

From Implementation to Facilitation: PROPEL adopts a Market Systems Approach

What is a Market Systems Approach?

The market systems approach (MSA) builds on the idea of value chains, but takes a broader approach by looking at the constraints that hinder the establishment of a well-functioning market for a given product, with aims to strategically address the identified gaps. The participants in market systems are broader than value chain participants and include: direct market players (producers, buyers, consumers); suppliers of goods and services (including, but not limited to, research institutions, finance providers, input and equipment suppliers); and entities that influence the business environment through rules and regulations (including government regulatory bodies and business associations).

PROPEL Market Systems Approach

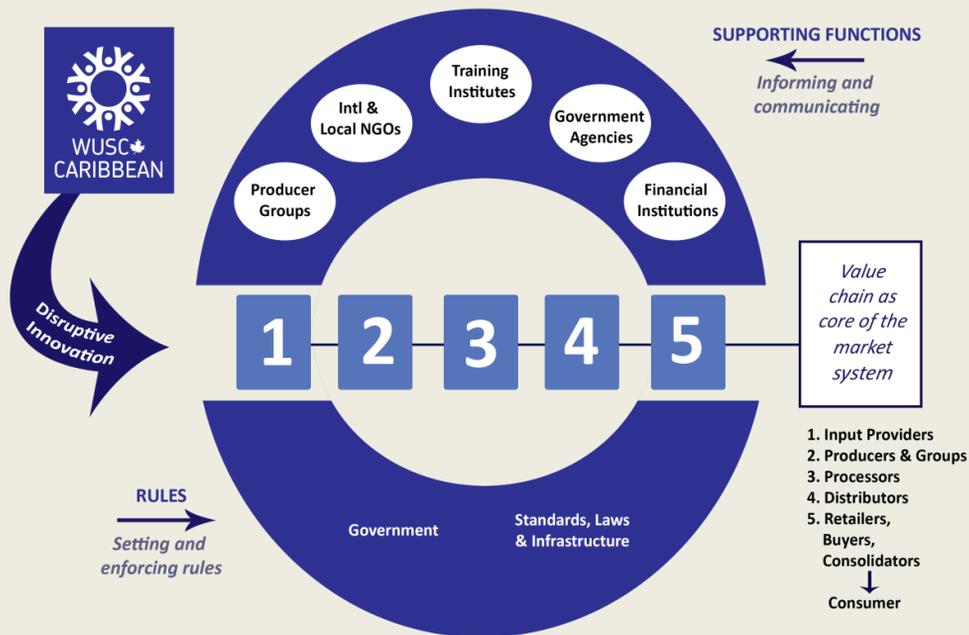


Figure 1: WUSC Caribbean Market Systems Approach

Why and where has it been adopted?

Through the Promotion of Regional Opportunities for Produce through Enterprises and Linkages (PROPEL) project, funded by the Government of Canada through Global Affairs Canada and private donors, WUSC Caribbean is focusing on facilitating the development of market systems in five countries: Barbados, Dominica, Guyana, Jamaica, and St. Lucia.

The objective of PROPEL is to stimulate a process which results in an effective market system for a specific agricultural product, such as ginger, onions, or potatoes. A PROPEL-targeted market system must be competitive and capable of delivering a sustained flow of benefits to a wide range of participants and be able to address and overcome shocks – thus ensuring that the impact of project interventions are sustainable. Assessments of current markets, carried out through stakeholder consultations and PROPEL-sponsored market studies, indicated that a country-specific approach to market-led interventions is required for successful, sustainable project implementation.

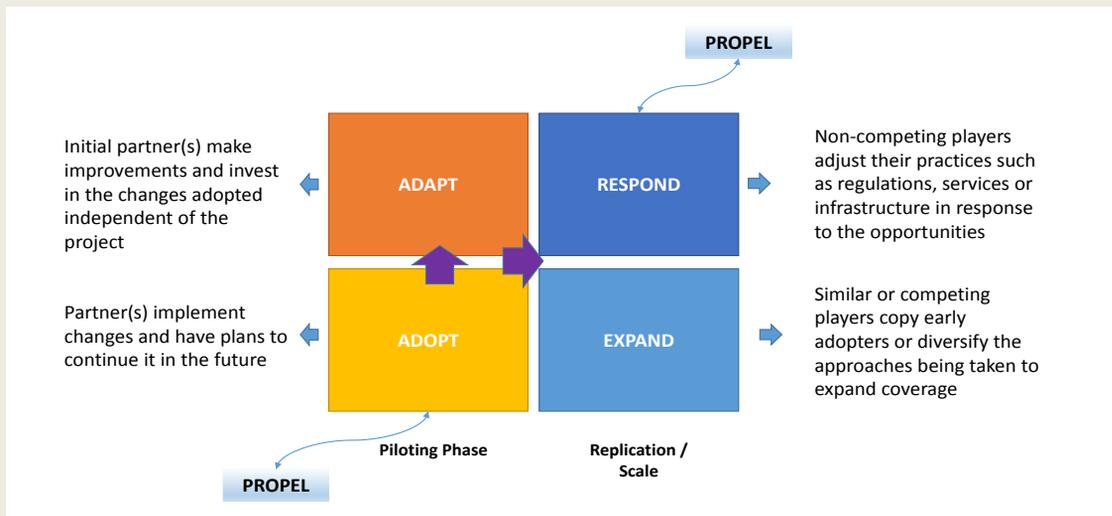
How does facilitating a markets systems approach work in PROPEL?

WUSC Caribbean begins with assessing the market system for a given fresh produce item to get a clear understanding of the incentives off all the participants in the market system and why they might seek to engage in market transactions in a sustainable manner. Participants in the market system can include private sector, governmental and non-governmental institutions, and producers. Each player is assessed based on their potential role within the market, as well as their contribution to the process of ensuring a consistent supply of good quality and quantity fresh produce entering the market system. This approach to engaging market participants is being pursued, not merely on an understanding of their needs, but on how strategic each participant is to the needs of producers and consumers and other participants in the value chain.

The contribution of governments is another important factor to consider in the MSA approach, as the state has a decisive role in facilitating the development of any fresh produce market system. Examples of government action include: direct recurrent investments in extension and research; the provision of clean seeds on a cost recovery basis; the creation of an enabling market environment through policy change; and the removal of bottlenecks.

Private sector involvement plays a critical role in the successful establishment of a given market system. The response of the private sector buyers to opportunities for leveraging more consistent supply, or input and credit providers leveraging market opportunities, are examples of potentially important private sector engagement in a market system.

WUSC Caribbean's role in the sustainable development of a given market system supported through PROPEL is that of facilitating key individuals and organizations to come together as a group to develop and implement strategies from which they can all benefit. WUSC Caribbean does not include itself as part of the group, but rather, as illustrated in Figure 1, contributes from the outside by challenging participants from within the group to innovate for their collective benefit. These individuals and organizations evolve ways or systems for effectively working as a collective. The dynamics of doing business with one another, while interfacing with the institutions and the rules and the regulations to which they must submit, is referred to as the (market) system.



A successful example of a market systems approach used by WUSC Caribbean in the implementation of PROPEL, is its role in strengthening the potato market system in Jamaica.

Since 2015 WUSC Caribbean has been an external facilitator in the sustainable development of the potato market system in Jamaica. In order to facilitate systemic change, WUSC Caribbean carried out a problem analysis that identified innovative interventions to improve how the potato market system functions. It sought to make the system more sustainable through improved participation and resourcing by the key participants within the potato market system and by aligning opportunities and the motivations of all the market players. The pilot interventions initiated innovation and tested behaviour change with partners. The impact and success of the initial pilot intervention extended beyond those immediately involved in buying, selling, financing and consuming as well as beyond the pilot phase. Its aim and success was measured by its ability to stimulate other market participants to: invest; change regulations; introduce more services; or to replicate a proven approach. Widespread change requires that the vested interests of market players are addressed and clear motivations for change are identified and integrated into the process.

A vital part of the success and sustainability of a given MSA-based intervention is to ensure that WUSC Caribbean does not become a key part of any transaction within the market system, but simply triggers innovation that would not take place without PROPEL's support and intervention. Embedded in the approach are both sustainability and exit strategies.

PROPEL generally facilitates two stages of the market system facilitation process:

a) Pilot stage -- piloting has proven an effective approach to test whether identified constraints can be overcome. WUSC Caribbean works with partners to design and implement pilots (e.g. potato varietal and seed quality testing) to determine if the changes identified can be effective. Partners invest financially and non-financially in the pilots and making the changes;

b) Response stage -- once the pilots have proven effective, programming moves to the replication and scaling up phase. WUSC Caribbean facilitates other businesses, who were not part of the initial pilot, to identify and seize opportunities arising out of the pilot, such as improving linkages between producer groups and HVM buyers; or facilitating input suppliers to see and respond to new market opportunities for their products; or for governments to make improvements to the enabling environment for the market to function more effectively in the longer-term.

The Potato Market System in Jamaica



In Jamaica a number of stakeholders, from within the Government of Jamaica, the private sector and producers, joined WUSC Caribbean in examining potato production, marketing, and consumption, as well as in identifying the key issues affecting the existing potato market. Given the problems affecting potato production and the changes required to address the identified gaps, strategies for achieving change were developed through a series of stakeholder meetings, discussions, and analyses. **Key issues identified included: need for extension support and research; better credit markets; access to quality seeds; improved contracting between buyers and producers; access to other inputs; and soil management. Poor seed quality was singled out as a key constraint, partly due to insufficient importation of super elite seeds.** In response, WUSC Caribbean facilitated the design and implementation of a pilot initiative to address these issues with the full participation and ownership of a range of market actors, including: Glastonbury Purveyor Company, Kujuma Traders Ltd.; Christiana Potato Growers Cooperative Association (CPGCA); St Elizabeth Cooperative Credit Union (STECCU); input providers such as Fersan and HI-PRO Ace; the Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF); the Rural Agricultural Development Agency (RADA); and 95 producers. These stakeholders initially agreed to contract with one another for the purposes of producing, buying, storing, and selling seed potatoes.

The pilot: At the beginning of 2014, PROPEL partnered with Kujuma Traders Ltd. to purchase super elite seeds as part of an arrangement in which Kujuma Traders Ltd. and PROPEL would share the costs of a container of super elite seeds to pilot planting with top quality seed. Both Kujuma Traders Ltd. and PROPEL would then ensure producers had access to the seeds through the establishment of contractual agreements with producers.

The initial arrangement was simple: producers accessed super elite potato seeds from Kujuma Traders Ltd. on a contractual and cost recovery basis and they received extension support through RADA. The producers also had an understanding that there was a market for their crop. Following the harvest of the initial crop, buyers would buy and store all of the seeds grown by producers. Once the next crop was ready to be planted, three months later, the stored seeds would be released for sale to a larger number of producers at a profit.



WUSC Caribbean's Alvin Murray training RADA Extension Officers to provide support to potato farmers

The initial trial was not without its challenges. Kujuma Traders Ltd. lacked the physical capacity to store all the purchased seeds, while other players, including the CPGCA, informed seed producers that they did not have adequate cash flow, and were not be able to buy the seeds. Other potato buyers/consolidators (including importers), were approached to buy and hold the seeds for the three months to prevent the high quality seeds from being bought and sold as food. No one player could commit however, as they either lacked adequate facilities or the needed cash flow for the investment.

Expansion of the Number of Stakeholders in the Pilot Phase'

As a result of the above mentioned constraints, all of the produce resulting from the first crop, that was intended to seed a second and larger crop, were potentially up for sale as food instead of seed. The initial pilot to address a key constraint of access to high quality seeds in the Jamaica potato market was heading towards failure. In response, WUSC Caribbean quickly arranged a multi-stakeholder meeting involving key private sector and government stakeholders that could play a role in resolving the issue. The magnitude of the problem and its implications were outlined at the meeting and a consensus was reached that the seeds must not be sold for consumption. A business case was developed to demonstrate how an investor could make a 100% return on investment within three months by buying, storing and re-selling the seeds. Glastonbury signalled their intention to collaborate so that the seeds could be bought and stored for the next planting season endeavor. Within 24 hours of the meeting, the STECCU and CPGCA also signalled their intention to collaborate to save the seeds. STECCU provided credit at an attractive rate for itself and CPGCA to purchase the seeds. CPGCA then sold the seeds at a profit to producers and paid off the loan to STECCU. The outcome of the pilot demonstrated that Jamaica could not only produce its own second generation seeds, but that producers, creditors, consolidators, and storage facilities could improve their earnings. Through multi-stakeholder collaboration and support, the pilot overcame the hurdles to become a success.



Response and Scaling up: The successful adoption of the change in the pilot stage prompted WUSC Caribbean to expand this initiative by facilitating other market players to adopt these changes and/or, adapt their way of working in response to the change. The aim of this initiative was to make more effective utilization of available resources spread amongst market participants through enhanced collaboration, based on the notion that changes adopted could become a permanent feature. Buyers additionally observed improved profit opportunities through an increased supply of better quality potatoes from local production.



Glastonbury Purveyor Company (Glastonbury) was the first company to adopt the change. It supplied producers with inputs (including high quality potato seed) on a contractual basis, and then bought the crop, paying the producers what they were due based on market price, minus the cost of inputs.

Glastonbury had a lien on the crop and was therefore assured of supplies of seeds to meet its own future contracting requirements for the next crop. Since the initial planting season would yield elite seeds, the following planting season was again intended to be based on contracts. However, the purpose of the following crops was to yield

potatoes for food and sales into high value markets (HVMs). Glastonbury would then be able to buy and sell potatoes for food, while at the same time continuing to produce elite seeds on its own.

To trigger innovation, WUSC Caribbean used PROPEL resources to buy improved quality potato seeds to be used to establish contractual relationships between Glastonbury and producers. Based on the proven success of this approach, other buyers, such as Sylvia Tomlinson and Tun Lue, were encouraged to invest in this model, in turn purchasing their own high quality potato seed and similarly contracting producers. **The large-scale adaptation of this model required ongoing facilitation by WUSC Caribbean to work with new and similar types of players, resulting in a second wave of partnerships that allowed for more contracting between buyers and producers and a scaling up in the production of potatoes to meet a greater portion of the Jamaican market demand.**

The increase in contracting led not only to more producers becoming contracted, but encouraged additional producers to become involved as they saw the success of the pilot, as they observed that neighbours who were using better quality seed were producing a larger quantity and a better quality of potatoes, obtained as result of their contracts and access to improved inputs. **Participating producers observed higher yields, larger marketable quantities of potato, higher prices, market preference for their improved quality potatoes and higher earnings.**

Encouraged by the positive results of this initiative, various producers across the island, without PROPEL support, sought to grow potatoes the way contracted farmers were now growing their potato crop. Enabled by PROPEL's support, RADA saw the opportunity through extension and farmer field schools to expand support to all potato producers on the island. This was the first evidence of rapid expansion of potato cultivation.

Within 24 months of the commencement of the pilot, every importer of potatoes in Jamaica was buying super elite or elite seeds, which had not been used in the past, and entering into agreements with farmers to produce potatoes. Even farmers who did not enter into agreements were now also planting higher quality seeds. According to RADA tracking data, Potato yields increased from an average of 12,000 pounds per acre to 17,000 pounds per acre. Small potatoes that were usually left in the field were now being harvested, sold, stored, and used as seeds for future crops. This increased the recovery rate of potatoes from the field by 20%, which further improved yield beyond the 5,000 pound per acre gains noted above.

As the potato market in Jamaica evolved, WUSC Caribbean witnessed the beginning of a "crowding in" effect. Potato was now seen as a crop with profit opportunities from many perspectives e.g. through financial investments, increased extension support, increased opportunity to market inputs, increased and guaranteed produce supplies. This enticement added further diversity to the stakeholders participating in the potato market as more market participants began to respond to these newly found opportunities. In collaboration with RADA, WUSC Caribbean facilitated additional linkages between farmers and input suppliers, to support training on fertilizer and pesticide use as a means to leverage market share by these input suppliers. With the evolution of the potato market system, FERSAN and HI-PRO Ace are now offering soil testing services to potato producers in an effort to market their inputs. Utilizing the results from the soil testing service, the input suppliers are now able to offer producers a particular blend of inputs to meet the real needs of the soil. This helps to optimize crop results while reducing the input costs. It can also mitigate the environmental impact of inputs by reducing the quantities of chemical fertilizers used per unit of land.

The added diversity of stakeholders within the potato market system has further served to strengthen it. Diversity in the system generates decreased dependency on a single stakeholder for any particular role. Buyers have now established their own storage facilities, they continue to offer elite and super elite seeds and other inputs, and are also financing production under contract. STECCU remains involved, and is looking to expand its exposure in agricultural market systems to other crops, including the onion market now being supported through PROPEL. Likewise Glastonbury and other buyers have continued to directly import super quality seeds, adopting the same model first tested through PROPEL.



Training support to RADA Extensionists and producers through Farmer Field Schools was an important aspect of the scaling up the intervention.



Buyers and Agro-processors realize that the "buy local" potato is profitable



Various stakeholders meet at a multi-stakeholder meeting to officially launch the 2017 National Potato Programme led by MICAFA with the active participation of various stakeholders from the market-system, including government officials, research institutions, extension services, input providers, buyers and buyer groups, storage providers, credit institutions, producers and producer groups. (Left to right) Mr. Peter Thompson, CEO of RADA; The Honorable Karl Samuda, Minister of Industry, Commerce, Agriculture and Fisheries; the Honorable Audley Shaw, Minister of Finance and the Public Service; Mr. Doug Graham, WUSC Caribbean Director; Mr. Hugh Gentles, CEO of POPA and owner of Glastonbury Purveyor Company.

Based on the results achieved with the potato market, buyers in Jamaica have established the Potato and Onion Producers Association (POPA) Jamaica Ltd. POPA adheres to an approach based on collaboration, cooperation, and complementarity with other key market actors, including MICAFA. POPA currently has 7 members and is actively encouraging additional buyers, input suppliers, and creditors to join. As an exit strategy, WUSC Caribbean is providing technical assistance to POPA to enhance its capacity to develop into a sustainable player in the Jamaican agricultural sector.

Government's Response & Supportive Enabling Environment

The Ministry of Industry, Commerce, Agriculture and Fisheries (MICAFA) had set a target to meet 100% of the local demand for potato cooked at the household by the end of 2015. It recognized that meeting demand for potato for the fast food sector was not feasible in the short term. With that in mind, MICAFA's response has been to support a production and trade environment to help incentivise local production. MICAFA reviewed its potato import permit process, providing priority to importers who are also involved in supporting the local production of potatoes, to encourage local production among importers.

In addition, both the Bodles Research Station (Bodles) and the Scientific Research Council (SRC), as research agencies under MICAFA, sought to increase their capacity to produce clean planting material locally. This will help to ensure the potato market system benefits from locally-grown clean planting material generated from tissue culture, as well as from imported material and seed varieties.



Alvin Murray participates in the launch of the 2016 National Potato Program launch at Christiana.





Hon. Karl Samuda, Minister of Industry, Commerce, Agriculture and Fisheries (MICA) (second right) and representatives of USAID in discussion with Alvin Murray, PROPEL's Regional Agriculture Coordinator (far right) at the CSA Symposium in Kingston. Minister Samuda inspects the sweet potatoes grown with clean planting material provided through PROPEL.

Lessons Learned

Reflections on the market system approach show that it offers a basis to:

- Identify opportunities for market participants to take action – provision of this service enhances decision making and exchange of information among market players, with the aim of improving the potential for innovation;
- Create awareness among relevant participants (such as credit providers, policymakers, producers, traders, researchers, and extension workers) with respect to the opportunities and constraints that affect their performance as innovators;
- Identify participants and potential participants who do or could act effectively to remove constraints and take advantage of opportunities to improve innovative performance and to encourage their commitment to such changes;
- Offers a strong basis for pursuing coordinated and collaborative action that serves the interests of the different participants; improves information access; and reduces transaction costs;
- Promotes sustainability based on a reliance on market participants rather than on subsidies from outside of the system; and
- Promotes ownership by participants of the processes taking place within the system.

In 2017 WUSC Caribbean has fully adopted the Market Systems Approach in its programming in the region. It has taken the lessons learnt in the Jamaica Potato MSA and applied them in Dominica. They have used the MSA to introduce trials of potato production in St. Lucia and Guyana and plan to do a pilot in Barbados later this year. In 2016-17 the MSA has been applied to other crops and in particular onions in all 5 PROPEL territories. Pilots are on-going with good indications of success.