

Promotion of Regional Opportunities for Produce Through Enterprises and Linkages (PROPEL)

ELECTRONIC CARIBBEAN PRODUCE MARKETING CORPORATION (ECPMC) FEASIBILITY REPORT



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WUSC CARIBBEAN COMMISSIONED REPORT

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Table of Contents

Glossary of Terms	3
Overview.....	4
Executive Summary.....	4
Objectives	5
Caribbean fresh produce: challenges and opportunities	5
Types of e-Commerce Platforms.....	7
1. E-Marketplace	7
2. E-Procurement	8
3. Virtual Trade Show	8
Case Studies	9
1. E-Soko: https://esoko.com	9
2. Virtual City and G-Soko: http://www.virtualcity.co.ke	10
3. ebay – a global retail platform: https://www.ebayinc.com	10
4. Farm Gate Exchange (FGX): http://www.fgxplatform.co.za	11
Observations and Lessons from case studies.....	12
1. Supporting existing or creating new business:	12
2. Sustainability and Scale	12
3. Key partners	13
Recommendation for the Caribbean market	13
The value add to be created at each stage of the process is highlighted below:	14
1. Role and incentives for key partners:	15
2. Sustainable income	15
3. Investment and Structure	16

Glossary of Terms

Pan-Caribbean	Activities across at least three of the following locations: Barbados; Jamaica; Dominica; Guyana; Trinidad & Tobago; Grenada; St. Lucia; and St. Vincent and the Grenadines
Extra-regional	Countries that are not included in the Pan-Caribbean countries listed above
Producers	Small and medium producers, including women-owned and youth as well as cooperatives and associations
High Value Market (HVM) buyers	Direct buyers including hotels, supermarkets, cruise ships, airlines, restaurants, processors and exporters within CARICOM or to Canada, the United States or the European Union Intermediaries including consolidators, distributors, trading companies, brokers, processors, importers and local markets. Local markets are included as an intermediary only when they have products that are supplied to the HVM Buyers listed. The importers included would be sourcing some products intra-regionally or domestically as well as importing internationally.
Fresh Produce	Fresh and agro-processed products in three categories:- Tropical fruit; - Vegetables; and Roots and tubers, specifically yams, sweet potatoes, ginger, Irish potatoes, onions and dasheen.

Overview

E-commerce is described as “the use of the internet to market, buy and sell goods and services, exchange information, and create and maintain web-based relationships between participant entities”. This definition highlights the multiple potential roles a platform can have, and reviews a variety of potential models both within and outside the fresh produce sector.

This report explores the different types and functionality of e-commerce platforms and evaluates key lessons learnt in different regions. It examines the potential motivation and benefits of key partners and users, and considers practical factors for engagement and deployment addressing relevant generic as well as Caribbean specific challenges. Finally, this report presents a potential approach, including a team structure, indicative costs and timeline required to establish a functional, sustainable Pan-Caribbean e-platform that could facilitate Producers and High Value Market (HVM) buyers in establishing wider trade for Fresh Produce in the Caribbean. However, this would require substantial up-front investment from donors, an appetite for risk and a long-term financial and personnel commitment in what is a highly fragmented sector.

Executive Summary

This report focuses on the potential for an e-commerce platform to increase trade between Producers of Fresh Produce and HVM buyers across the Caribbean. This presents a number of key challenges. The quality and delivery of fresh produce from smallholders in the Caribbean is inconsistent and often sub-standard. HVM buyers have well-established, often extra-regional supply chains, and lack confidence and motivation to change. The perishability of Fresh Produce also requires higher efficiency post harvest to delivery, to guarantee freshness and taste to customers and end consumers. Whilst an e-commerce platform alone will not change the capabilities or behaviour of Producers or HVM buyers, establishing a relevant model, engaging the right pan-Caribbean partners with effective commercial and operational deployment and on-going support could make a difference over time.

There are a plethora of e-commerce solutions in the market. These range from basic websites displaying industry contacts and expertise, virtual buying and selling activities, through to platforms that are supported by a physical infrastructure managing inventory and fulfilment of orders including quality control, packaging and shipping services. Highly successful e-commerce platforms such as eBay have become a one-stop shop for an extensive range of products and drive revenue from transactions on a global scale. Successful agricultural e-commerce platforms, such as E-soko in Ghana, tend to be country-specific and trade in limited - mainly dry - commodities. They tend to combine an approach that provides valuable market price and agronomy information to producers, with a ‘marketplace’ for bids and offers. Given lower volumes of commercial transactions, platform income is often sustained in a number of ways including monthly charges to farmers, income from partnerships with mobile phone providers that offer preferential rates to members, monthly buyer subscriptions as well as revenue from other service providers where possible.

This report recommends that an e-commerce platform for fresh produce in the Caribbean, focuses both on the needs of Producers and HVM Buyers for maximum impact and benefit. The E-soko platform used in Ghana provides such functionality and would be a strong pre-established, relatively low cost platform to implement from a technical perspective. However, the success of such a platform is highly dependent on a strong central team that manages and disseminates information to producers, as well as facilitates engagement of transactions and industry partners to ensure long terms sustainability. Without central co-ordination the platform is highly unlikely to drive pan-Caribbean trade. Indicative **annual costs** of this solution are **US\$ 467K**, targeting a network of **15,000 Producers, 200 HVM buyers** and a projected income from a combination of transaction and service based revenue streams of over **US\$ 500K p.a.** after 3 years. However, even with this level of investment and the use of off-the-shelf, proven technology and expertise the specific issues inherent to the Caribbean fresh produce sector mean that this investment would come with a very **high risk profile** and would be **unlikely to attract commercial investment** until the model is proven.

Objectives

In order to evaluate the value that different e-platform models can deliver to buyers and sellers in the Caribbean, the report will measure potential success in supporting the following objectives:

- **Increase HVM purchases** of fresh produce from Caribbean producers
- **Increase producer incomes** and expand the supply base
- **Facilitate and expand pan-Caribbean trade** of fresh products
- **Improve the quality and competitiveness** of Caribbean producers
- **Deepen commercial relationships** between HVM buyers, producers and Caribbean service providers

Whilst effective e-platforms can facilitate information, expand commercial networks and markets, and theoretically reduce barriers to entry for producers, it is important to understand the existing barriers, as well as the key motivations in the market to evaluate the necessary services and support required.

Caribbean fresh produce: challenges and opportunities

Supply chains for fresh products offer a unique challenge in any market given their perishability and the short time required from farm to consumer, particularly without sophisticated ripening facilities or cold storage. Regardless of any e-platform solution, fresh produce supply chains must be well co-ordinated and efficient from harvesting activities through to post-harvest treatment, packaging, shipment and presentation to consumer through markets/ retail, food service or export channels. HVM buyers expect consistent quality and quantity of product at competitive prices. They already have established reliable supply chains, with a perception of high risk of change. On the supply side, producers face the challenge of producing sufficient quantity at the right quality to satisfy buyers' demands. In the Caribbean this is combined with a general lack of transparency of pan-Caribbean market pricing information, and capacity to trade pan-regionally.

There are a number of challenges and opportunities in building closer links between HVM buyers and producers in the Caribbean. These provide practical considerations when evaluating the functionality of an e-platform as well as the infrastructure and capacity to support it. Whilst simplicity and ease of use, as well as accessibility to mobile technology are critical for platform adoption, it will be the ability to assist users overcome barriers and exploit opportunities for trade that will ultimately determine the value and sustainability of the platform. Some of these key challenges and opportunities are explored below:

Quality	<p>Challenge: during this study, feedback from buyers has highlighted that the quality of fresh produce in the Caribbean is often sub-standard, with issues pre and post harvest including packing, on-time delivery, documentation, mixed loading, phyto-sanitary requirements, logistics, shrinkage and spoilage.</p> <p>Opportunity: Organisations such as CARDI are a source of excellent expertise and could provide targeted pre and post-harvest support across the region. An opportunity exists to increase the effectiveness of how this expertise and support is delivered to farmers to assist with quality standards. There is also the potential to explore the involvement of insurance and shipping companies in guaranteeing quality and delivery of products, and increased efficiencies from farm gate to delivery.</p>
Established Supply Chains	<p>Challenge: most large buyers have established supply chains with strong relationships and need a compelling reason to change or expand.</p> <p>Opportunity: Pan-Caribbean demand and pricing information could create a more transparent market, where producers of competitive produce on one island can connect with HVM buyers on other islands where their existing supply chains are less competitive. HVM buyers will have visibility of pan-Caribbean pricing and can make more informed sourcing decisions.</p>

Pan-Caribbean Business

Challenge: There are very few truly pan-Caribbean HVM buyers in the retail, distribution or food service sectors. Whilst organisations such as Massy have a regional buying strategy, actually purchases are conducted at an island or store level. As importantly, the lack of a pan-Caribbean aggregator means there is no obvious single infrastructure for physical consolidation, quality control and shipping of produce to support an e-commerce trading platform. On the supply side there are limited collaborations of farmers, rather sales are made from farmers to large aggregators who have established relationships with buyers.

Opportunity: A pan-Caribbean infrastructure exists in key sectors that can facilitate trade such as logistics, telecoms, insurance and banking. With the right level of support smaller aggregators and farmer groups could organise pan-Caribbean shipments and deliveries to HVM buyers. Similarly, greater transparency of pricing and supply could facilitate HVM buyers in establishing a more effective pan-Caribbean sourcing strategy.

Geography and scale:

Challenge: The large number of islands and relatively low number of producers limits transactional volumes and can drive up the cost of production and delivery, and limit the users of an e-commerce platform making it expensive and underutilised.

Opportunity: Other income sources for the e-commerce platform must be reviewed to offset relatively low user numbers and ensure sustainability in the long term (rather than purely transactional charges).

These key factors must be taken into account when planning the engagement and deployment of the platform against the key objectives. For example, an e-platform alone will not increase sales of fresh produce to high value buyers if their perception of low quality and expectations of poor delivery remain the same. Similarly, whilst farmers may receive market prices that help them to negotiate better prices and new markets, they will only achieve this if they focus on the pre and post harvest quality, and potential collaboration with other smallholders to meet buyer demands.

This report has reviewed a number of different options for e-commerce platforms looking at structure, challenges and benefits in the Caribbean context, as well as a number of case studies from different markets to understand reasons for success and failure. This process has helped to rule out a number of models, as well as understand key functionality and success factors upon which to make a recommendation.

Types of e-Commerce Platforms

E-commerce models vary depending on the type of activities offered on the platform. These range from one-way information provision, to trading and payment transactions, different geographical reach, products or services (from physical to electronic), volume and value of transactions, ownership/ management of the platform and many more. This section explores three main types of e-commerce platforms, and considers the suitability of different approaches for the Caribbean market.

1. E-Marketplace

These are platforms that include many buyers and sellers, where the buyer and/ or seller creates their own specification, terms and conditions, and advertisement for the product that they are buying or selling. The platforms are usually managed by a 3rd party, and the buyer and/ or seller are free to accept the offer they choose. In some cases a time limit is applied to the transaction and the best offer at the end of the time limit is the winner. The 3rd party may play a silent role in the transactions, or may facilitate negotiations and other support functions such as insurance, shipping, logistics and payment transactions. Whilst this is the most common type of e-commerce platform, there are some key differentiators between E-Marketplace models.

<p>Auction/ Non-auction</p>	<p>Depending on the platform, price negotiations can result in a 'forward auction' with ascending prices, where the seller entertains bids from a number of buyers and bidders increase price sequentially. Other platforms act as an introduction or 'match making service' where demand is matched with supply, but negotiations and final agreement on pricing occur off-platform directly between the buyer and seller. Both approaches offer greater visibility of market pricing and demand, but the auction approach also offers members current and historical records of agreed pricing, which has inherent value.</p>
<p>Physical versus Virtual stock</p>	<p>Certain trading platforms physically own and manage stock and manage key elements of quality control, financing and payment between buyers and sellers. They use e-marketplace as a tool to register, vet and sell to a range of customers, avoiding middlemen and reducing transaction costs. Other platforms neither own nor receive the stock, and the risk of 'the deal' is between the buyer and seller. Such platforms may recommend support services and provide information to members to support these transactions, but they have no liability and participation in the transactions.</p>
<p>Public versus Private networks</p>	<p>Depending on the platform it can either be accessed through easy registration by anyone who has access to the internet (such as eBay), or members must be vetted and approved by an administrator and become part of a 'closed group' whose privacy is protected and who may not be targeted by advertising and/ or other services they have not agreed to. Public platforms have more flexibility to build significant revenue streams from selling advertising space.</p>

A key commercial driver of E-Marketplace platforms is to enable a wider market reach for buyers and sellers and increase sales volumes. In addition, by creating transparency of information up until an offer is made or accepted this provides information that assists buyers and sellers in understanding the market price for their products. The deployment of a suitable e-marketplace in the Caribbean could drive pan-regional price transparency and connect buyers and sellers to facilitate trade.

2. E-Procurement

E-procurement platforms are private networks in which one company makes purchases from selected suppliers with the primary objective of reducing prices from producers in a descending price auction. The company runs or solicits a 3rd party to manage the platform and the activities, but leverages its own established purchasing requirements and logistics and payment infrastructure to secure the deal. The platform uses using price transparency between participating suppliers with an expectation that the lowest price wins. This requires clear specifications and volumes for purchase requirements, pre-approved suppliers for quality and ability to supply. Historically this approach has been popular in automotive, electronics and telecoms industries and is increasingly being used by large HVM buyers (e.g. Walmart/ Tesco) in mature markets with established supply chains.

However, the main commercial objective is to reduce prices from producers, and the process can limit, rather than open up markets, as buyers will tend to invite the suppliers that they know to participate to guarantee quality and delivery. The information that is generated on an e-Procurement is usually confidential and therefore does not improve market transparency for the wider supply chain. Whilst this model could be applied in a controlled way with a large HVM buyer in the Caribbean, it is unlikely to have a significant impact on producer communities.

3. Virtual Trade Show

This is an information source presented on a website that enables all relevant supply chain groups to provide information on their products and services to their target markets and customers. These groups would include producers, buyers, shippers (both local and maritime), finance institutions, quantity surveyors, processors, suppliers of various kinds of crates and other containers, and agronomists providing agricultural support.

For any platform to add real value in the Caribbean context, it must support both Producers and HVM buyers, as well as facilitate pan-Caribbean trade. Whilst, if carefully managed, an eProcurement solution with a large HVM buyer could reach out to a wider producer network in reality there are no true pan-Caribbean buyers and auctions will be specific to certain commodities and include a large number of the existing supply base. Similarly, whilst a Virtual Trade show will play a role in connecting organisations, it will not directly facilitate key objectives for producers. Latest market information on pricing and demand will not be provided by such a solution. Whilst the information could be useful for pro-active producers and service organisations, this is unlikely to drive a major increase in producer sales, incomes and the competitiveness of products across the region.

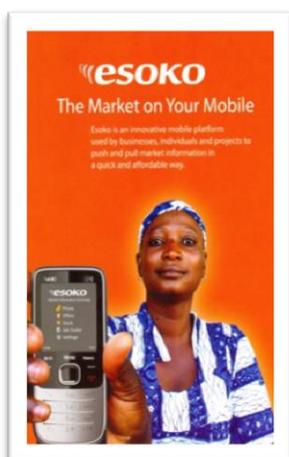
For these reasons this report has focused on a cross-section of successful e-Marketplace case studies to understand different models including success factors and lessons learnt that could support a recommended approach for the Caribbean.

Case Studies

Following a detailed review of a wide cross-section of global e-commerce platforms representing large international corporations such as e-bay at one extreme and regional donor-funded programmes such as E-soko at the other, this report focuses on a relatively small number of **relevant case studies**. While there are multiple e-platforms operating in the agriculture sector, most of these are highly specific to either mature markets such as the US where infrastructure represents a limited barrier to growth or to much larger sectors or countries such as India where requirements and scale are so fundamentally different as to be irrelevant to the specific needs of the Caribbean:

1. E-Soko: <https://esoko.com>

The E-soko platform deployed in Ghana, Kenya and recently in Mexico, is an example of a platform that offers a multitude of mobile-based services and solutions from marketing, monitoring, advisory and field service applications. Marketing applications include sending SMS messages and/ or Interactive Voice Response messaging (in cases where literacy is an issue), with information that is relevant to the farmers that have subscribed to the platform. According to the E-soko team, the most valuable information for farmers are current market prices, and depending on the time of year and season, the focus of information will include data on crop protocols, weather forecasts and other extension services. The platform also enables any type of survey within the established networks such as mapping farm sizes, household surveys and crop monitoring, which can be delivered via SMS for ease of response and low cost implementation. E-soko have established contact centres in Ghana and Kenya in recognition of the fact that users of the applications need both technical and agronomy advice, and technology cannot replace a person at the end of the line to assist with problems and questions.

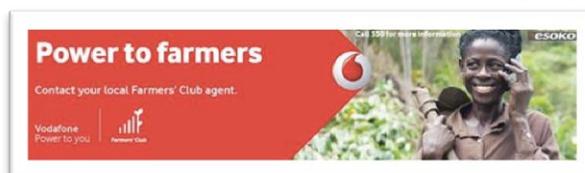


(a) E-Soko network and 'Farmers' Club'

E-Soko have a network of 60,000 farmers in Ghana, with a view to growing this to 160,000 over the next 12 months. They have established a 'Farmers Club' platform in conjunction with Vodafone, where for two cedi a month the farmers have access to E-soko information and services, and preferential rates to other farmers. The benefits include:

- Relevant scientific crop information in their local language
- Relevant information on pricing
- A match making service, matching buyers and suppliers
- Free calls to other members of the farmer club
- Competitive rates for other calls
- Free access to an expert agricultural hotline

The platform works on all android and basic phone handsets and has a short code dial number for the call centre. According to E-soko the size of the user group is growing from word of mouth recommendations, with no formal marketing taking place. For Vodafone, the growth in their market share, as well as calls made outside the user group network, is significant and justifies the activity. The platform has the functionality to send airtime credits to recipients, which could be a motivation for participation in surveys and/ or for feedback on off-platform transactions.



(b) E-soko 'marketplace' functionality

The platform also has a 'marketplace functionality' application which links buyers and sellers of agricultural products. It includes historical data and the latest market price trends, and functionality for members to place offers to sell, and bids to buy. E-soko have not actively promoted the marketplace functionality and consequently uptake has been limited and volumes of buy-sell transactions remain limited. The platform does not offer functionality to manage payment, insurance or shipping transactions, but acts as a 'match making service' with actual deals occurring off platform between buyer and seller.

Critically, previous attempts to offer such services have failed due to the risks involved the timing of payment (shipment or delivery) and around guaranteeing quality and delivery of product. E-soko are currently reviewing an escrow approach to withholding payment in a third party account until the buyer confirms acceptance of the products, but this is still work in progress. According to E-soko the match making services has low volumes of transactions for predominantly 'dry goods'. The majority of transactions are from aggregators and farmer groups rather than individual smallholders.

(c) Platform overheads

The platform is run as a closed user group with the ability to profile farmers (language, crops, country) and set up 'smart groups' to disseminate as well as gather relevant information and support. In Ghana, E-soko has 3 central administrators who approve all new members and post all the transactions, access to 14 content specialists from agronomists, nutritionists and research practitioners, as well as a network of 43 agents across Ghana responsible for gathering daily information on market prices for 58 commodities. In short, content provision and dissemination is the biggest cost of the platform. Revenue primarily comes from farmers subscribing to the network, with a longer-term view to charge buyers monthly subscription charges, and charge service industries for advertising across the farmer network.

2. Virtual City and G-Soko: <http://www.virtualcity.co.ke>



Virtual City Ltd. is a mobile software firm that develops and delivers mobile software solutions to the supply chain and agribusiness industry in Africa. Virtual City created G-Soko, an e-market place platform run by the Eastern Africa Grain Council (EAGC). The platform centralises trade in grains through warehousing facilities, and has established a trade ecosystem where different market actors and service providers including farmers, traders, financial institutions, agro-dealers and other players participate. The platform receives offers and bids, and matches buyers with sellers so that a price and volume can be determined. Once parties agree on offers, and carry out their own due diligence, the platform acts directly as a transactional clearing house with banks, agro-dealers, buyers and sellers entering into a tripartite contract.

(a) G-Soko warehouse network across Eastern Africa

The platform partners with a wide range of warehouses across East Africa, and as a first step, (EAGC) quality certifies them all. High quality and cost effective storage solutions offer a pricing motivation to farmers as they can benefit from selling when the seasonal price of grain is high and receive a warehouse receipt on delivery of their product. Alternatively there is a guaranteed market for their product if they need access to liquidity urgently. The warehouse receipt provides a range of benefits to farmers such as access to the online trading platform and immediate access to financial products, underwritten by the grain in storage. The platform is a closed platform with customers vetted and approved for levels of financial transaction before they are permitted to trade.

(b) G-soko storage through to transactions

G-Soko uses a physical warehousing receipt system to avoid the risks and challenges faced by other 'virtual' inventory platforms. The warehouse receipt acts as legal title of product ownership and can be transferred instantly at point of sale. There is a range of settlement options including part payment deposits. The platform has a dispute mechanism processes if the end buyer is not satisfied with their purchase.

3. ebay – a global retail platform: <https://www.ebayinc.com>

ebay is now the largest retailer in the world, yet has no stores or inventory and all its business is undertaken online and covers B2B, B2C and C2C. ebay provides an e-marketplace where suppliers post their offerings and buyers can compete on ascending price basis. ebay has a 'food and drink' category that trades a range of fruits, though mostly preserved or canned fruits such as sun dried tomatoes, dried apricots and dates. Presumably this is due to the higher risk profile of perishable fruit products.

(a) Listing fee revenue streams

Aside from advertising, ebay generates a significant percentage of its revenue through supplier listing fees. There are different scales for different categories and different types of suppliers (private or business), but the average fee is 10% of the final transaction cost (including postage). Suppliers never pay more than £250 as the final listing fee. In addition to the standard listing fee, upgrades for visibility generate further revenue.



YOUR SELLING FEES



(b) Ebay’s supporting services model

ebay provides an auction service linking buyers and suppliers, however it does not provide a full transactional service, with buyers and sellers independently responsible for financial transfers, insurance, quality assurance and logistics. ebay uses PayPal as the preferred finance partner, though buyers and suppliers are permitted to complete the final transaction in any way that is mutually agreeable (cash, direct bank transfer etc.). ebay provides a simple star feedback rating of each member, and whilst this is not a quality assurance function, it does allow each transaction to be rated by each party. Ratings focus mainly on the accuracy of the product to the advert, the speed of delivery and payment.



4. Farm Gate Exchange (FGX): <http://www.fgxplatform.co.za>

FGX was started in South Africa in 2010 by three partners to evaluate the feasibility of an electronic trading model for fresh produce. It was established in conjunction with the key producers, marketing agents and buyers with a primary objective of creating price and stock transparency for producers through the supply chain. FGX is a Service Provider (SP) that manages all transactions between buyers and sellers. This includes registering users, matching demand and supply, conducting negotiations and virtually managing the shipment and the payment process including any necessary dispute resolution. Funds are transferred into a trust account when an order is placed and paid once the buyer confirms acceptance of the produce. In short, the SP aims to provide a one-stop shop for buyers, with (quality and payment guarantees) who are looking for a variety of products at a competitive price with reduced logistics costs. It is attractive to producers as they reduce their transaction costs by selling directly from the farm gate to the buyer and builds trust through full transparency of costs and stock through the supply chain. The platform charges the seller a fee of up to 5% per transaction depending on the size of the deal and FGX allocates funds to all parties as agreed once the deal is complete.

Spot prices in the market are the guides for daily transactions and whilst the actual transactions on the platform are kept private between buyer/ agent and seller, a history of all prices is kept in the database and average prices are shared with all users. FGX feels that the ability for the seller to have visibility of all of the pricing in the supply chain is critical in building stronger relationships and trust in the industry.

The platform has been successful due to sustained support and benefits for all key industry players. Large players in the market such as Dutoit, Wildeklaar, ZZ2 and Lebombo are the key participants in the platform, and the key beneficiaries. There is no current interaction with, or benefit for smallholder producers.

However, FGX have explained that they will shortly be launching a Version 2 of the platform that aims to run a couple of large fresh produce markets in South Africa and provide structure and control for smallholder buyers and sellers. 50% of fresh produce in South Africa is traded in traditional/informal markets where cash is carefully controlled through cashiers, but there is no structure or standards surrounding price information. FGX are planning to aggregate trading information and control data, workflow and money to create a level of transparency for all.

Observations and Lessons from case studies

There are some key factors that have influenced the design and/ or success of the case study platforms. In reviewing these, we can better understand the approach potentially best suited to the Caribbean market.

1. Supporting existing or creating new business:

E-commerce platforms are most effective in the short term when they are implemented to facilitate established commercial relationships. In the case of FGX, for example, the platform was established to increase the efficiency (and reduce the costs) of existing trade between key market players. In the case of G-Soko, there was pre-existing regional demand for good quality grain, which was satisfied through implementing the platform alongside an infrastructure of warehouses and management to ensure its success. In the case of E-soko, the platform focus has been on providing content to producers, not deploying resource to engaging with buyers who will utilize the producer network. As a result, the trading functionality of the platform is limited, and not self-financing. For trading to increase, time must be spent understanding buyer requirements and facilitating introductions to grow business traded over the platform.

2. Sustainability and Scale

For an e-commerce platform to be successful it requires sufficient income from transactions and/ or other income sources to cover its costs and enable it to grow. Depending on the platform and volume of transactions and/ or users, this can be achieved in different ways

- Commercially successful, public e-commerce platforms, such as eBay, Amazon and Alibaba offer a one-stop shop for a huge range of products, on a global basis. They have evolved to ensure that they become a regular and reliable part of their customers' buying patterns and they derive revenue from transactional charges. The very limited volumes represented by Caribbean markets generally, and the fresh produce sector specifically, **effectively rule out this type of sustainable e-commerce platform without significant on-going subsidy.**
- G-Soko, on the other hand, has developed a large network of warehouses through which high volumes of non-perishable product are traded. The quality control and warehousing services that they offer to customers, as well as the receipt to payment functionality, have filled a gap in the market and repeat purchases from big buyers and a sustainable income for the platform. However, this relies on **non-perishable dry goods** and requires an integrated, centrally managed warehousing infrastructure **that does not exist in the Caribbean.**
- FGX was established with the key players in the fresh produce industry, with established volumes of supply and demand. However, they have recognised that for them to continue to grow they need to make changes that increase the transparency and structure of the informal markets (50% trading volume), and expand their footprint to play an active role in that sector. This is effective in South Africa with the involvement of **large multinational companies dealing with very high product volumes that would make replication in the Caribbean unfeasible.**

- E-Soko's focus on assisting producers has been very successful in building large networks of farmers, which has been used to engage Vodafone to support in establishing a sustainable income for the services that are being provided. However, if the trading platform is to be successful in widening producer sales it must build credibility with buyers. This could be through widening partnerships to include insurance, banking and logistics services to give buyers more comfort in the process. Whilst more suitable to application in the Caribbean due to reliance on small farmers rather than large scale transactions, **E-soko's model represents a significant up-front cost to implement and scale up.**

3. Key partners

All of the platforms have selected partners to support key elements of their functionality. Whilst eBay does not offer its own payment functionality it has partnered with PayPal globally to offer security in this critical area. G-Soko has partnered with the Eastern Africa Grain Council (EAGC) to provide the physical infrastructure and supply chain management for the platform. E-soko has leveraged a deal with Vodafone to allow farmers access to preferential tariffs, allow Vodafone to grow its market share, and to provide a sustainable income for the platform in the absence of trading transactions. A similar approach in the Caribbean will be key if investment in a potential e-platform is considered with key regional service providers in telecoms (e.g. LIME), insurance (e.g. Sagicor), shipping (e.g. Tropical) and banking (e.g. CIBC First Caribbean).

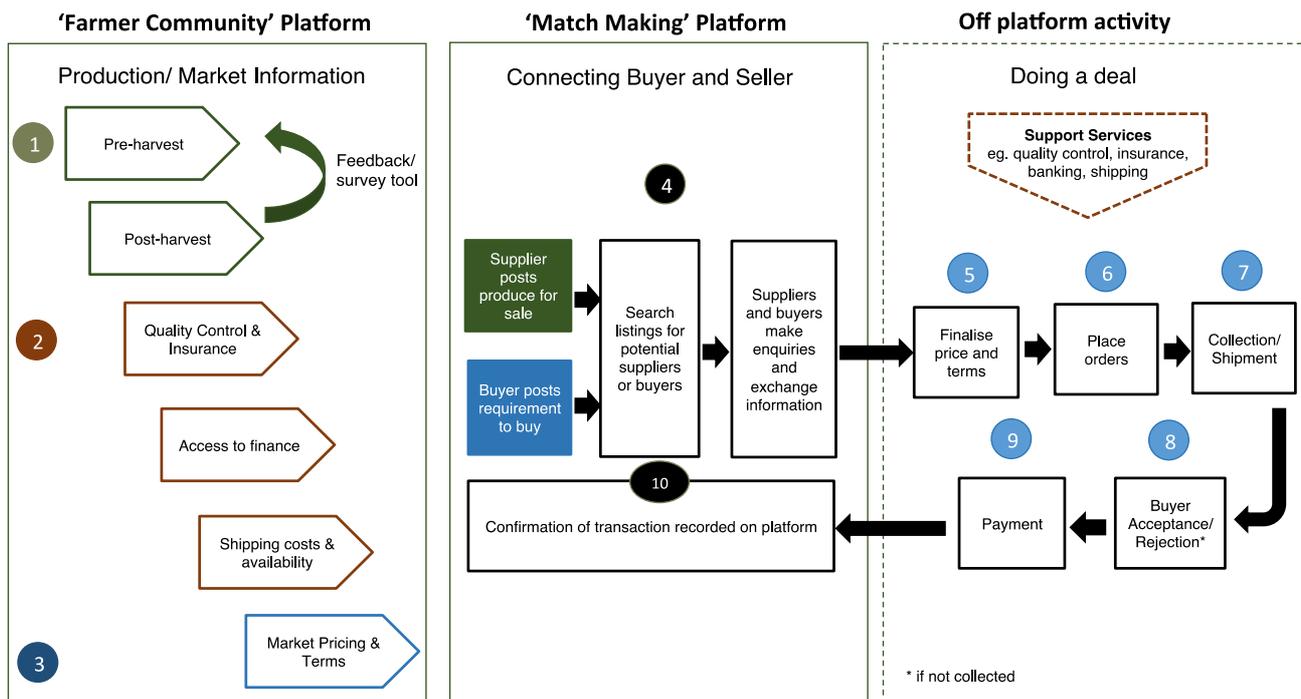
Recommendation for the Caribbean market

Based on case studies and discussions with service providers, HVM buyers, intermediaries and farmers, **this report is recommending that any potential Caribbean e-platform take an approach similar to E-soko, but with a stronger focus on engagement with key partners and buyers to drive pan-regional trade.** This has significant implications in terms of up-front investment and subsidy in the medium term but the platform has strong functionality to connect with and support producers, regardless of scale, as well as the ability to 'match make' buyers and sellers over time. It does not require a physical infrastructure to manage inventory, but has functionality that could engage partners in the provision of critical services to facilitate trade.

Key Objectives:	E-soko	G-Soko	eBay	FGX
Increase HVM Purchases	✓	✓	✓	✓
Increase producer income	✓	✓	✓	✓
Potential to Facilitate pan-Caribbean trade	✓	✗	✓	✓
Improve producer quality & competitiveness	✓	✗	✗	✗
Widen commercial relationships	✗	✓	✗	✗

Ability to connect and support producers is key functionality and income

The implementation would require the leadership of a central team to engage with users and partners and oversee transactions in the short term. The model would minimize overheads by linking suppliers directly to buyers and avoid the consolidation of fresh produce in a 'centralised' or a number of key warehouses. The approach would engage a regional telecoms partner such as LIME or Digicel, as well as regional insurance companies and shipping companies to support producer quality guarantees and/ or effective methods for managing risk during a buying transaction. Key retail, distribution and food service buyers would be fully engaged to ensure the platform meets their requirements. A proposed operating model is summarized below:



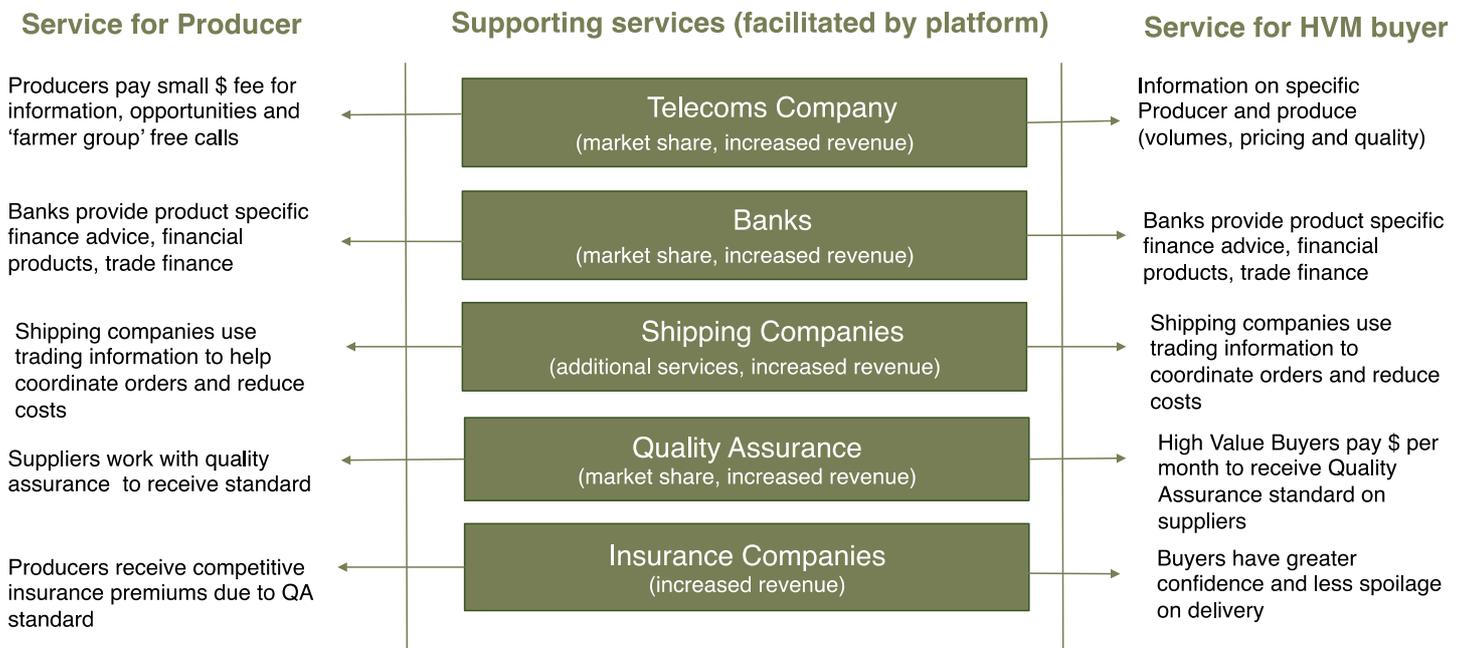
The value add to be created at each stage of the process is highlighted below:

Ref	Value add activity	Process
Information and support to farmers to improve quality ('Farmer Community Platform')		
1	Pre and Post harvest support for farmers to improve quality and yield	<ul style="list-style-type: none"> Understand and disseminate useful information for farmers eg weather updates, disease alerts and advice, harvesting techniques, storage, ripening etc? Potentially offer 'help line' for specific questions Potentially utilise survey tools to ensure information is current and useful
2	Information on support service availability and pricing to support build smallholder capacity and pan-Caribbean trade	<ul style="list-style-type: none"> The platform will establish relationships with banks, insurance and shipping companies to provide information on support services to farmers including short term loans/ micro finance etc finance rates and shipping rates and availability
3	Information on market and farm gate prices to support farmers in negotiations and business planning	<ul style="list-style-type: none"> Latest farm gate, wholesale and/ or retail product pricing gathered from partners, markets, stores and platform transactions.
'Matchmaking' buyers and suppliers		
4	Platform allows buyers and sellers to access new contacts, demands and markets	The platform is open for a subscribed 'farmer community' as well as buyers to post their produce and/ or demand, opening up new contacts and markets. Facilitation from the platform managers will be necessary to build linkages, 'stories' and momentum.
Doing the deal (off platform) with support services		
5-9	A deal is completed by the parties away from the platform	<ul style="list-style-type: none"> The deal can be facilitated by support services such as insurance, banking and shipping. Quality assurance standards, payment and delivery service will be the choice and responsibility of the parties but the platform would facilitate this through 'industry partners' Incentives such as airtime or discounted rates could be used to confirm price of off-line transactions.
Market information		
10	A history of transaction details and user satisfaction is maintained	The details of each transaction is recorded, pricing supports ongoing market information for farmers (non-transaction specific)

The value-add at each stage of the process must be clear and agreed by all users. It is important to fully understand the motivations of the main partners to the platform, and outline their role in the approach and the sustainability of the solution.

1. Role and incentives for key partners:

Key partners and users must play a role in setting up the linkages to support the platform, and be motivated that its use will positively impact their market share and/ or bottom line. The diagram below illustrates potential high level benefits and incentives for users and partners that would need to be fully validated through full engagement and negotiations:



2. Sustainable income

In order to establish a more detailed business case, detailed discussions with farmer groups, service providers and buyers would be required to validate potential volumes and income for the platform. However, outline assumptions are made below for illustrative purposes only. While scaling up a platform to 15,000 farmers is possible within the Caribbean, it will be **highly resource intensive** and represents a **significant stretch target** given the relatively limited number of smallholders across the region:

Platform members and volume	Year 1	Year 2	Year 3
N° Producers	10,000	10,000	15,000
N° HVM buyers	20	100	200
Value of transactions (US\$)	100,000,000	100,000,000	150,000,000
Revenue:			
Buyer subscription (US\$500 per month)	10,000,000	50,000,000	100,000,000
Telecoms (US\$20 per month)	200,000,000	200,000,000	300,000,000
Service Provider income (5% transaction value)	5,000,000	5,000,000	7,500,000
Advertising	10,000,000	20,000,000	30,000,000
Total:	235,000,000	275,000,000	377,500,000

Given the relatively low number of users in the Caribbean compared to global and/ or country platforms in Africa, the platform would also need to establish income sources from services offered to key partners (e.g. insurance, shipping, banking), as well as charge a % for each facilitated buy/sell transaction.

3. Investment and Structure

The proposal would be to establish a NewCo based on the E-soko model, hosted by a key service provider such as LIME or Digicel who could provide existing office and organisational infrastructure to offset start-up costs. This entity would pay a license fee to E-soko, rather than develop a new technology solution and recruit a small, but experienced team to implement and manage the platform. After three years it is expected that the costs of this team would be covered by income from the platform. An outline team structure and indicative costs are outlined below and would need to be validated. The team would need to be a ‘reseller’ or ‘distributor’ of the platform, would have a balance of commercial, IT and agronomy experience, and would access experts (e.g. CARDI at a regional level) and agents in the market to gather data required to support producers and buyers with a small outsourced contact centre:

Whilst these costs are indicative, and have the potential to deliver significant regional benefits, they do illustrate the **scale of up-front and ongoing subsidy required – up to US\$1.5m over three years** – in order to create an effective, world-class commercially self-sustaining platform. In the context of the regional logistics, financing, infrastructure and market challenges faced by the Caribbean fresh produce sector it also represents a **very significant investment risk**.



Cost Category:	\$USD
Resourcing and Staff:	
Platform Manager	100,000
Agronomist	100,000
Call Centre Manager	750,000
IT Manager	250,000
Call Centre Staff x 2	750,000
Market Pricing Agents	24,000
Startup Costs:	
Platform Development	50,000
Content Development	5,000
Infrastructure Costs:	
Small office and associated costs	8,000
TOTAL	1,670,000