

## Supporting the potato market system in Dominica:

### PROPEL is helping to expand potato production across the region



Building on its success in bringing systematic change to the potato market system in Jamaica, WUSC Caribbean identified Dominica as a country with significant opportunity for sustainable growth for their potato market. Potato has been an established crop in Dominica for over a decade, however most of the production was centralized in the southern part of the island. Farmers across the island were looking for crop diversification and showed considerable interest in potato production. An opportunity existed to expand production by importing higher quality seed material, (from grade A to Elite). This results in double the volume of seeds per bag with the potential to increase both the quality and quantity of potato produced by each seed.

After consultation with producers, government and other stakeholders, WUSC Caribbean signed a sub-project agreement with Dominica's Ministry of Agriculture and Fisheries in October, 2015 to provide the Ministry with elite potato seeds to distribute to approximately 174 producers, in order to invigorate and expand potato production on the island. Originally the

intention was for the project to cover the differential cost between grade A and Elite seed, however, with the impact of tropical storm Erika the project covered the entire seed costs to support the rehabilitation of the damaged agriculture sector in Dominica. Through PROPEL support, 220 bags of Spunta, 520 bags of El Mundo, and 360 bags of Desiree seeds were provided to the Ministry of Agriculture (MOA). In addition to the seeds, many farmers received farmer field school training on seed management and potato production by PROPEL's Regional Agricultural Coordinator, Mr. Alvin Murray working in collaboration with the MOA extension officers. Some farmers and extension officers from the MOA participated in a study tour to Jamaica to learn best practices and to see how the potato market system functions in Jamaica. This initiative increased potato production in Dominica from 36 acres to 63 acres in the first year.

### This is the story of three female farmers who benefitted from PROPEL's early intervention to catalyse the expansion of potato production in Dominica

#### Dawn Francis, small farmer and agri-preneur from the central mountainous region

Dawn Francis is a 45 year old organic farmer from Corona, St. Paul. She is a strong advocate of permaculture and organic farming and along with cultivating vegetables, dasheens, yams, onions and sweet potatoes; she rears chickens, goats and ducks. Through her membership in the Dominica Organic Agriculture Movement (DOAM), Dawn is working towards local organic certification of her farm's produce. Dawn capitalizes on the location of her farm in the central mountains to attract tourists for Nature Island farm stays, hiking and agro-tourism. Visitors are invited to participate in farming activities and to eat produce and meat produced on the farm. She owns 2 ½ acres and leases another 3 acres for her family farm and tourism business. In 2015 she planted 1 bag of El Mundo seeds on just under ½ an acre. She had planted Desiree seeds previously, but tried the new El Mundo variety, as they could go from farm to table without a period of curing. Despite missing the training from the farmer field schools, Dawn was very excited about her crop exclaiming,



Dawn Francis, agri-preneur

*"the potatoes were big! One day I noticed the stems were falling down, so I dug up a few and they were big and ready. I did not want them to rot, so we harvested them all that day. I don't know if it is our soils, but I think this is a two-month potato crop."*

She was very pleased with the result, claiming a 1:5 return, which she felt was very good. She was able to sell potatoes to the local supermarket and she withheld some which were sold to the Operation Wallacea team, who were staying on the farm during the potato harvest. Dawn has since received post-harvest training through PROPEL and has had extension support from the Ministry of Agriculture. She admits,

*"if I had the training before, I would have had a better harvest, I am very proactive and this time I plan to put in an acre of potatoes as soon as I can get the seeds".*

## Lilian Marcellin, a seasoned farmer gets a boost from cross country training on potato production through PROPEL



Lilian (seen above) reflecting on entries in her farmers diary

Lilian Marcellin is a veteran farmer, working about half of her 10 acre farm in Calibishie, with her husband, for the last 45 years. Lilian traditionally farms sweet potatoes, ginger, plantain, onions, dasheens, vegetables and potatoes and she sells her produce on the local market as well as to supermarkets. She is an active member of the North Eastern Women Farmers Group. In February, 2016 Lilian was selected by WUSC Caribbean for a PROPEL study tour to Jamaica to learn about potato production first-hand, from successful potato farmers and the WUSC Caribbean team in Jamaica. Lilian also benefitted from potato farmer field school training through PROPEL and extension support from the MOA.

As a result of the field trip to Jamaica, the farmer field school training in Dominica and access to the Elite potato seeds, Lilian has expanded her potato crop and is utilizing the techniques learned on the Jamaica tour not just to potato production, but also to farm sweet potato and onion.

*“When I went to Jamaica, I realized that I made a mistake with how I was planting and drying the potatoes – I was planting them left, right, all over the place, mixing up the big seeds with the little seeds, I would have done better if I had gone before to Jamaica to see how it is really done.”*

Lilian planted 4 bags of El Mundo, 4 bags of Spunta and 1 bag of Desiree. She lamented that 3 bags of Spunta were spoiled, but explained that she had planted sweet potato in the same soil and had a similar experience, so she would not plant in that area again. However she was very happy with the rest of crop from which she was able to sell 30 bags – 20 to the local supermarket Greens and the rest in the local market.

*“I love the Spunta and use it in my curry chicken every week. I hope to plant 5 bags of potatoes this season”*



Lilian shows off her potato harvest in the group's drying house

## Rosie Francis - first time potato farmer finds success with her first crop



Rosie is hands-on, working her potato fields in Calibishie

Rosie Francis is a 47 year old entrepreneur from Calibishie. Rosie's family has owned a farm in the area for generations. On her 13.5 acre farm, Rosie has cultivated bananas, plantains, sweet potatoes, yams, dasheens, vegetables, ginger, tannia, saffron, coconuts, cocoa and castor oil. In addition to farming, Rosie owns a well-known local area shop which sells craft items and often her own produce. Rosie also holds down a job with the Government. This industrious lady had been a large banana farmer, but with falling banana prices and after a blight with black sigatoka disease, in late 2015 she was encouraged by her extension officer from the MOA to enroll in the PROPEL farmer field school on potato production to see if it could be an opportunity for her. After training, she was given access to 5 bags of El Mundo seeds, 4 bags of Spunta and 1 bag of Desiree seeds as well as technical support from the WUSC Caribbean team and the MOA extension officer to plant potatoes on an acre and a half of her land. She explained,

*“if I am going to do this (plant potatoes), I am going to do it well.”*

Rosie's first attempt at planting potatoes met with mixed results as an aged member of her family fell and became bed-ridden. With the additional responsibilities she was not able to harvest all of her crop. In total, Rosie planted 10 bags of potato seeds and reaped 60 bags of potatoes, a return of 1:6. As the El Mundo variety ripened first, she was able to harvest all of those potatoes getting "twenty something bags" with which she was very pleased.

*"The land is rich and I got a good result. The IGA (Supermarket) called me. They heard I had a crop of potatoes and they asked for it. I don't have to market my produce. People know me and I have good quality, so I can easily sell it to locals and tourists in my shop or to the supermarkets. I estimate that I tripled my investment, even after having to pay to plough and hill the land."*

Rosie was able to reap and sell some of the other potato varieties as time permitted. So the potatoes would not all spoil, she also gave away bags of seeds to other farmers in the area, encouraging them in turn to try their hand at producing potatoes and to get back into commercial farming. Unfortunately, some of her crop was left unharvested, as she did not have the time or resources to manage it. When asked what she attributed to her success she explained it,

*"I know not everyone got the same results, but I followed what was taught to me at the PROPEL field school. I did not use pesticides, just the fungicide as they showed us. I also applied the t-manure (a liquid fertilizer made from composting animal dung and grass or vegetative matter) which I use extensively on the farm."*

Composting was introduced to this farming community in 2014 to help conserve moisture in the roots of crops in times of drought and also to reduce the amount and/or need for additional fertilizers, cutting costs and contributing to more sustainable agricultural practices.



Rosie on her farm in Calibishie



Rosie (2<sup>nd</sup> on right) with the PROPEL group at the Women in Agriculture Symposium

As a successful potato farmer, entrepreneur and a member of the North Eastern Women Farmers group, Rosie was selected by WUSC Caribbean to attend a 'Women in Agriculture Symposium', sponsored by UN Women, FAO, UWI and PROPEL in Trinidad in mid-April, 2016. As one of the seven women supported to attend through PROPEL, she had the opportunity to share in discussions and learning regarding gender issues in agriculture across the region. She had this to say about her experience at the symposium,

*"It was good to be there, you see that women everywhere have the same issues. Women have to stop seeing themselves as left out of the family or the workforce and get out there and make things happen. I have tried to form a group, to train and employ young women to produce and package craft in a marketable way, but it is difficult. Everyone wants to have a job and get money but they are not all so keen to put in the work and now I do not have the time."*

When asked if she intends to continue planting potatoes, Rosie said,

*"With all the health issues in my family, I am not sure if I can go ahead with potatoes this season. If I can get some help, I will. I booked 30 bags of seeds, but now I wish I had 50 bags! I am trying to get a contract with IGA and I know Greens will buy the potatoes, so we will have to wait and see, but I know I can make good money even though I wish the price was a bit higher. Mr. Green is trying to help the farmers, he can import the potato at a lower price so we have to be happy with that. At the end of day, after all cost, there is still a surplus."*

All three women remain committed to potato production and hope to expand production in the 2016 winter planting season.

As a result of the seed program and training provided through PROPEL in collaboration with the MOA, the first planting season was deemed a success, nearly doubling the acreage of potatoes in production. While not all the farmers cultivated the three varieties provided, farmers seemed to generally prefer the Desiree variety of potato, probably because it was familiar to them in terms of performance and pest issues.

Lessons learned from the first planting season, included: a need for drying facilities in main agricultural regions; need to work more closely with buyers to manage and purchase/market the potatoes; the importance of the MOA to make arrangements or facilitate farmers to acquire tilling machines; and the need for greater collaboration with the Ministries of Trade, Health and Education for the sustainability of the potato market.

To improve production for future potato crops in Dominica, WUSC Caribbean continues to engage with farmers and has held post-harvest consultations and training. In September 2016, PROPEL support provided training and soil testing kits to the MOA extension officers so that they can provide more support to farmers on managing their soil fertility, nutrient requirements, soil/water relations and do soil mapping and testing in-situ.

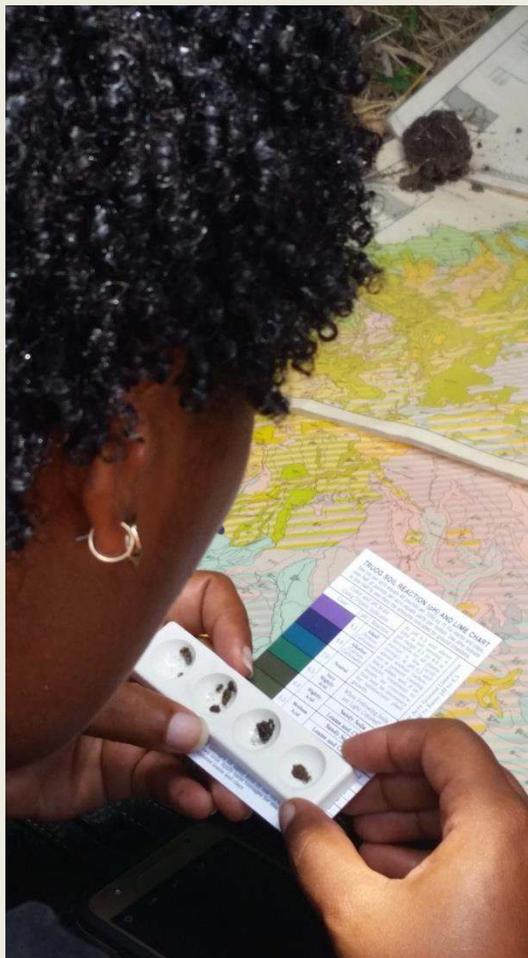


Post Harvest Training in the fields being conducted by the PROPEL team

Additionally, and to support the overall development of the potato market in Dominica, the project has also engaged with the Dominica Agricultural and Investment (AID) Bank to help break down barriers to credit by making available low interest loans for farmers, especially those with contracts, to provide local supermarkets with potatoes.

*"Some of the potatoes were quite small which is a change for Dominica...but customers had commented on the taste, which they said was quite fine and the quality for the most part was good. Farmers were most happy with the yield however, one farmer told me he had a return on 8 or 9:1 which is really good!"*

Paul Green, Green's Supermarkets and Wholesale



Soil Testing Training provided by WUSC Caribbean

Based on the results of this last planting season and the positive response from farmers, buyers and consumers alike, the MOA has committed to continue to import Elite seed for potato farmers to buy. The proceeds from the sale of seeds provided through PROPEL formed a revolving fund for the purchase of seeds for the upcoming crop cycle.