nine Attributes

Based on Feld's nine (9) attributes that contribute to a vibrant entrepreneurial ecosystem, the Caribbean's entrepreneurial ecosystem has been mapped in a matrix which identifies the sources of each attribute in Barbados, Jamaica and Trinidad and Tobago.











Table 1 Caribbean Entrepreneurship Ecosystem Matrix

Eco System Attributes	BARBADOS	JAMAICA	TRINIDAD & TOBAGO
1a. Governmental support	 Growth Stage financial support through the Credit Guarantee Fund which is managed by the Central Bank Tax credit for investment in renewable energy ventures Duty Free importation of inputs for approved small businesses in manufacturing and agriculture Reduced corporation tax for approved small businesses 	 Tax incentives for businesses listed on the junior stock exchange MSME and Entrepreneurship Policy 2013 Collateral Registry 	 Venture Capital Act 2005 Tax exemption for approved small companies Micro Enterprise and Training Grant Micro Invest Fund
1b. Government Agencies	 Corporate Affairs & Intellectual Property Office (Business & IP Registration) BNSI (Packaging regulation) National Insurance Department The Copyright Society of Composers, Authors and Publishers Inc. Town and Country Development Planning Office Customs and Excise Department 	 Bureau of Standards Jamaica Jamaica Intellectual Property Office Companies Office of Jamaica Inland Revenue Department (to allow tax deductions) National Insurance Scheme National Housing Trust Taxpayer Registration Office Tax Compliance Certificate Unit HEART/Trust 	 Companies Registry Intellectual Properties Office Inland Revenue Division VAT Registration Unit Central Statistical Office Ministry of Trade and Industry Trinidad and Tobago Bureau of Standards Chemistry Food and Drugs Division (Ministry of Health) National Insurance Board











Eco System Attributes	BARBADOS	JAMAICA	TRINIDAD & TOBAGO
	 BIDC (Duty Free entry of products) Inland Revenue Department Barbados Revenue Authority 	LIMT Mana	LIMIT Ch. Assessables
Diverse pool of human capital (source of partners, sub-contractors & professional services)	 Cave Hill School of Business 3 Technical Colleges / Institutes Barbados Coalition of Services Industries Inc (49 professional associations) 	 UWI Mona Mona School of Business 24 Technical Colleges/ Institutes Jamaica Coalition of Services Industries Inc (27 professional associations) 	 UWI St. Augustine Arthur Lock Jack 16 Technical Colleges/Institutes Trinidad & Tobago Coalition of Services Industries Inc (55 professional associations)
Sustainable pool of start- ups and entrepreneurs	 Barbados Youth Business Trust Youth Entrepreneurship Scheme Barbados Small Business Association Barbados Entrepreneurship Foundation \$20 Challenge Barbados Entrepreneurship Foundation Agriculture Challenge UWI Cave Hill SEED Program 	 Jamaica Youth Business Trust JA Company of Entrepreneurs Programme (JACE) Secondary Early Education Entrepreneurial Development (SEED) Programme National Business Model Competition (DBJ & PSOJ) Vincent Hosing UWI Venture Competition 	 Trinidad and Tobago National Secondary School Entrepreneurship Competition
3. Advisory Services (mentorship, business training)	 Barbados Youth Business Trust Barbados Small Business Association 	 Jamaica Youth Business Trust Small Business Association of Jamaica 	 Youth Business Trinidad & Tobago National Entrepreneurship Development Corporation (NEDCO)











Eco System Attributes	BARBADOS	JAMAICA	TRINIDAD & TOBAGO
	 BIDC - Small business Unit Ministry of Youth, Sports & Culture Second Chance Program 	 Jamaica Business Development Corporation Youth Entrepreneurs Association of Jamaica Jamaica Chamber of Commerce Jamaica Social Entrepreneurship Boost Initiative (SEBI) 	Junior AchievementLaunch RockItYMCACARIRI
4. Accelerators and Incubators	 Barbados Youth Business Trust BIDC Incubator TEN Habitat (Boot Camps & Innovators Hub) Youth Entrepreneurship Scheme (training & business modelling) 	Jamaica Youth Business Trust Branson Centre of Entrepreneurship Jamaica Business Development Corporation Incubator Technology Innovation Center at Joan Duncan School of Entrepreneurship	Business CARIRI Microsoft Innovation Centre TT UStart at UTT BizBooster at Lok Jack GSB Scotiabank Vision
6a. Financial capital from investors	 Trident Angels Barbados Entrepreneurs' Venture Capital Fund (BimVentures) Enterprise Growth Fund Ltd (Govt) 	 Alpha Angels First Angels Jamaica Caribbean Investment Network ISupport Jamaica Progressive Micro-Finance Group Venture Capital Jamaica (Development Bank of Jamaica) 	 Caribbean Investment Network Renaissance Angels IP Angels Enterprise Hub
6b. Small loans and grants	Barbados Youth Business Trust (micro)Fund Access	Jamaica Youth Business Trust (micro)	Trinidad Youth Business (micro)











Eco System Attributes	BARBADOS	JAMAICA	TRINIDAD & TOBAGO
	 Credit Unions (members only) Commercial Banks (collateral required) Lending Intermediaries (Fast Cash, Axcel Finance) [collateral required] Barbados Cultural Industries Development Agency Grant Program 	 Credit Unions (members only) Commercial Banks (collateral required) Lending Intermediaries (Carib Cash, LASCO Money) [collateral required] 	only) • Commercial Banks (collateral required) • Lending Intermediaries
7. Frequent events for engagement and networking	 BYBT Global Entrepreneurship Week TEN Habitat Caribbean Start-up Summit TEN Habitat Female Founders Boot Camp Start-up Weekend (Corey Graham) Innovate Barbados (BIDC) BEF Mix and Mingles Pitch IT Caribbean Women Innovators Network Accelerate Caribbean 	 Converge Tech Start-up Summit Next Gen Creators DBJ & Seed Stars Pitch Competition 5-5-5 Pitch Event Expo Jamaica Christmas in July Trade Show Bold Ones Denbigh Agricultural, Food and Industrial Show 	 TTYB Global Entrepreneurship Week Start-u Weekend Anime Caribe Decibel Entertainment Expo EntrepreneurLifeTT Amplify Start-up Boot











Eco System Attributes	BARBADOS	JAMAICA	TRINIDAD & TOBAGO
8. Large anchor firms (<i>create</i> revenue opportunities for entrepreneurs)		 Flow Digicel Grace Kennedy Group of Companies MegaMart (retail) LASCO Group of Companies 	 Flow Digicel BP Oil Company SM Jaleel Co Ltd (beverages) Massy Group (food, chemicals, distribution & retail)
9. Export Support	 BIDC BCSI Barbados Manufacturers Association (BMA) Caribbean Export 	 JAMPRO JCSI Jamaica Manufacturers Association (JMA) Caribbean Export 	Export TT TTCSI TT











PRIME ENTREPRENEURIAL INNOVATIVE/HIGH GROWTH BUSINESSES

Medium to High Capital Requirements

1. Recycling

Waste management industry is valued at US1.4 trillion. The bulk of the revenues are generated from garbage collection and the landfilling of the garbage. Where the collector owns the landfill, there is no incentive to recycle various categories of waste. However, an untapped revenue source can be found in identifying products which end up in the garbage for which there is a high demand; even if it is used. Two such categories of waste are lead-acid batteries and motor oils.

Lead-Acid Battery Recycling

According to the website www.scrapsalesusa.com, the average value for recycled lead-acid batteries is US0.30 per pound and/or US\$10 per battery. Most persons either discard their spent batteries or leave them at the auto-shop. Since there is little value placed on them from consumers, an aspiring entrepreneur can either pay a nominal fee or collect them and engage in the processes below to generate revenues from the battery. It is recommended that this venture is conducted in the formal sector where the batteries are sold to licensed smelters to reduce the environmental and personal health risks.

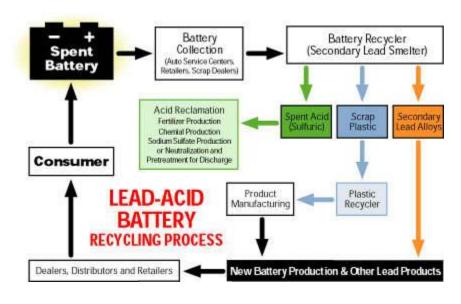


Figure 2 Lead-acid battery recycling options











The skills required are a knowledge of or training in

- OSHA standards for handling lead based products
- Basic auto-mechanic skills
- Shipping logistics

There also exisits a market for lithium (household) batteries which confirm to the same health and safety protocols as the lead-acid batteries.

Recycled motor oil

The Recycler's Word website (<u>www.recycle.net</u>) provides a seller and buyer matching service for recycled products. The below figure highlights the current demand for and price of used motor oils. Further research identified a company which developed and sells eco filters and pumps specifically for such operations – Russell Finex (www.russellfinex.com).

WANTED: LW1210351

Grade: Used Motor Oil Submitted: February 13, 2018

Location: USA, THE WOODLANDS TEXAS

Quantity: 20000 gallon US Ongoing

Price: \$0.90 USD gallon US

VIEW MORE DETAILS

AVAILABLE: LA1210448

Grade: Recovered Pyrolysis Oils

Submitted: February 14, 2018

Location: INDIA, GUWAHATI ASSAM

Quantity: 15,000 ton Week Price: \$36 INR litres

VIEW MORE DETAILS

WANTED: LW1209239

Grade: Crushed Oil Filters

Submitted: January 29, 2018

Location: KOREA, SOUTH, SEOUL SEOUL

Quantity: 500 ton Month

Price: \$45 CNF Busan Port USD ton

VIEW MORE DETAILS

AVAILABLE : LA1210302

Grade: Used Motor Oil

Submitted: February 12, 2018

Location: USA, NORTHWOOD OHIO Quantity: 50000 gallon US Week

Price: \$1.10 USD gallon US

<u>VIEW MORE DETAILS</u>

WANTED : LW1208575

Grade: Used Motor Oil

Submitted: January 21, 2018

Location: USA, THE WOODLANDS TEXAS

Quantity: 20000 gallon US Ongoing Price: \$0.90 USD gallon US

VIEW MORE DETAILS

Figure 3 Buyer matching portal for recycled products

The skills needed to recycle motor oils are:

- Auto mechanics
- Transportation of waste
- Medium duty equipment operator
- Pump and filtration maintenance
- Quality inspector











2. Innovative versions of traditional small and medium size businesses

Many of the traditional small businesses are facing the challenge of cultural shifts and preferences which have reduced the demand for the services or products. For instance, as more women embrace their Afrocentricity, there is a need to develop affordable clothing, soft furnishings and other items to meet the trend regionally. There is also a demand for balms and rubs for sinusitis and muscle pain based on heritage homeopathy.

The introduction of prefabricated cupboards and shelving has created a dilemma for joiners as homeowners can have the items installed with minimum disruption to their home. There is an opportunity for young joiners and painters to collaborate and produce locally prefabricated high demand items based on seasons and cultural trends.

The skills or services needed for this opportunity:

- Joinery, carpentry, tiling, painting
- Creative designers
- Business development or sales professionals

3. Online tutoring – STEM subjects

This sector is a low capital venture for persons who are skilled and/or certified in science, technology, engineering and mathematics to utilize existing web-based meeting portals to tutor students across the region. The venture would require the entrepreneurs to develop lesson plans, a social media brand or following and a method of receiving payment.

Online educational services are one of the top ten high yield businesses globally.

The skills necessary for online tutoring:

- Certification in the subject area (possible course accreditation from the local Accreditation Council)
- Curricula or lesson plan development
- Online meeting portals navigation and/or management
- Brand creation and development

4. Chemical free or reduced beauty products and services

The global trend for beauty treatments is to be able to customize the products or treatment based on the individual's combination of skin or hair attributes. This is particularly trendy in the natural Afro-hair market and extends to the "bearded" movement among men of all ethnicities. The problem such consumers face is the unavailability of the ingredients and the uncertainty of the mixing quantities. Therefore, creating a niche market for customized hair, beard and skin care kits.











The kits are sold online with fulfilment through mail orders supplemented with popup shops to build awareness and brand preferences. The business provides access to YouTube videos on how to combine and apply the products, inclusive of styling tips. A review of these businesses has shown that a few have secured retail beauty stores as customers; to expand product availability of the more popular kits. (http://www.naturallythinking.com/gifts.html)



Figure 4 Product sample of custom mail order hair and beard care products

The required skills to enter this market segment are:

- Hairdressing (N/CVQ)
- Barbering (N/CVO)
- Cosmetology (N/CVQ)
- Hair Care and/or Skin Care Formulation (available online)
- Quality control
- Shipping logistics

5. Domestic and regional order fulfilment facilities

Entrepreneurial and small businesses operating within one Caribbean country such as those under study, are often hamstrung in test marketing and growing the revenue due to lack of knowledge and skills in regional order fulfilment. A great opportunity exists for providers to alleviate this pain for the manufacturers or creators by developing and operating regional order fulfilment centres. The Amazon story began by using the regular post office and then expanded to private couriers such as UPS.

A model for benchmarking exists though <u>www.zazzle.com</u> and <u>www.zulilly.com</u>. In the early stages of the business life, the creators lose valuable time by delivering local orders when their creative ability can be more profitably applied in manufacturing product.

















Figure 5: Extract from Zazzle.com business model

The skills needed to enter this market are:

- Regional postal and shipping logistics
- Regional customs and ports of entry regulations
- Business development (to engender confidence to gain clients)
- Software or app development
- Cyber security

6. Entrepreneurship Event Promotion

One of the key markers of a viable entrepreneurship ecosystem is the hosting of ecosystem events. Match-ups, First Friday Coffees, Biz Brews, investor pitch parties, brainstorming lunches etc. have been successfully employed to build entrepreneurial ecosystems. The University of North Iowa's "A study of entrepreneurial networking events" identified the value gained by attendees as well as the types of networking events that attracted various kinds of participants.

The identified value of entrepreneurship events were:

- Creating spaces for non-critical feedback, coaching, connections and marketing; fewer pitch competitions and more collaborative ambience
- Education targeting specific stage-of-business best practices and solutions
- Access to talent for various business functions and collaboration to bring ideas to market
- Targeting large anchor firm executives to present on their business challenges and the value of solutions to the company

The study also mapped the types of events that attracted certain types of entrepreneurs and can be used to guide the creation of similar events for the region. For example, the 1 Million Cups (1MC) is held in 75 cities and is low cost to the attendees; however, the two (2) early stage businesses that are selected to present can invest in passport status which allows for presenting in various cities. This can be adopted by hosting the sessions in parishes or high traffic urban centres and expanded through franchises in CARICOM countries. Pitching is not permitted and the non-competitive environment adds to the value of the event.











Event	Pre-Startup	Start Up	Existing
1M Cups	↑	↑	1
Shark Tanks	\leftrightarrow	↑	1
Pitch Events (SWTS)	†	1	1
First Friday Coffee	\leftrightarrow	1	1
Biz/Tech Brews & Startup Drinks	1	1	\leftrightarrow
Hackathons & Startup Weekend	1	1	1
Coworks	1	1	1
Jellys	1	1	1
Coliving	1	1	1

Figure 6: University of Iowa Study of Networking Events Matrix of Attraction to Events

The skills needed to be competent in this segment are:

- Event planning and management (N/CVQ or certification)
- Food and beverage operations
- Brand creation and management
- Event promotion
- Negotiation
- Business and persuasive writing

7. Renewable energy (power and products)

The renewable energy industry requires high capitalization due to the landed cost of the panels, batteries and associated parts. The design and installation segment of the market is dominated, globally, by medium to large firms that place little emphasis on the after-installation aspects.

It is this gap in services that presents a need to add value to the industry through cleaning and maintenance of the panels, batteries, turbines and motors. This is particularly the case for the solar panels as the collection efficiency is increased with cleaner panels. In instances where the installation firm locks the customer into the after-installation cleaning, a business model can be developed to provide job placement for certified solar panel maintenance personnel at a lower cost than a certified solar PV installer, employed by the installation firm. Additional opportunities exist in the segment for distribution of solar powered household and commercial appliances/equipment.

The renewable energy industry is a high priority for investors and there are currently several grant and venture capital incentives for start-ups and scale ups in this area.

The skills needed for this business segment are:

- Solar PV Installer
- Solar PV Maintenance











- Wind Turbine Maintenance
- Mechanical Maintenance
- Occupational Health and Safety (Working at high altitudes)
- Maintenance of Solar PV powered appliances
- Electrical Installation

8. Caribbean heritage tourism products

The creative and cultural industries in Barbados, Jamaica and Trinidad & Tobago are formalizing to develop a sub-ecosystem to support the growth of the cultural ventures which do not conform to traditional product lifecycles. For instance, Barbados' Cultural Industries Development Authority provides grant financing to creative/cultural business concepts. The business model is evaluated by the Authority's board and financing is awarded for the most viable projects.

Additional governmental and international funding and support can be attained by strongly emphasizing the pivotal role of culture to the United Nations Sustainable Development Goals.

The skills needed for this business segment are:

- Caribbean heritage studies
- Community tourism
- Event management and planning
- Artiste (talent) management
- Marketing and promotions social media marketing specialty
- Market research (traveller preferences and trends)

9. Agri-business

Food security and the reduction of food importation costs have become priorities for developing countries across the world. The Research Program on Climate Change, Agriculture and Food Security (Nov 24, 2016), promoted that youth farmers are the future of agriculture. The sector is aging and has been one of the last to experience rapid technological advancements. This presents several opportunities for young persons to rejuvenate their country's agricultural sector through developing new techniques and forward integration through agribusinesses.

- Crop production
- Soil testing technician
- Irrigation
- Sorting and packing facilities
- Agro-processing soup mixes, vegetable blends, purees











- Aquaculture
- Livestock rearing incorporating technology
- Tanning (animal skins)
- Vertical crop production











Potential Low Capital Businesses in Emerging Sectors

As most start-ups are challenged with access to financing, recommended modes of entry into the emerging business sectors are proposed.

1.	Recycling	Compo	osting	cod	conut	shells	and d	ther
		mater	ials for	sal	e at fa	armers'	markets	and
		other	expos	to	home/	'small	gardeners	s as
		fertiliz	er/mulc	:h				

2. Innovative versions of traditional small and medium size businesses
Using free web based solutions for coordinating beauty services and retailing after care products.

3. Online tutoring in STEM Small scale tutoring for various exams in Caribbean countries. School vacation camps focused on sports, the arts or academics.

4. Chemical free or reduced beauty products and services

Re-seller for US or UK based producers of customized hair and beard care products. Use social media as a promotional and ordering hub.

5. Domestic and regional order Providing delivery for services small fulfilment facilities producers S0 they can focus on manufacturing; considering the large distances between districts.

6. Entrepreneurship Promotion Event Monthly pop-up limes at established bars or restaurants with a featured act / speaker (upcoming artistes & innovators). See Chic Chats and "Unwined" Events on Facebook.

7. Renewable energy (power and products)

Solar panel cleaning Solar panel repairs

8. Caribbean heritage tourism productsHistorical city, walking tours for short stay visitors and hikes in nature parks for long stay visitors. Promoted online and through hotels.

9. Agri-businessGrowth and retail of medicinal herbs, cacti and other high demand plants
Spice processing or re-packing for retail sale











Skills and Expertise Required for Innovative/High Growth Businesses

The market study assessed the courses offered by technical institutes in each country and where provided, quantified the number of persons certified in those subjects or occupational standards.

Summary of skills required to enter the emerging business sectors, alphabetically listed:

- Agro-processing soup mixes, vegetable blends, purees
- Aquaculture
- Artiste (talent) management
- Auto mechanics
- Barbering (N/CVQ)
- Basic auto-mechanic skills
- Brand creation and management
- Business and persuasive writing
- Business development or sales professionals
- Caribbean heritage
- Certification in the subject area (possible course accreditation from local Accreditation Council)
- Community tourism
- Cosmetology (N/CVQ)
- Creative designers
- Crop production
- Curricula or lesson plan development
- Cyber security
- Electrical Installation
- Event planning and management (N/CVQ or certification)
- Event promotion
- Food and beverage operations
- Hair Care and/or Skin Care Formulation (available online)
- Hairdressing (N/CVQ)
- Irrigation
- Joinery, carpentry, tiling, painters
- Livestock rearing
- Maintenance of Solar PV powered appliances
- Market research (traveller preferences and trends)
- Marketing and promotions social media specialty
- Mechanical Maintenance
- Medium duty equipment operator
- Negotiation











- Occupational Health and Safety (Working at high altitudes)
- Online meeting portals navigation and/or management
- OSHA standards for handling lead based products
- Pump and filtration maintenance
- Quality assurance
- Quality inspector
- Regional customs and ports of entry regulations
- Regional postal and shipping logistics
- Shipping logistics
- Software or app development
- Soil testing technician
- Solar PV Installer
- Solar PV Maintenance
- Sorting and packing facilities (produce)
- Tanning (animal skins)
- Transportation of waste
- Vertical crop production
- Wind Turbine Maintenance











Skills and Expertise Present in the Caribbean Ecosystem

Based on interviews with the Heart/TRUST and secondary research with the Trinidad and Tobago National Training Agency as well as the TVET Council, the registry of occupational competencies for which certifications have been awarded are matrixed below.

The industries which are supported by the National and Caribbean Vocational Qualifications are:

ADMINISTRATIVE AND BUSINESS PROCESSES	Barbados	Jamaica	Trinidad
Accounting Services		\checkmark	
Administrative Professional		\checkmark	\checkmark
Banking Processing Operations			\checkmark
Bursary		\checkmark	
Business Administration		\checkmark	
Business Services		\checkmark	
Call Centre		\checkmark	\checkmark
Customer Engagement Operations		\checkmark	
Customer Service	✓	\checkmark	\checkmark
Data Operations			\checkmark
DEVELOPING A NEW OR AN EXISTING BUSINESS ENTERPRISE	✓	\checkmark	\checkmark
Financial Services		\checkmark	
Library and Information Services - {Library Assistant/Clerk}			\checkmark
Marketing Promotions and Sales	\checkmark	\checkmark	\checkmark
Mortgage Processing		\checkmark	
Paralegal Services		\checkmark	\checkmark
Payroll Administration			\checkmark
Payroll Clerk			\checkmark
Real Estate Services			\checkmark
RECEPTION			\checkmark
Records and Information Management		\checkmark	
Records Management		\checkmark	
Retail Operations		\checkmark	
Teller			✓
HORTICULTURE	Barbados	Jamaica	Trinidad
Amenity Horticulture - Landscaping	\checkmark		\checkmark
Amenity Horticulture - Nursery	✓		\checkmark



Horticulture



Amenity Horticulture - Sports Turf Cricket Pitch and Field Maintenance







Floral Arrangement			\checkmark
Range Management (Ecology of natural parks)			\checkmark
Soil Testing			✓
AGRICULTURE	Barbados	Jamaica	Trinidad
Agricultural Equipment Operations		√	
Agriculture	✓	√	
Agro Food Processing	✓	✓	✓
Bamboo Charcoal Processing		\checkmark	
Bamboo Harvesting & Pre-processing		✓	
Bamboo Ply Technology		\checkmark	
Bamboo Shoot Production		\checkmark	
Crop Production			\checkmark
General Agriculture	✓	\checkmark	
Greenhouse Technology		\checkmark	
Irrigation		✓	
Organic Agriculture			✓
Sustainable Sea moss Production			✓
Tractor Operation and Maintenance	✓		✓
Tree Crop Farming			✓
FISHERIES AND LIVESTOCK	Barbados	Jamaica	Trinidad
	Barbados	Jamaica	Trinidad ✓
FISHERIES AND LIVESTOCK Apiculture (Beekeeping) Butchery	Barbados	Jamaica ✓	
Apiculture (Beekeeping) Butchery	Barbados √	Jamaica ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations		Jamaica ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture)		Jamaica ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production		Jamaica ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing		√	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress		Jamaica ✓ ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling		√	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations		√	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations)		√	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations		√	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing		✓ ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION	✓	✓ ✓	
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION Air-Conditioning & Refrigeration Maintenance	√ ✓ Barbados	√ √ Jamaica	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION	√ ✓ Barbados	√ √ Jamaica √	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION Air-Conditioning & Refrigeration Maintenance	√ ✓ Barbados	√ √ Jamaica √	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION Air-Conditioning & Refrigeration Maintenance Refrigeration and Air-Conditioning (Commercial)	√ ✓ Barbados ✓	√ √ √ Jamaica √ √	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Apiculture (Beekeeping) Butchery Dairy Farming Operations Food Fish Production (Aquaculture) Inland Aquaculture Operations - Tilapia Production Livestock Rearing Livestock Slaughter Dress Meat and Seafood Handling Ornamental Aquaculture Operations Poultry Processing (Plant Operations) Rabbit Rearing REFRIGERATION Air-Conditioning & Refrigeration Maintenance Refrigeration and Air-Conditioning (Commercial)	√ ✓ Barbados ✓	√ √ √ Jamaica √ √	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓











Automotive Repairs Maintenance	✓	\checkmark	
Mechanical Maintenance	✓		
Motor Rewinding			✓
Motor Vehicle Air Conditioning Systems	✓		\checkmark
Motor Vehicle Body Repairs (Cars and light trucks)	✓		✓
Motor Vehicle Care and Conditioning			✓
Motor Vehicle Chassis Systems			\checkmark
Motor Vehicle Engine Systems			\checkmark
Motor Vehicle Repairs (Cars and light trucks)	\checkmark	\checkmark	\checkmark
Motor Vehicle Steering and Suspension Systems		\checkmark	
Motor Vehicle Transmission		\checkmark	\checkmark
Outboard Boat Engine Repair	✓		✓
Small Engine Repairs	✓		✓

BEAUTY	Barbados	Jamaica	Trinidad
Aesthetics	✓		
Beauty Therapy	✓		
Hairdressing	✓		
Image Consulting and Fashion Styling		\checkmark	
Massage Therapy	✓		
Nail Technology	✓		
Salon Management			✓
Trichology		✓	

TOURISM AND ATTRACTIONS	Barbados	Jamaica	Trinidad
Banqueting		\checkmark	
Beverage Services	\checkmark	\checkmark	\checkmark
Commercial Diving (Air)			\checkmark
Commercial Food Services	\checkmark	\checkmark	\checkmark
Food Preparation, Food Service & Beverage Service - Chef de Parte, Cookery, Pastry Commis, Sous Chef, Stewarding, Pastry Chef)	✓	✓	✓
Front Office - (Uniform Services - Bellman)	✓		✓
Hotel Accounting		\checkmark	
Hotel Property Maintenance		\checkmark	
Housekeeping	\checkmark	\checkmark	
Housekeeping - (Houseman)	\checkmark		\checkmark
Housekeeping - (Laundry Attendant)	\checkmark		\checkmark
Boarding Clerk Services			\checkmark
Entertainment Coordinating		\checkmark	
Events Planning and Management	\checkmark	\checkmark	\checkmark
Events Management Services (Balloon Craft)			✓











River Rafting	✓
Sports & Recreation Administration	✓
Travel and Tours Operations	✓
Water Sports Equipment & Maintenance	✓
Water Sports Operations	✓
Wellness Programme Planning	✓

CONSTRUCTION RELATED	Barbados	Jamaica	Trinidad
Backhoe and Loader Operations	✓		✓
Brick/Block-laying, Rendering	✓		✓
Building & Construction - Construction Site Management			✓
Building & Construction - Construction Site Supervision	✓		✓
Building Construction Drafting			✓
Building Maintenance		\checkmark	
Carpentry & Joinery	✓	✓	✓
Civil Construction		✓	✓
Concreting	✓		✓
Concreting/Steel-fixing	✓		✓
Construction Drafting		✓	
Construction Inspection		\checkmark	
Draughting and Construction Technician Work			✓
Floor Covering & Finishing - Carpet, Resilients, Timber	✓		✓
Furniture Finishing	✓		✓
Furniture/Cabinet Making	✓	✓	✓
General Construction			✓
Glass & Glazing			✓
Heavy Construction Equipment	✓	\checkmark	
Masonry & Steelfixing	✓	\checkmark	
Metal Work Engineering		\checkmark	
Painting & Decoration		✓	✓
Pipefitting		\checkmark	✓
Plumbing	\checkmark	\checkmark	✓
Properties and Facilities Maintenance Management (Building			
Maintenance)			✓
Property Development Management - Construction Project			
Management			✓
Restoration Trades		\checkmark	
Road & Highway Construction & Repairs		\checkmark	
Road Maintenance			✓
Scaffolding		\checkmark	
Steelfixing	✓	\checkmark	✓











Stonework Masonry	✓	✓	✓
Tiling-Masonry	\checkmark	\checkmark	\checkmark
Welding & Fabrication	✓	✓	✓
CREATIVE	Barbados	Jamaica	Trinidad
Art and Craft Production			\checkmark
Bamboo Weaving			\checkmark
Ceramic Production			✓
Clothing Production & Technology	✓	✓	
Design & Construction of Lingerie & Sleepwear			✓
Drapery Making		✓	✓
Fabric Design			✓
Fashion Designing		✓	
Garment Construction & Manufacturing	✓	✓	✓
Home Furnishings Production (Fabric)			✓
Interior Decorating		✓	\checkmark
Jewellery Making - Seeds, precious metals		✓	✓
Leather Goods Manufacturing			✓
Masquerade Design and Production			\checkmark
Papier Mache Craft			\checkmark
Pattern Making		\checkmark	
Photography			
Picture Framing			
Screen Printing			\checkmark
Soft Furnishings			\checkmark
Tailoring			
Upholstery		✓	✓
METAL WORK	Barbados	Jamaica	Trinidad
Light Metal Fabrication			✓
Metal Work Engineering			✓
ALLIED HEALTH SERVICES	Barbados	Jamaica	Trinidad
CARE OF THE OLDER ADULT	✓		✓
Community Health Primary Care (Community Health Aide)		✓	
Early Childhood Education Care & Development	✓	✓	✓
Early Childhood Special Needs	· ✓	✓	✓
Geriatric Care	· ✓	√	√
Health Care Assistance	· ✓	✓	✓
Health Screening			✓
Nanny Services		✓	











Nursery Care Services Peri-Operative Surgical Technology (POST) Pharmacy Technician Phlebotomy Pre-Hospital Care (Emergency Medical Technician) Pre-Hospital Care (Emergency Medical Technician) Pre-Hospital Care (Paramedic) Pre-Hospital Care (Paramedic)	✓	✓ ✓	
INFORMATION TECHNOLOGY Basic Chaining (IT) Computer Service & Support Customer Premises Telephone Installer/Repairer Digital Animation Domestic/Consumer Electronics Information Technology Network Engineering Web Programming	Barbados	Jamaica ✓ ✓ ✓ ✓	Trinidad ✓
POWER AND ELECTRONICS Electrical Installation Electrical/Electronic Technology Fluid Power Equipment Maintenance Industrial Electronic Maintenance Industrial Electronics Power Generation (Stand-by) Power Line Construction and Maintenance (Distribution) Renewable Energy Small Appliance Repairs	Barbados √ ✓ ✓	Jamaica ✓ ✓	Trinidad
SAFETY AND SECURITY Crime Scene Investigations Fire Fighting Industrial Security Operations Lifeguard Occupational Safety and Health Policing and Law Enforcement (Cybercrime)	Barbados √	Jamaica ✓	Trinidad ✓











LOGISTICS AND OPERATIONS	Barbados	Jamaica	Trinidad
Custom Services			
Extrusion Operations			√
Extrusion Operations (Plastics) Forklift Operations	,	,	√
Freight Forwarding	✓	√ √	
Logistics Management		∨ ✓	
Marine Terminal Operations		•	✓
Mechanical Maintenance		✓	•
Plant Maintenance (Mechanical)		↓	
Process Plant Operations		•	1
Rigging		✓	·
Stevedoring Operations	✓	· ✓	· /
Urban Pest Management	V	· ✓	•
Warehousing Operations	✓	· ✓	
warehousing operations	•	•	
DESIGN, CULTURAL AND ENTERTAINMENT	Barbados	Jamaica	Trinidad
Audio & Visual Editing Operations			\checkmark
Camera Operations			\checkmark
Community Cultural Performance			✓
Community Hosting Services			\checkmark
Community Tour Guiding			\checkmark
Community Tourism			\checkmark
Lighting Operations			\checkmark
Lithographic Printing (Pre-press)	✓	\checkmark	
Live Sound Engineering			\checkmark
Multimedia Production		\checkmark	
Music Production			
Musical Performance			
Printing & Graphic Arts		\checkmark	
Printing and Graphic Arts -Computer Graphic Arts	\checkmark		✓
PRODUCTION FOR TELEVISION & FILM (NON-TECHNICAL)			\checkmark
Radio Broadcasting			\checkmark
Recording Engineering			\checkmark
Steel Pan Manufacturing			\checkmark
Steel Pan Tuning			✓
Steel Pan Tuning			\checkmark
Technical Assistance in TV and Video Production			\checkmark
Using Computer Aided Design Software			











WASTE WATER OPERATIONS (RECYCLING/RECLAMATION) Asset Maintenance (Wastewater) Asset Maintenance (Water) Wastewater Collection System Operations Wastewater Process Plant Operations Water Distribution System Operations Water Process Plant Operations Quality Monitoring (Water and Wastewater) Hydrological Monitoring and Data Processing	Barbados	Jamaica	Trinidad ✓ ✓ ✓ ✓ ✓ ✓ ✓
SOCIAL WORK	Barbados	Jamaica	Trinidad
Youth Development Work			✓
INSTRUCTION	Barbados	Jamaica	Trinidad
COACHING AND INSTRUCTING IN SPORTS			\checkmark
Defensive Driving Instruction (Heavy/Extra Heavy Vehicle)	\checkmark		\checkmark
Defensive Driving Instruction (Heavy/Extra Heavy Vehicle) Defensive Driving Instruction (Light Motor Vehicle)	✓ ✓		✓ ✓
			✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle)	✓		✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus)	✓		✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services	✓		✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle)	✓		✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle) Learner Driving Instruction (Motorcycle)	✓		✓ ✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle) Learner Driving Instruction (Motorcycle) Nari Exams	✓		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle) Learner Driving Instruction (Motorcycle) Nari Exams Parenting Facilitation	✓		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle) Learner Driving Instruction (Motorcycle) Nari Exams Parenting Facilitation Professional Awards Certification	✓		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Defensive Driving Instruction (Light Motor Vehicle) Defensive Driving Instruction (Omnibus) Domestic Housekeeping Services Learner Driving Instruction (Light Motor Vehicle) Learner Driving Instruction (Motorcycle) Nari Exams Parenting Facilitation Professional Awards Certification Training and Assessment	✓	√	✓ ✓ ✓ ✓











Skills and Expertise Gaps of the Caribbean Ecosystem

The market study identified nine (9) business segments that were prime for entrepreneurial ventures and the skills required to develop those ventures. The business segments are:

- 1. Recycling lead acid batteries and motor oil,
- 2. Innovative versions of traditional small and medium size businesses
- 3. Online tutoring in STEM subjects
- 4. Chemical free or reduced beauty products and services
- 5. Domestic and regional order fulfilment facilities
- 6. Entrepreneurship Event Promotion
- 7. Renewable energy (power and products)
- 8. Caribbean heritage tourism products
- 9. Agri-business

The market study also reviewed the skills currently being certified in each county either through the N/CVQ system or global certifications from the established training providers. The registry of skills which Caribbean citizens have access to is enormous. The challenge appears to be a lack of awareness of what is available domestically, regionally or online. The training providers were unwilling to share the statistics of the number of persons certified over the last two years.

In comparing the skills required for the prime or high growth business segments for entrepreneurial development, it was observed that the skills are available within the three countries being studied. By focusing on the Caribbean Vocational Qualifications, any CARICOM entrepreneur that wishes to explore the prime business segments can be trained in the occupational area at the same standard as persons from Barbados, Jamaica and Trinidad – which provides for mobility of the skill sets.

In assessing the individual country reviews which were derived from interviews of key stakeholders in each country, it is observed that awareness of the non-information technology entrepreneurial segments was low. There was a tendency of the stakeholders to posit "Caribbean Silicon Valley". It should be noted that Isenberg in his Harvard Business Review research strongly advised against trying to create a Silicon Valley when developing a successful entrepreneurship ecosystem. In essence, the Caribbean opportunities are wide and the skilled human capital is equally vast.

The stakeholders' outlook on the segments that could be explored by entrepreneurs (see table below) was corresponded to the global high growth segments at the broad level. In order to align skills and training, it would necessitate ideation forums where opportunities and linkages can be clarified.











Industries	Barbados	Jamaica	Trinidad
Agriculture	\checkmark	✓	\checkmark
IT	✓	\checkmark	\checkmark
Creative industries	✓		✓
Renewable energy	\checkmark	✓	
Medical industry	✓		
Chocolates	✓		
Film & Video	✓	✓	
STEM	✓		
Animation	✓		\checkmark
Robotics	✓	✓	\checkmark
E commerce	✓		\checkmark
Recycling		✓	✓
Tourism			✓

Figure 7 Regional Stakeholders' outlook on potential sectors for Caribbean entrepreneurs

The real skills that are absent in the entrepreneurial ecosystem relate to 1) strategic planning and execution, 2) identifying opportunities from the "societal voids" to create ventures to fill those voids and 3) understanding of value chains or processes.

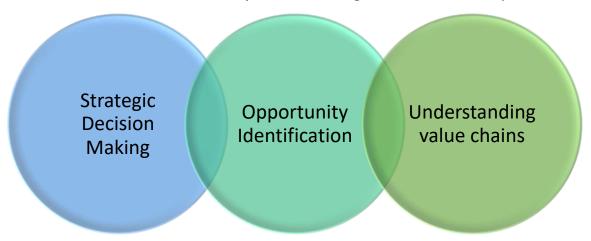


Figure 8 Skills Gap in Caribbean Entrepreneurship Ecosystem

The training and skilling up should be implemented on two levels – i) for the entrepreneurs and ii) for the services professionals and support organizations. The entrepreneurs' level of training needs to equip them to map the solutions to opportunities and determine the competitive costing model. Whereas, the professionals and support organizations' level of training, should equip them to deliver support at the technical level. Too often the training for entrepreneurs seeks to transform them into bookkeepers and operations specialist as opposed to sensitizing them to the need to contract those activities from the ecosystem. Further, the training delivery can be conducted by the subject matter experts within the country; thereby increasing the self-sustainability of the entrepreneurial ecosystem.











Barbados Entrepreneurial Ecosystem Review

The ecosystem review was conducted through structured interviews with key stakeholders in the country under review.

1. Name of the agency

Seventeen (17) companies were interviewed as part of this data collection process, these include:

Table 2 List of organisations that were interviewed

1. Barbados Agriculture and Development Marketing Corporation (BADMC)	2. Barbados Cultural Industries Development Authority (BCIDA)
3. Barbados Coalition of Service Industries (BCSI)	4. BIMAP
5. Barbados Vocational Training Board (BVTB)	Enterprise Growth Fund Limited (EGFL)
7. Barbados Chamber of Commerce and Industry (BCCI)	8. Fund Access
9. TEN	10.Central Bank of Barbados- Credit Guarantee Scheme
11.Barbados Private Sector Trade team (BPSTT)	12.Walbrent College
13.Passiflora- Andromeda Gardens	14.IICA- Inter- American Institute for Cooperation on Agriculture
15.Verdun House	16.Cherry Tree Trust Charity
17.Barbados Manufacturing Association (BMA)	

2. What is the nature of your input to youth entrepreneurship?

With regards to input into entrepreneurship, approximately 70% of the organisations interviewed provided business support services. The 2nd highest area of input is in the area of Policy development. Input into regulatory was the area with the least amount of input from the agencies interviewed.











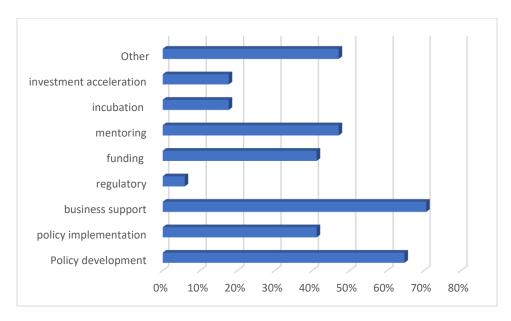


Figure 9- Nature of input into youth entrepreneurship











3. Which industry(s) or other organizations does your agency interact with?

94% (16) of respondents identified that they interacted with other ministries/ agencies. A wide range of industries and agencies were mentioned, however, the tourism industry experienced the most interactions. The below table highlights the industries and organisations highlighted by the respondents grouped according to organisational type.

Table 3- Organisation with which respondents interacted

Ministries		Agencies		Industries		Schools		Other	
	4		_		-				-
Government	1	Accreditation Council	1	Agro processing	1	BCC	1	Embassies	1
Ministry of Agriculture	3	BAMC	1	Architects	1	BIMAP	1	Social Partnership	1
Ministry of Industry, International Business, Commerce & Small Business	3	BAS	2	Auto mechanics	1	Primary Schools	1	Walkers Researve	1
Ministry of Finance & Economic Affairs	1	BCCI	1	Auto-tronics	1	Secondary Schools	1	Authorised Dealers	1
Ministry of Labour- HRD Fund	1	BCSI	1	Barbados natural fibers network	1			Pandia Seeds	1
Ministry of Culture, Sports & Youth	1	BIDC	2	Caribbean Chemicals	1				
		BMA	2	Construction Company	1				
		BPSTT	2	Creative industries	1				
		BYBT	3	Engineers	1				
		Caribbean export	2	Health and wellness	1				
		CDB	1	ICT	1				
		CIDA	3	Management	1				
		EU	1	Renewable energy	2				
		FAO	1	Tourism	6				











Ministries	Agencies	Industries	Schools	Other
	Homeless Society	1 Traditional areas plumbing &electrical	S- 1	
	IDB	2		
	IICA	1		
	Intimate Hotels	1		
	Investment banks	1		
	NCF	1		
	SBA	1		
	The Prison	1		
	UWI Seed	1		











4. Has your agency collaborated with any other ministries/agencies to create a better enabling environment for entrepreneurs? If yes, provide name and initiatives.

94% of respondents collaborated with other agencies and ministries on projects that create an enabling environment.

Table 4 Collaborative projects across Barbadian entrepreneurship support agencies

Company	Collaborative Projects
BADMC	 School Garden Initiative-Ministry of Agriculture Impact program & Life program; Livestock Rearing, Aquaculture- TVET & IICA
BCIDA	 BCSI- National Services Week- did an assessment of the audio-visual sector BIDC- participation in program planning and conducted presentations (music incubator) BYBT- participated in the programming YES- assisted in the delivery of some of their programmes and spoke to some of their clients BTMI- UK and NY marketing promotion opportunities for Barbadian cultural products
BCSI	 MSME Policy World Bank- MHUB project- educate tech entrepreneurs on how to pitch to investors. One off initiatives with CIDA and NCF was focused on capacity building for cultural entrepreneurs Skills for the future- worked in collaboration with PBHC- capacity building for complementary and alternative therapy
BIMAP	 Ministry of Commerce and Industry - framework for entrepreneurs BIDC- training Ministry of Labour- training
BVTB	 IDB- training in furniture making IDB & MQI- auto-tronics, auto mechanics- Requests from Gov't Ministries to develop programmes, for e.g. Ministry of Youth Affairs and Culture- (provide males them with training in bob cats and skid steers) Banks, Bridgetown Port, UCAL- In plant training in specific areas (set up a programme to meet specific needs)
Enterprise Growth Fund	 Global entrepreneurship week- BYBT Renewable energy and energy efficiency- Division of energy (purpose was to encourage Barbadian businesses to adopt energy efficient technologies, EGFL managed the smart fund)











Company	Collaborative Projects
BCCI	1. Ministry of Energy- Green economy initiative (ongoing since
	2008)
	2. Ministry of Commerce- Trade Facilitation
	3. Ministry of Agriculture- Food security particularly related to disasters
	4. Department of Emergency Management- Risk reduction and
	business continuity
Fund Access	1. Ministry of Commerce- Small Business Development Center
	2. Ministry of Agriculture- Youth agri-preneurship program
	3. BCIDA- Training and Pitch
TEN	4. YES- assisted in the delivery of some of their programmes
	and spoke to some of their clients
Central Bank of	5. Ministry of Labour – Business Acceleration and Support1. VAT Receivables Liquidity Facility
Barbados- Credit	2. Trade Receivables Liquidity Facility
Guarantee Scheme	3. Enhanced Credit Guarantee Fund
Barbados Private	The BPSTT participates bi-annually in meetings of the
Sector Trade Team	CARICOM Council
(BPSTT)	2. for Trade and Economic Development (COTED) in
	Georgetown Guyana.
	3. Empowering Women Through Trade and Entrepreneurship
	Opportunities Workshop 4. The Trade Team collaborated with the Barbados Small
	Business
	5. Association to host a workshop focused on women in
	entrepreneurship.
	6. CARICOM-Cuba Forum: identified issues affecting
	companies 7. trying to get into Cuba and built contact.
	8. Brexit Forum"
Walbrent College-	1. Her Majesty's Prison Dodds- The prison initiative- helping
Grenville Phillips	the prisoners to develop businesses
IICA	1. Ministry of Agriculture & TVET Council - Youth Farm
	program, Impact project
Barbados	Lobby government about creating avenue for small
Manufacturing	business to become suppliers to the relevant ministries.
Association	

5. Outlook on entrepreneurship.

- a. What is your agency's outlook on the current state of the entrepreneurship sector?
- At least **40%** of respondents indicated that improvement was needed in the sector. Respondents indicated that more *training and support* needed to be











provided to entrepreneurs. There was also a need for *cooperation* among industries. Particularly, "too much duplication" among industries was highlighted as another issue.

- Finance was identified as a major challenge by **24%** of respondents. Access to financing and more innovative funding models were suggested.
- **29%** of respondents believed that the Barbados entrepreneurial environment was not strictly entrepreneurial. Some of the areas they highlighted in support of this belief was:
 - Entrepreneurs needed to understand that entrepreneurship lended to the sustainability of the business and not just of themselves
 - o Entrepreneurs needed to be more risky and adventurous
 - They needed to have more creative ideas
 - Barbados does not have a strictly scientific entrepreneurship profile instead we have the profile for small businesses.
- **24%** of respondents believed that the current environment was one that encouraged entrepreneurship and that it could be seen in the increased numbers of young people getting into entrepreneurship.

b. What is your agency's outlook on the entrepreneurship sector's capacity to grow domestically?

47% of respondents believed that there is potential for growth. **29%** of respondents stated that growth would only be actualized if the necessary supporting structures were in place. Some of the supporting structures that were highlighted were:

- Access to finances
- Support for the more innovative types of businesses such as coding, software development, ecommerce, mobile learning
- Ensuring that those who needed help actually received it
- Relevant policy framework and proper implementation of such framework
- Strategic partnerships

c. What is your agency's outlook on the entrepreneurship sector's capacity to attain global competitiveness in the next 5 years?

47% of respondents believed that Barbados could attain competitiveness in five years, **11%** did not agree and another **11%** did not know. Some of the respondents thought competitiveness was possible in certain industries and highlighted *cultural industries*, *IT*, *manufacturing non-traditional products*. As in the previous question many respondents identified that global competitiveness could occur with the right environment which included the below:











Figure 10- environmental factors that would encourage global competitiveness



6. Engagement of local professionals

a. How does your agency engage the services of local professionals to assist in marketing your objectives or mandate?

70% of respondents used local professionals in some capacity although in many cases it was to help execute activities rather than to market their objectives or mandate.

The below table outlines the initiatives that respondents believed to be most successful.

Table 5- Successful collaborations between Barbadian respondents and local professionals

Company	Successful Initiatives
BADMC	Engaged a local geologist to do some testing in order to drill a well in Spring Hall St. Lucy.
BCIDA	The cultural industries development fund which has provided grants to approximately 10 people and more proposals are under evaluation
BIMAP	Miguel Newton, Printex Printery, has been contracted over several years, initially in the capacity of printing certificates and has grown to full event planning and management.











Company	Successful Initiatives
BVTB	Cosmetology program- A cosmetology student placed 2nd at one of the World Skills competitions
Enterprise Growth Fund	Energy Smart Fund- provided loans to convert businesses to upgrading to energy efficient technologies with a pre- requisite of an energy audit report. These audits and reports were conducted by local professionals Oversight for Intimate Hotels Energy Efficiency where several small hotels were able to access funding to upgrade their properties and local architects, designers, constructions
BCCI	companies were contracted. Revitalization of Bridgetown project- Urban Planning with BSBA & UWI
Fund Access	Manufacturing sector – Engages a consultant to assist clients with processes, marketing, improvements in conjunction with the BIDC and Caribbean Export
IICA	Youth farm- trained 100 youth between 15 and 18 from 2012-2016. Engaged local professional as training facilitators and mentors.

7. <u>Does your agency facilitate the awareness of other entrepreneurship stakeholders which can assist the entrepreneur in their chosen industry?</u>

82% of respondents said that they facilitated the awareness of other entrepreneurship stakeholders. The organisation which was shared most by the respondents was the BIDC. The below figure identifies all the agencies that the respondents recommended to their entrepreneurs.

Figure 11 Agencies that were highlighted by the Barbados respondents

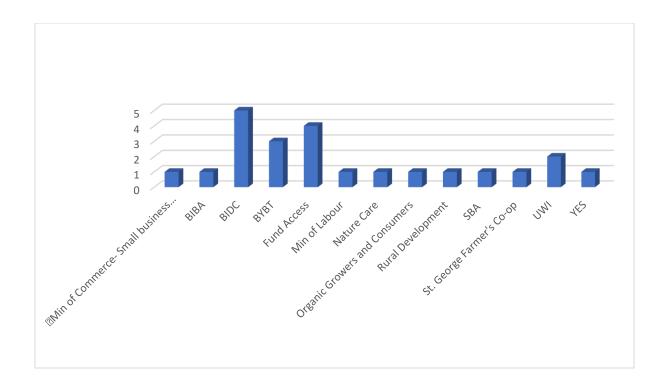












8. What funding or facilitation of the access to funding does your agency provide to assist in startup or growth of entrepreneurial ventures?

Ten (10) companies provide funding or facilitate access to funding; five (5) of these companies provided direct access to funding and are listing below:

Table 6- Companies and the funding opportunities they provide

Respondent	Funding opportunities			
BCIDA	 Cultural industries development fund 			
EGFL	 Small Hotels Investment Fund Tourism Loan Fund Innovation Fund Industrial, Investment & Employment Fund Energy Smart Fund Agricultural Development Fund 			
Fund Access	- Business Boost- \$1000- \$25,000			
CBB- Credit Guarantee Scheme	 Credit Guarantee Scheme for Businesses Enhanced Credit Guarantee Fund 			
Cherry Tree Trust Charity	 Seed funding, and we have a MOU with Scotiabank to send persons with business plans that they wouldn't fund but that we might consider funding. 			











The other five respondents either pointed their clients in the direction of funding or partnered with others to prepare funding proposals.

9. <u>Do you think that the entrepreneurs who started businesses in the last five (5) years are adequately qualified or experienced to meet the current and future needs for economic development?</u>

All the respondents answered this question in the context of the entrepreneurs with whom they interact. 53% of the respondents thought that the entrepreneurs who started businesses were adequately qualified and experienced.

Those who did not believe that the entrepreneurs were adequately qualified and experienced gave the following reasons:

Table 7- Reasons why entrepreneurs are not considered qualified and experienced to meet economic development needs

вутв	"Much of the entrepreneurship we have here is micro. Many that I come across are interested in entrepreneurship but not properly trained. There are a set of skills that are needed to go along with the technical skills. Many have good idea but are under resourced."
Enterprise Growth Fund	"People who come in requesting funding have not done enough research to demonstrate that what they are looking to do is viable, they don't necessarily demonstrate that it is more than a fad and can be sustained on the long term" "Their financial projections and historical financial information are weak"
Fund Access	"In the absence of formal research there is a trend on developing self and business which puts them in a better position to expand domestically, regionally and internationally"
TEN	"Most entrepreneurs that we encounter are entrepreneurs by default, they end there because they lost job or are underemployed and therefore are doing a side hustle. But they don't have the skillset to develop and grow the businesses because the system is created to design a job for an individual and not for entrepreneurship. They are not developing business with teams so that they can have impact. They are not incapable but it requires a mental shift."
CBB- Credit Guarantee Scheme	"Many are qualified and skilled while some are not. However, with access to quality training and mentorship programmes on island, there is adequate capacity to stimulate economic development."











Passiflora- Andromeda Gardens	"But maybe it has to do with the training, in that the training we provide is technical and does not look at how to run a business. Also found that entrepreneurs are just focused on themselves and their businesses rather than being focused on growing the business."
Cherry Tree Trust Charity	"Many people start their own business as a lifestyle business and many don't see the need to learn more that the basics of buying and selling for a price as necessary for business success. We however require a full business plan with financial to start our engagement."

10. What emerging industries are yet to be fully explored by entrepreneurs?

IT and Renewable energy were the industries most highlighted by entrepreneurs. Within IT, gaming software development, digital marketing and app development were the emerging areas highlighted. One respondent indicated that rather than focusing on emerging industries, entrepreneurs should innovate within the areas in which they are already operating.

Table 8- Emerging industries that should be explored by entrepreneurs

Industries	No. of respondents selected	Suggested Segments
Agriculture	3	Hydroponics Aquaculture Horticulture Honey Production Medicinal agriculture
IT	5	Gaming Software development Digital marketing App Development
Creative industries	3	
Renewable energy	5	
Medical industry	1	
Chocolates	1	
Film & Video	2	
STEM	1	
Animation	1	
Robotics	1	
E commerce	1	

11. <u>Identify the gaps between current capacity of the youth skills and the emerging industries?</u>











There were a number of gaps identified by the respondents. *Training* was highlighted most often followed by *funding*. With regards to training, a number of respondents identified that enough training was already available in Barbados, however, others noted that specialized areas of training was missing.

Table 9- Gaps in youth skills

Gap	# of respondents
Training	6
Infrastructure	2
Infrastructure	2
Knowledge	1
Experience	1
Presentation Skills	1
Not Recognizing Opportunities	1
Funding	4
Mentorship	1
Skills	2
Research	1
Marketing	1











11. <u>Identify any new structures or indicators that will support an enabling environment to increase entrepreneurship in the next 5 years</u>

A number of structures were identified to support an increase in entrepreneurship. There were also number of re occurring themes. The results are seen below.

Table 10 New structures that would enable entrepreneurship for next 5 years (Barbados)

Education	Financing	Technology	Business Support	Policy	Other
4	3	3	8	2	8
- Training at levels outside of that offered at BCC and SJPP	- less risk averse types of financing	Exposure to advances in technology	Marketing specific to entrepreneurs	Policy framework	Insurance for farmers
- Educational system that encourages entrepreneurship	- Angel investor networks	Hunger for innovation	Accounting structures for entrepreneurs	Innovation Policy and implementation strategy	Wean people away from government dependence
- CXC/ CAPE qualification on entrepreneurship	- Incentive based support of entrepreneurship to attract investors	Increased knowledge of technical skills	Legal structures for entrepreneurs		Implementation rather than talking
- School curriculum should include entrepreneurship			Best practices		Become less risk averse











Education	Financing	Technology	Business Support	Policy	Other
			National innovation scheme		End corruption and increase tendering for projects
			Entrepreneurship hub		Development of products whose IP can be leased to entrepreneurs
			One stop for everything on entrepreneurship		already have what we need, but must use it efficiently
			Mentorship		Mastering a second language











Jamaica Entrepreneurial Ecosystem Review

1. Name of the agency

Nineteen (19) organisations were targeted in the market study with ten (10) companies accepting our request to be interviewed as several of the relevant personnel were unavailable for various reasons. The interviewed organisations were:

Table 11- List of organisations that were interviewed

 Branson Center for Entrepreneurship 	2. Council of Community Colleges of Jamaica (CCCJ)
3. HEART Trust/NTA	4. Jamaica Business Development Corporation (JBDC)
5. Jamaica Chamber of Commerce (JCC)	6. MSME Alliance
7. National College of Management & Business (NCMB)	8. National Development Foundation of Jamaica (NDFJ)
9. Small Business Association of Jamaica (SBAJ)	10.Young Entrepreneurs Association of Jamaica (YEA)

2. What is the nature of your input to youth entrepreneurship?

With regards to input into entrepreneurship, approximately **40%** of the organisations interviewed provided mentorship. The 2^{nd} highest area of input is that of advocacy. Input into policy implementation, lobbying and competency-based training were the areas with the least amount of input being **10%** of the agencies interviewed. The area of training and professional development which was slightly higher at **20%**.











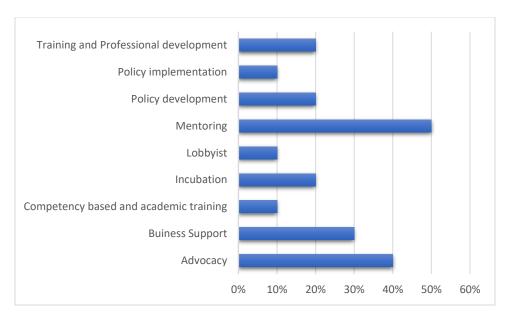


Figure 12- Nature of input into youth entrepreneurship

3. Which industry(s) or other organizations does your agency interact with?

100% of respondents identified that they interacted with other ministries/ agencies. A wide range of agencies were mentioned, however, the Ministry of Industry, Commerce, Agriculture & Fisheries experienced the most interactions, followed by the Ministry of Education. The below table highlights the organisations highlighted by the respondents grouped according to organisational type. What is reflected is that there is a much higher rate of interaction with government agencies, of **67%** compared to the NGOs with **28%**.

Table 12- Organisation with which respondents interacted

Ministries			Agencies		Industri es		Other	
Cabinet Office		1	MSME Alliance	4	Jamaica Public Service	1	British High Commissio n	1
Development Jamaica	Bank of	3	Private Sector Organization of Jamaica	1			US Embassy	1
Economic Oversight (Ministry of Fi	Programme Committee nance)	1	Small Business Association of Jamaica	4				











Ministries		Agencies		Industri es	Other
HEART Trust/NTA	8	Women's Entrepreneurship Network	2		
Jamaica Business Development Centre	5	Youth Entrepreneurship Association	5		
JAMPRO	2	Jamaica Manufactures Association	2		
Ministry of Culture, Gender, Entertainment & Sport	6	Jamaica Exporter's Association	1		
Ministry of Education (Colleges of Jamaica)	3				
Ministry of Industry, Commerce, Agriculture, and Fisheries	1 0				
Ministry of Labour Ministry of Tourism					
National Housing Trust	1				
Planning Institute of Jamaica UWI	1				

4. <u>Has your agency collaborated with any other ministries/agencies to create a better enabling environment for entrepreneurs? If yes, provide name and initiatives?</u>

100% of respondents collaborated with other agencies and ministries on projects that create an enabling environment.

Table 13 Collaborative projects across Barbadian entrepreneurship support agencies

Company	Collaborative Projects
1. Branson Center for Entrepreneurship	Partnering with Hub Co-working to provide a space for work, idea and networking.
2. Jamaica Business Development Corporation (JBDC)	MICAF agricultural base programme, straw, wood, clay for the spa industry, mining of semi-precious stones, cultural industries.
3. MSME Alliance	Have a MOU with the National Development Foundation for training and support.











Committee member of the UWI entrepreneurship group to support research in MSME matters

4. National College of Management & Business (NCMB)

Dialogue with government to sponsor at risk youth in their community to be trained in life skills that will help them start their own business.

5. National Development Foundation of Jamaica (NDFJ)

The National Development Foundation of Jamaica (NDFJ) and the MSME Alliance have signed a Partnership Agreement to provide training and other support services to members of the MSME sector for a period of three years.

6. Small Business Association of Jamaica (SBAJ)

They lobby government to include micro and small business in the civil and other projects and to provide and environment for entrepreneurship growth as we cannot compete directly with the large players in the country.

7. Young Entrepreneurs
Association of Jamaica
(YEA)

Discussion with the government on SME policy reform

- 5. Outlook on entrepreneurship.
 - a. What is your agency's outlook on the current state of the entrepreneurship sector?
- The respondents indicated that improvement was needed in the sector. Respondents indicated that there are a number of barriers to entry, and even though it has improved over the years, youth entrepreneurship is still regarded as something you attempt if you have been unsuccessful in being hired as a government employee or a large company. The age range posited when young people pursue an entrepreneurial venture is between 25-29 years.
- Finance was identified as a major challenge by **80%** of respondents. Access to financing and more innovative funding models were suggested.
- Some of the areas they highlighted as solutions to the barriers to entering of this belief were:
 - Greater access to finances
 - New approach to the way entrepreneurial ventures are assessed
 - The exposure of the concept and practice of entrepreneurship from the primary school level











- There is a need to boost existing initiatives that will stimulate secondary school students to either develop or embrace entrepreneurial pursuits
- Strategic partnerships when bidding for funding that supports entrepreneurship
- The government needs to continue to promote the value of Jamaicans startups as a way to sustainable development

b. What is your agency's outlook on the entrepreneurship sector's capacity to grow domestically?

All of respondents believed that there is potential for growth and they provided their analysis of what was needed as the support for entrepreneurs' needs. Some of the suggestions advanced included:

- To more aggressively promote a cooperative approach as some of the ideas will require strategic partnership for it to be accomplished
- The youth have to see the value of entrepreneurship beyond the concept of a micro lifestyle business to one that can expand beyond the immediate surrounding and parish to be demanded island wide.
- There is a need for mentors who have entrepreneurial experience and have been successful in their industry
- There needs to be a way to inculcate a risk taking entrepreneurial mindset into the youth as to many are still waiting for government support as a means of survival
- There needs to be a clear understanding in the minds of the agencies and the target market so that the difference between a traditional small business and entrepreneurial business is readily understood.

c. What is your agency's outlook on the entrepreneurship sector's capacity to attain global competitiveness in the next 5 years?

30% of the respondent believed that attaining global competitiveness was possible using the examples of Reggae musicians and jerk seasoning, to underscore the point that the potential was very possible. The statistics revealed that there is a consensus among all the respondents, that there is uncertainty as to what will be the next entrepreneurial growth business, but several projects including Agro-business, Renewable Energy and Information Technology were actively being pursued.

6. Engagement of local professionals

a. How does your agency engage the services of local professionals to assist in marketing your objectives or mandate?

50% of respondents used local professionals in some capacity although in many cases it was to assist in the execution activities rather than to market their objectives or mandate. These where the organisations that have the budget for procuring these











services, and they also have a team on staff to provide much of the skills for initiatives such as magazines and newsletters.

80% have a Facebook page but only those with an allocated budget could afford to have the pages maintained, and one respondent advised that their website was hacked, at least on two occasions. **10%** only used email and this was done in-house.

b. Which one has been most successful?

The below table outlines the initiatives that respondents believed to be most successful.

Table 14 Successful collaborations between Barbadian respondents and local professionals

Company	Successful Initiatives
Branson Center for Entrepreneurship	Website
Community Colleges of Jamaica	Website
HEART Trust/NTA	Website design and maintenance
Jamaica Business Development Corporation (JBDC)	Small Business Expo
Jamaica Chamber of Commerce	Newsletter
MSME Alliance	The MSME magazine
Small Business Association of Jamaica (SBAJ)	Facebook development
Young Entrepreneurs Association of Jamaica (YEA)	The National Entrepreneurship Week

7. <u>Does your agency facilitate the awareness of other entrepreneurship stakeholders which can assist the entrepreneur in their chosen industry?</u>

70% of respondents said that they facilitated the awareness of other entrepreneurship stakeholders. The organisation which was shared most by the respondents was HEART/NTA. The below figure identifies all the agencies that the respondents recommended to their entrepreneurs.











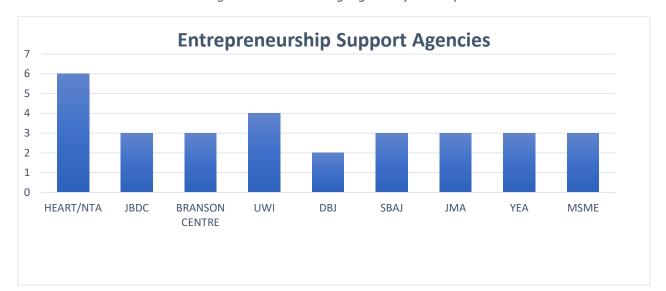


Table 15- Agencies that were highlighted by the respondents

8. What funding or facilitation of the access to funding does your agency provide to assist in startup or growth of entrepreneurial ventures?

It was interesting to discover that none of the respondents provide funding for entrepreneurial ventures. This was provided in large part through loans through the Development Bank of Jamaica. The commercial banks and credit unions were another source but the loan requirements and interest rates were seen by the entrepreneurs as unattractive, especially with the risk of business ventures.

9. Do you think that the entrepreneurs who started businesses in the last five (5) years are adequately qualified or experienced to meet the current and future needs for economic development?

All the respondents answered this question in the context of the entrepreneurs with whom they interact. Only 20% of the respondents thought that the entrepreneurs who started businesses were adequately qualified and experienced.

Those who did not believe that the entrepreneurs are adequately qualified or experienced gave the following reasons:

Table 16- Reasons why entrepreneurs are not considered qualified and experienced to meet economic development needs

Branson Center for Entrepreneurship

"Many of the entrepreneurial ventures are still attempting to convert their ideas into long term growth businesses and the five-year window sees more failures than successes for various reasons."











Council of Community Colleges of Jamaica (CCCJ)	"Many of the former students looking to start business though qualified academically need the business acumen which can't only be developed overtime, and at times through trial and error to make the entrepreneurial venture success. Five years although the statistics are not readily available is normally too soon to have developed the experience to more the business beyond the micro level."
Jamaica Chamber of Commerce (JCC)	"It depends on the nature of the business. The risk and the nature of the business environment can change so drastically, as was seen during the economic down-turn. The real test of the durability of a business especially for a startup where there is always pressure for cash flow, is usually the downfall of the business"
MSME Alliance	"Some of the entrepreneurs that we encounter are entrepreneurs by circumstances, and they lack the finance, experience, training and network to have the level of success they desire."
National College of Management & Business (NCMB)	"Many have started via bootstrapping (building a business out of very little or virtually nothing; relying usually on personal income and savings plus sweat equity from others) and realize there is so much more to running a business, so they come to us to fill the gaps."
National Development Foundation of Jamaica (NDFJ)	"Some of them lack the training and mental toughness to sacrifice for what they say is their idea, even with a business plan the ability to find alternatives when problems arise discourages them.
Small Business Association of Jamaica (SBAJ)	"Many people start their own business as a lifestyle business and are only interested in making enough to meet their needs, they don't consider that if the barriers to entry are low their model is copied, and their market share eroded.
Young Entrepreneurs Association of Jamaica (YEP)	Entrepreneurs need more guidance and support that usually takes more the five years to see them established. We have seen more businesses plateau or close in five years that have expanded.

10. What emerging industries are yet to be fully explored by entrepreneurs?

IT and Renewable energy were the industries most highlighted that could benefit from entrepreneurial pursuit. Within IT, gaming software development, digital marketing and app development were the emerging areas highlighted. One respondent believes there was still quite a lot that can be done through agriculture











but admitted it was prohibitive due to the energy cost and high capital required in agri-processing. This is where partnerships or cooperatives could become a vehicle for maximizing the entrance and success rate by pooling their various skill. The table below shows the number of respondents and the suggestion of emerging industries that are possible focus areas.

Table 17- Emerging industries that should be explored by entrepreneurs

Industries	No. of respondents selected	Suggested Segments
Agriculture	5	Agro-processing Aquaculture Bamboo Medicinal Cannabis
IT	8	Gaming Software development App Development
Renewable energy	6	
Recycling	4	Plastics Metal
Film & Video	2	Movies Animation
Robotics	1	

11. <u>Identify the gaps between current capacity of the youth skills and the emerging industries?</u>

There were a number of gaps identified by the respondents. *Funding* was highlighted most often followed by *training*. With regards to training, a number of respondents identified that enough training was missing, mentorship by experienced business persons was a vital component lacking in many instances. There was a consensus that the traditional way of selecting a project for funding puts many young people at a disadvantage, because the requirement assumes a level of sophistication such as business plan writing, pitching and governance that many start-ups lack in some way.

Table 18- Gaps in youth skills

Gap	# of respondents
Training	7
Experience	8
Funding	8
Mentorship	5
Skills	8











Research











12. <u>Identify any new structures or indicators that will support an enabling environment to increase entrepreneurship in the next 5 years</u>

A number of structures were identified to support an increase in entrepreneurship. There were also number of re occurring themes. The results are seen below.

Table 19 New structures that would enable entrepreneurship for next 5 years (Jamaica)

Education	Financing	Technology	Business Support	Research	Other
6 - Start the	4 There needs to be	3 Use more	7 Mentorship by	5 Some studies have	1 Mastering a second
exposure to entrepreneurship from the primary school level. This would aid in breaking the mental barrier of who can be an entrepreneur.	a different model when assessing entrepreneurs, and the financiers need to be trained how to effective do so.	competitions to attract new ideas to solve old problems	persons who have also had successful entrepreneurial businesses	been done but the findings are not always shared to help the effort be more focused.	Mastering a second language
- A closer relationship is needed with UWI the assist with the data capture and publishing of the studies that will help to guide the focus for entrepreneurship	The interest rates are too high and are stifling development	Encourage a grassroots approach using low cost material to tap into the renewable energy sector.	Better cooperation and coordination is required so that organization with similar interest and services can hold mini expos across Jamaica to capture a larger cross section of persons.	UWI needs to take a leading role in collecting data on emerging industries and matching them to a competitive advantage, or one that can be developed short to medium term.	











Education	Financing	Technology	Business Support	Research	Other
Information regarding entrepreneurial endeavours need to strategically be released across the campuses and colleges, using the best mediums to stimulate interest.				Benchmarking is good, but what is pursed must be scalable and adaptable to create our own version	











Trinidad and Tobago Entrepreneurial Ecosystem Review

1. Name of the agency

Six (6) companies participated in the interviews as part of this data collection process, these include:

Table 20- List of organisations that were interviewed

	CTS College of Business and
Launch Rocklt	Computer Science Ltd.
	Young Men's Christian
Trinidad and Tobago Chamber of	Association(YMCA) Trinidad and
Industry and Commerce	Tobago
Junior Achievement Trinidad and	6. National Entrepreneurship
Tobago	Development Co. Ltd

2. What is the nature of your input to youth entrepreneurship?

When it comes it comes to input into entrepreneurship, all of the organisations interviewed provided mentoring programs. The 2nd highest area of input is the provision of business support services and the 3rd highest was incubation. One organization contributed to policy development while the others functioned in diverse areas of entrepreneurship in Trinidad; for instance, investment acceleration.

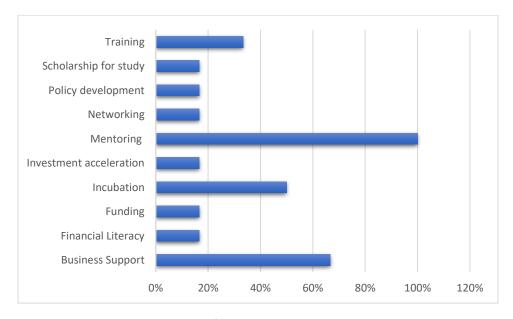


Figure 13- Nature of input into youth entrepreneurship











3. Which industry(s) or other organizations does your agency interact with?

94% (16) of respondents identified that they interacted with other ministries/ agencies. A wide range of industries and agencies were mentioned; however, the tourism industry experienced the most interactions. The below table highlights the industries and organisations highlighted by the respondents grouped according to organisational type.

Table 21- Organisation with which respondents interacted

Ministries	Agencies	Industries Schools	Other
Ministry of Agriculture	1 Caribbean Industria Research Institute (CARIRI)	1 Agro 1 Arthur Lok Jack processing	1 Unicom 1 er (Courts)
Ministry of Education	3 Civilian Conservation Corps	1 Creative 3 BIMAP Industries	1
Ministry Finance	3 National Entrepreneurship Development Co. Ltd (NEDCO	producers (oil and Tobago(UTT)	1
Ministry of Labour and Small Enterprise Development	2 Trinidad & Tobago Youth Business Trust	1 Financial 2 Secondary Schools Services	1
Ministry of National Security	1	Health and 1 wellness	
Ministry of Sports & Youth Affairs	. 3	ICT 4	
Ministry of Trade and Industry	4	Manufacturin 3 g	
		Robotics 1	
		Tourism 2	











4. <u>Has your agency collaborated with any other ministries/agencies to create a better enabling environment for entrepreneurs? If yes, provide name and initiatives.</u>

All of the participating agencies responded that they collaborated with ministries and agencies to implement entrepreneurship enabling initiatives.

Table 22 Successful collaborations between Barbadian respondents and local professionals

Organisations	Initiatives
Launch RockIt	Ministry of Planning, Ministry of Labour, The World Bank, Inter-American Development Bank (IDB), Trinidad Youth Business Trust (YBTT), The University of the West Indies (UWI) and others have connected 500 persons through networking to build businesses and helped 88 teams launch ideas.
Trinidad and Tobago Chamber of Industry and Commerce	The Ministry of Finance, the Ministry of Planning and the Ministry of Trade. The Chamber is responsible for the recommendation to the Minister of Finance to create tax incentives for startups. Though this has not been put in place, the recommendation led to a \$100,000 grant being started for entrepreneurs.
Junior Achievement Trinidad and Tobago	Ministry of Labour through the Junior Corporate Enterprise Program. A program for students to understand how cooperatives work and how investing work.
CTS College of Business and Computer Science Ltd.	Consultations
Young Men's Christian Association(YMCA) Trinidad and Tobago	Ministry of Social Development
National Entrepreneurship Development Co. Ltd	Partnering with the Ministry of Labour and Small Enterprise Development (Line Ministry) for the IBIS programme which provided, training, mentorship, funding and incubation to entrepreneurs. Also, partnering with the University of the West Indies to Entrepreneurship Bootcamp for students.

- 5. Outlook on entrepreneurship.
 - a. What is your agency's outlook on the current state of the entrepreneurship sector?











- Sixty six percent 66% of respondents indicated that the sector needed to be more responsive to the more pressing needs of entrepreneurs. The National Entrepreneurship Development Corporation is currently engaged in a restructuring and re-branding initiative to increase its relevance in the entrepreneurship ecosystem in Trinidad and Tobago.
- The calibre of financing that was available was classified, by 30% of the participants, as misaligned to the funding needs of entrepreneurs. The trend of financing competitions was considered to be a less effective financing mechanism for start-ups and growth stage businesses. Though the competitions encouraged the pitching of ideas; more robust funding was needed.
- **30%** of respondents believed that the current environment was one that encouraged entrepreneurship and that it could be seen in the increased numbers of young people getting into entrepreneurship.

b. What is your agency's outlook on the entrepreneurship sector's capacity to grow domestically?

83% of respondents believed that there is capacity for growth in the Trinidad and Tobago entrepreneurial sector. **66%** of respondents stated that the appropriate private and government resources would have to be directed towards the sector. Some of the supporting structures that were highlighted were:

- Mentorship and funding
- Stimulus to use the second tier of the stock exchange
- Increased focus and support for youth entrepreneurship

c. What is your agency's outlook on the entrepreneurship sector's capacity to attain global competitiveness in the next 5 years?

50% of respondents believed that Trinidad and Tobago could achieve global competitiveness in five years, **16%** did not agree and another **16%** indicated that a small number of entrepreneurs are already operating globally. The conditionality of the global competitiveness becoming mainstream in the entrepreneurship sector was easy access to the support systems that would drive foreign market sales.

6. Engagement of local professionals

a. How does your agency engage the services of local professionals to assist in marketing your objectives or mandate?

All of the organisations interviewed engaged the services of local professionals to facilitate the promotion and execution of their mandate.

• The training institutions worked with professionals to develop courses and program that encompass workplace competencies.











- The entrepreneurship centred organisations engaged prominent professionals and entrepreneurs to function as brand or program ambassadors.
- The business support organisations engages volunteer mentors and advisors to deliver on start-up boot camps and other initiatives

7. <u>Does your agency facilitate the awareness of other entrepreneurship stakeholders which can assist the entrepreneur in their chosen industry?</u>

83% of respondents said that they facilitated the awareness of other entrepreneurship stakeholders. They frequently referred individuals to the NEDCO and YBTT for entrepreneurial guidance, mentoring and funding. The Chamber and Launch RockIt collaborate with the IADB and the local incubators to deliver their programs in addition to increasing awareness of the respective programs.

8. What funding or facilitation of the access to funding does your agency provide to assist in start-up or growth of entrepreneurial ventures?

50% of the participants did not provide funding for entrepreneurs. However, one of those organisation is currently working with the Caribbean Development Bank (CDB) to create and manage a funding program for entrepreneurs in Trinidad and Tobago.

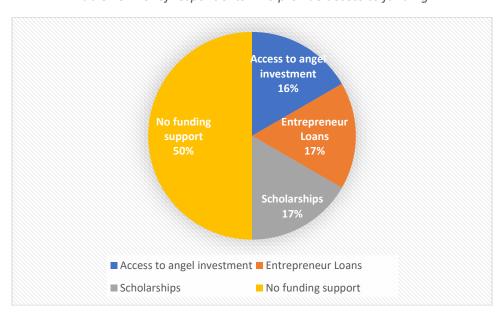


Table 23- No. of respondents who provide access to funding











9. <u>Do you think that the entrepreneurs who started businesses in the last five (5) years are adequately qualified or experienced to meet the current and future needs for economic development?</u>

All the respondents answered this question in the context of the entrepreneurs with whom they interact. 50% of the respondents thought that the entrepreneurs who started businesses were adequately qualified and experienced.

Those who did not believe that the entrepreneurs were adequately qualified and experienced gave the following reasons:

Table 24- Reasons why entrepreneurs are not considered qualified and experienced to meet economic development needs

Launch RockIT	Entrepreneurs can reach this level through more training, and also through the support of government agencies.
Trinidad and Tobago Chamber of Industry & Commerce	This can change through us providing mentorship through a structed angel investment program.
YMCA	There are not enough support systems in place, and mentorship needs to increase.

10. What emerging industries are yet to be fully explored by entrepreneurs?

The respondents highlighted agriculture, information technology and the creative industries as industries or sectors that are prime for entrepreneurs. It is interesting to note that in Trinidad the renewable energy sector is not top of mind for business support organisations.











Table 25- Emerging industries that should be explored by entrepreneurs

Industries	No. of respondents selected	Suggested Segments
Agriculture	3	Hydroponics Aquaculture
IT	3	Software development Mobile App Development Cyber Security
Creative industries	3	
Tourism	2	
Recycling	1	
Animation	1	
Robotics	1	
E commerce	1	

11. <u>Identify the gaps between current capacity of the youth skills and the emerging industries?</u>

The identified gaps were predominantly related to information; in the form of training, knowledge and research. The other gaps were linked to business and financial management know-how. It should be noted that the entrepreneur can outsource some of these skills through the local professionals' sector. The business experience can be annexed by securing mentors and advisors in the critical areas of the entrepreneurial venture. This gap identification validates the necessity of a vibrant ecosystem to the successful development of the entrepreneurial sector in a country.

Table 26- Gaps in youth skills

Gap	# of respondents
Training	3
Infrastructure	1
Knowledge	3
Business experience	2
Funding	1
Research	1
Marketing	1











12. <u>Identify any new structures or indicators that will support an enabling environment to increase entrepreneurship in the next 5 years</u>

A number of structures were identified to support an increase in entrepreneurship. NEDCO has indicated that their re-vamped structure and model will address the significant areas where entrepreneurs lack the skill and access.

Table 27 New structures that would enable entrepreneurship for next 5 years (Trinidad & Tobago)

Education	Financing	Technology	Business Support	Policy
4	3	3	3	2
Business operations training	- less risk averse types of financing	Exposure to advances in technology	Marketing specific to entrepreneurs	Policy implementation
Accountability requirements of investors	- Angel investor networks	Innovation within traditional sectors	Best practices	Revamping of aged trade policies
			Entrepreneurs' networks	
			One stop for everything on entrepreneurship	
			Mentorship	











Recommendations

In the ecological context, an ecosystem evolves or develops to sustain the primary lifeform(s) at their optimum capacity. The entrepreneurial ecosystem is quite similar as it matures over time to reach a state of equilibrium which is characterized by vibrancy and abundance. The Caribbean entrepreneurial ecosystem market study has examined the ecosystem through the lenses of the Feld nine attributes, the prime business sectors for entry by Caribbean entrepreneurs and the skills/knowledge requirements to achieve the new ventures.

Natural ecosystems experience three (3) main stages of development which result in a mature community of the particular species. The three stages are:

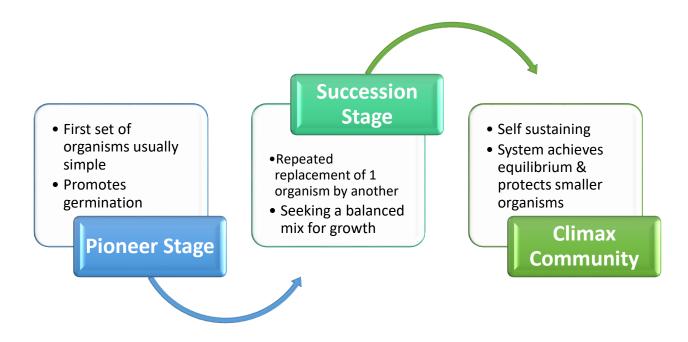


Figure 14 Three main stages of ecosystem development

From analysis of the market study information, it is observed that the **Caribbean entrepreneurship ecosystem is in EARLY PHASE SUCCESSION**. The pioneer stage of this ecosystem has produced its maximum output within the entrepreneurial context.

For instance, the provision of tax incentives to stimulate entrepreneurship has benefitted the start-up of traditional businesses but is insufficiently supportive of advanced venture models.











In order for further growth to take place, the Caribbean entrepreneurial ecosystem must **begin its succession stage**. The succession stage is characterized by the constant replacement of the simple structures of the pioneer stage with dynamic and best-fit organisms to promote growth. One such initiative in the Caribbean has been the emergence of co-working spaces and start-up incubators as a replacement to subsidized rent in industrial clusters.

Using the Brad Feld nine attributes of a successful entrepreneurial ecosystem, the succession stage, balance seeking replacements could be:

Ecosystem Attributes	Potential Succession Stage Actions
Diverse pool of human capital – technical & business	Stimulate innovation or improvement visioning for youth graduates to drive entrepreneurial culture among the pool of human capital <u>versus</u> a heavy emphasis on a workforce that would attract foreign direct investment.
Financial capital from investors	Implement facilities for year-round access to venture capital in addition to the cyclical access through pitch competitions.
3. Leadership in the ecosystem (visible online and in country)	Increased digital marketing of success stories and promoting the value of "giving back through mentoring" versus reluctant and highly engaged thought leaders.
4. Effective and well-integrated accelerators and incubators	Existing incubators should embrace more collaboration and knowledge sharing to guide new and existing entrepreneurs to the most appropriate path for their venture.
5. Affordable professional service providers	Initiatives towards changing the prevailing approach of attaining professional services as a "favour", to entrepreneurship agencies negotiating affordable fee schedules for core services needed by entrepreneurs. This creates mutually beneficial transactions and sustainable partnerships between the entrepreneurial sector and service professionals.
6. Large anchor firms (create opportunities for entrepreneurs)	Advocate for and create partnerships with manufacturers and ICT firms to come to the entrepreneurship market for solutions to prevailing problems. Essentially, building a pipeline of opportunities.











Ecosystem Attributes	Potential Succession Stage Actions
7. Governmental support for start-up and growth stage requirements	Legislation with supported policies that are applicable to entrepreneurs at different stages of development. Benchmarking of highly productive entrepreneurial regions to inform the legislation and policies.
8. Frequent events for engagement and networking	Monthly sector led meet ups and non-competitive idea sharing spaces. A potential theme can be "For entrepreneurs, by entrepreneurs".
9. Sustainable pool of start-ups and entrepreneurs	The existing ideation and start-up promoting initiatives only promote the winners or exceptional entrepreneurs. The dynamic approach would be to have a listing of other ventures "birthed" in the program as there maybe investors who are seeking similar ventures to support.

The Caribbean entrepreneurship ecosystem is at a stage where there is an expectancy and relentless desire to forge the entrepreneurial culture in the region. The key success factor to the greater advancements in the Caribbean entrepreneurship ecosystem is the willingness of the support agencies (organisms) – including government - to be entrepreneurial in their approach. The ecosystem requires adaptability to the shifting requirements of the new venture industries and the support organisms should be capable of meeting those dynamics.











Appendix 1: List of Acronyms

BYBT Barbados Youth Business Trust
YBTT Youth Business Trinidad and Tobago

JYBT Jamaica Youth Business Trust

BIDC Barbados Investment Development Corporation

EGFL Enterprise Growth Fund Limited

BITA Barbados Income Tax Act

CIDA Cultural Industries Development Agency

VAT Value Added Tax

MSME Micro, Small and Medium Enterprises
SIPP Security Interest in Personal Property

JBDC Jamaica Business Development Corporation

SBDC Small Business Development Centre

MICAF Ministry of Industry, Commerce, Agriculture and Fisheries

ICATT Institute of Chartered Accountants

EIF Enterprise Investment Fund

MIDA Micro Investment Development Agency

SSF Self-Start Fund

MELF Micro Enterprise Loan Facility

UNDP United Nations Development Programme
BNSI Barbados National Standards Institute
BCSI Barbados Coalition of Services Industries
JCSI Jamaica Coalition of Services Industries

TTCSI Trinidad and Tobago Coalition Services Industries

DBJ Development Bank of Jamaica

PSOJ Private Sector Organisation of Jamaica

JACE Junior Achievers Company of Entrepreneurs Programme

YES Youth Entrepreneurship Scheme

BEF Barbados Entrepreneurship Foundation

JA Junior Achievers

SEED Secondary Early Education Entrepreneurial Development (SEED)

NEDCO National Entrepreneurship Development Corporation

IBIS National Incubator System

WINC Women Innovators Network in the Caribbean

JAMPRO Jamaica

BMA Barbados Manufacturers' Association
JMA Jamaica Manufacturers' Association

TTMA Trinidad and Tobago Manufacturers' Association OSHA Occupational Safety and Health Administration

NVQ National Vocational Qualification CVQ Caribbean Vocational Qualification

TVET Technical and Vocational Education and Training

PV Photovoltaic

STEM Science, Technology, Engineering and Mathematics BIMAP Barbados Institute of Management and Productivity











HRD Human Resource Development CDB Caribbean Development Bank

EU European Union

FAO Food and Agriculture Organization

NCF National Cultural Foundation
BTMI Barbados Tourism Marketing Inc
MHUB Mobile Social Networking Hub

MQI McEnearney Quality Inc

UCAL United Commercial Autoworks Limited

CBB Central Bank of Barbados

JCC Jamaica Chamber of Commerce

CCCJ Council of Community Colleges of Jamaica
NDFJ National Development Foundation of Jamaica

SMAJ Small Business Association of Jamaica

YEA Youth Entrepreneurs Association of Jamaica

NGO Non-Governmental Organizations
MOU Memorandum of Understanding
YMCA Young Men's Christian Association
CARIRI Caribbean Industrial Research Institute

UTT University of Trinidad and Tobago IDB Inter-American Development Bank

UWI University of the West Indies











Appendix 2: Interview Questions (Barbados, Jamaica, Trinidad & Tobago)

Information on the agency

1.	Name of the agency
2.	Which industry(s) or other organizations does your agency interact with? (prompt for information on new industries such as renewable energy)
3.	Nature of your input to youth entrepreneurship: policy development policy implementation business support regulatory funding mentoring incubation investment acceleration other
Know	ledge and Behaviours towards entrepreneurship
4.	Has your agency collaborated with any other ministries/agencies to better the enabling environment for entrepreneurs? If yes, provide names and initiatives.
5.	What is your agency's outlook on the entrepreneurship sector? a) Current state
	b) Capacity to grow domestically
	c) Capacity to attain global competitiveness in the next 5 years
6.	How does your agency engage the services of the local professional services (entrepreneurs) to assist in delivering your objectives or mandate?
7.	Does your agency facilitate the education or awareness of entrepreneurship stakeholders on the paths to enter their chosen industry? Yes No
	If yes, what was the most recent intervention?
8.	What funding or facilitation of the access to funding does your agency provide to assist in start-up or growth of entrepreneurial ventures?

Entrepreneurship Sector Growth

9. Do you think that the entrepreneurs are adequately qualified or experienced to meet the current and future needs for economic development?











- 10. What emerging industries can be accessed by entrepreneurs?
- 11.Identify matches between current capacity of the youth skills and the emerging industries?
- 12.Identify supporting structures or the markers of the enabling environment that is needed to increase the entrepreneurship in the next 5 years

Training Providers ONLY:

Request certification data on persons 18 to 35 years by courses of study











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