



1. I'd like to thank Adam, Laurie and the other organizers for inviting me to this week's conference. It's wonderful to be back on Prince Edward Island. It's been far too long since I was last here.
2. A couple of years ago, I had the privilege of travelling to Seychelles and Maldives for a series of meetings related to a climate change project I was involved in. As usual on these trips, I tried check out the local food scene by visiting local shops and markets, and talking with vendors and producers. I'm always curious to learn about local food cultures and find new experiences.



3. Well, here's what I found on that trip: chicken from Brazil, wheat and rice from India, sweet potatoes from the United States and apples from France, and water - if you can believe it - from Norway



I learned that Seychelles imports 70% of all of its foods while in Maldives, 100% of the sugar, wheat and rice is imported. I learned that Praslin Island in Seychelles used to grow all of the vegetables for both itself and the main island of Mahe. Today it can't even support itself. I learned that the sixteen poultry farms on Seychelles had been reduced to two, and it was difficult for these producers to compete with the cheaper imported chicken.



And in Maldives, the Brazilian chicken is cheaper than local fish. Think about that for a moment. In a country that has a land area of 298 km^2 within an ocean area of $90,000 \text{ km}^2$, imported chicken is cheaper than local fish



I don't want to leave you with the impression that there were no local products to be had whatsoever but this was a bit of an eye-opener. We tend to imagine tropical islands as places where there is lots of local food available, especially fresh fruits, vegetables and fish. But what I saw in Seychelles and Maldives - the heavy reliance on imported foods - was telling. What I saw here was part of a pattern that's being repeated on other small islands - and indeed in many other regions- around the world. And the implications for local food security could be enormous.



5. I'm going to pause here for a moment for a little food security 101. According to the UN's Food and Agriculture Organization, food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. In other words, food security exists when you do not live in hunger or in fear of starvation.

6. So with that definition in mind, is importing food a problem? Is it an indicator of food IN-security? If you're importing food, you still have access to food. But while importing food is not a problem in itself - in Canada, I think most of us appreciate being able to buy some fresh fruit and veg in January - such a heavy reliance on imports to meet local food needs does raise a number of concerns.



7. Relying heavily on imported food leaves a country vulnerable to external pressures related to volatile global food prices. Increasing food prices hit crisis levels in 2007-2008. Although the prices have moderated somewhat recently, the overall trend is still upwards with prices for both crops and livestock products expected to remain above historical levels. Global food prices are affected by a range of forces including weather conditions, low global food stocks, increasing oil prices, rising demand for biofuels, changing food demand, and speculation in financial markets (like the global economic crisis).



8. Price hikes in foods can also affect nutritional security, especially among vulnerable populations such as the poor, the young and elderly, and women, as people switch from more expensive, nutritionally varied diets to ones higher in cheaper, carbohydrate staples, such as rice and maize. This shift has been contributing to a rise in health problems such as heart disease, diabetes and obesity throughout the Small Island Developing States, or SIDS. I learned that cardiovascular disease is now the number one killer in Seychelles.



9. And what about the role of climate change when it comes to imported food? Global markets can help fill the gap left when a country can't produce all of its own food. But what happens when the crop you depend on fails somewhere else?

10. You may recall that during the world food price crisis of 2007-2008, there were food riots in many countries around the world. While there were several factors contributing to the riots, droughts in many grain-producing regions of world were a significant factor. There just wasn't enough food available. Then in 2010, after an extreme heat wave in Russia that resulted in a significant drop in their grain crops, they instituted a ban on grain exports in an effort to keep the grains for their own domestic markets. Not only did this not bring down food prices in Russia, it also contributed to a dramatic hike in international grain prices. The severe reduction in global grain reserves in 2011 led the former head of the World Bank, Robert Zoellick, to warn that the world was "one shock away from a full-blown crisis." Pretty scary stuff.



11. The Russian heat wave was just one climate event but what happens as global temperatures continue to rise? In their Fifth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) warns that we will experience more extreme weather events, including more intense storm activity, more frequent and more severe flooding, and longer-lasting droughts. They identified food insecurity as one of the key risks of climate change, potentially affecting all aspects of food security, those being food availability, accessibility, use, and food system stability or sustainability.



12. A changing climate means more variability and less predictability in seasons and weather patterns so critical to food production. In Seychelles, for example, I was told that the climate used to be very predictable and stable: light rains at night and heavy rains in December. That is now changing and in 2011 they experienced a 7-month drought, something else that doesn't fit our image of a tropical island. There was no large-scale water storage on the island at the time because until recently, it wasn't necessary.



And of course, a changing climate doesn't just affect food production on land. I was told that one reason that fish is becoming more expensive in Maldives is that, as in so many other places, a warming ocean is causing fish stocks to move further away from their traditional grounds as they search for cooler waters.



14A. A heavy reliance on imports is clearly not a sustainable approach to long-term food security for the SIDS. But why has there been such a major shift away from local food production? Globalization has been a huge driver of the change. Traditional agricultural systems in many places have been replaced by less diverse cash crops and livestock production, often with unsustainable land-use practices.



14B. We see similar pressures on our ocean resources from larger fishing fleets that work to service an international market. With these changes there has also been a loss in traditional knowledge around local food production. At the same time, there is also increasing pressure on both land and sea from population growth and expanding tourism, especially in the coastal zone. And farming and fishing themselves are often no longer viewed as attractive futures among a younger, more mobile population with different expectations in life than what their parents and grandparents had.



13. A report on Pacific island food security sums up the situation facing islands everywhere. It states that the "...future food security...cannot be left solely to dependency on imports. If that is the case, then poverty would increase and the ability of a...nation to deliver on its [sustainable development] obligations would be seriously compromised...Thus, improvements to local food production are pertinent to strengthening resilience, especially in a changing climate regime."



15. So we see that there are many challenges to local food security in the SIDS. But do opportunities exist to overcome these challenges? It was exactly this question that brought leading policy makers and experts in SIDS food security and nutrition to meet in October 2015 during the EXPO Milano, the theme of which was “Feeding the Planet - Energy for Life”. At the meeting, they addressed the issue of food security from many angles including:

- the importance of promoting sustainable approaches to agriculture and fisheries,
- building resilience to climate change and disasters,
- improving rural livelihoods and especially those of women and youth,
- the interface between food security, nutrition and health,
- the dependence on international trade and the need to ensure access to food, and
- the crucial role of partnerships to advance food security and nutrition.



16. The meeting ended with the Ministers and representatives of the SIDS releasing the Milan Declaration on Enhancing Food Security and Climate Adaptation in Small Island Developing States. The declaration outlines the major challenges to food security in the SIDS and emphasizes the need to increase local food production, improve the management and use of natural resources, and adapt to climate change and build resilience to extreme weather and climatic events.



17. A short declaration like this - just 19 paragraphs - does not get into specifics of how to improve food security in the SIDS, nor is it expected to. What it does do is raise the profile of a serious issue at the political level by identifying the challenges for island food security and climate change and provide a framework for action. Indeed, the Milan meeting was seen as a first step in fulfilling a mandate given to the UN's Food and Agriculture Organization to facilitate the development of an action programme to address food security and nutrition challenges in the SIDS.



18A. But does this mean that we have to wait for governments and multilateral organizations to develop such a plan before we can act? I would say, quite emphatically, no. Governments and multilateral organizations such as the FAO clearly have a huge role to play in tackling these large, multi-faceted issues - the so-called wicked problems. But there are already many actions taking place in island communities that such an action plan could build on.



18B. Indeed, one of the most exciting aspects of the Milan Declaration its emphasis on partnerships for local food production. Meeting participants specially highlighted the importance of engaging local communities, including small-scale producers and women, and learning from a wide range of people and institutions to find the best and most innovative solution to the problem at hand. 19. Island communities are already taking the lead on developing local food security. On that same trip to Seychelles and Maldives, I saw many initiatives already underway and many opportunities just waiting for the right kind of support to get them off the ground.



20. I learned that Maldives could be self-sufficient in several crops such as pumpkins, chilies, and eggplants, and a crop such as taro could replace the need for so much imported rice. What they need is a proper assessment to determine what crops can be grown on which of its nearly 1200 coral islands.



21. There's an NGO in Seychelles that has been running a campaign to promote home gardens in a bid to improve local food security. What they need, however, are extension services on seed saving, composting, home remedies for pests, as well as a source for small quantities of seeds for home gardeners. When I shared this story in Maldives, I learned that they also want to foster home gardens and have similar needs for extension services and capacity building. (Vanuatu)



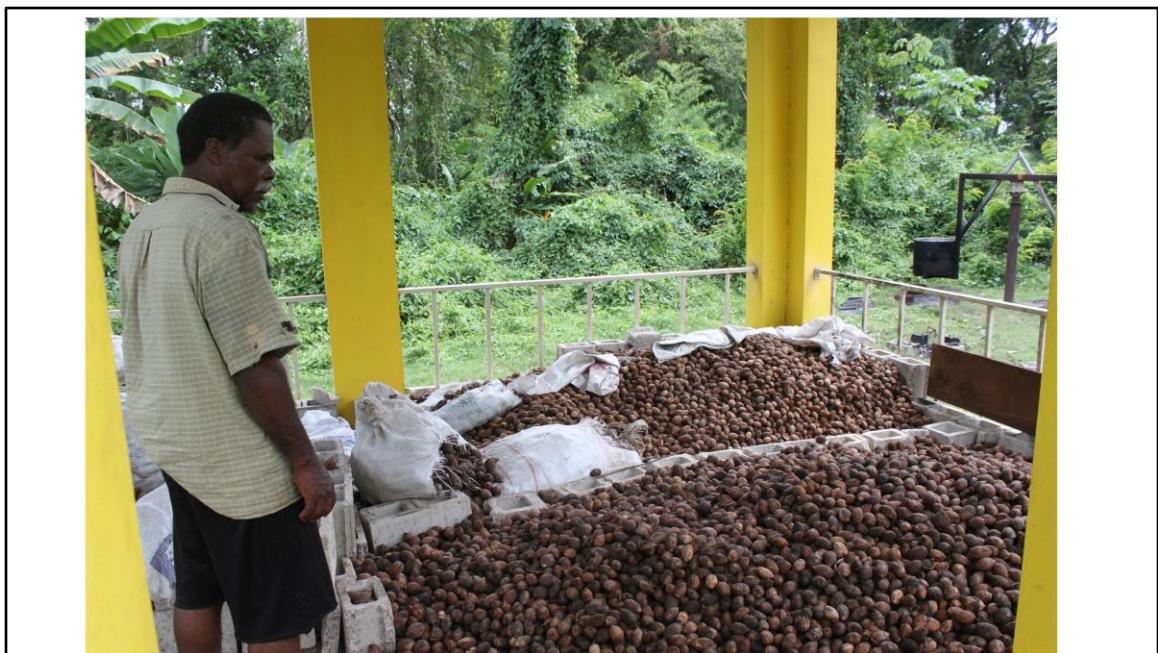
22. There is an interest in looking at traditional crop species and food production methods to see if those can be revived or adapted for today. Both countries have lost many native plant species and recognize that to conserve local genetic resources they first need to document what's left.



23. And this is isn't just Seychelles and Maldives. It's in communities across the SIDS and around the world. One of the hats that I wear is the co-coordinator of Many Strong Voices, a program that links communities in the Arctic and SIDS to address climate change by sharing experiences and learning from each other. We have partners in many countries around the world and enhancing local food security is a major priority for them.



24A. Among our partners are people replanting local mangroves to restore fish nursery areas as well as to reduce shoreline erosion; indigenous farmers looking at cultivating old crop varieties that may be better suited to local environmental conditions and perhaps provide new economic opportunities; communities encouraging the production of mangrove honey and harvesting of mangrove crabs as a way of both protecting their mangroves and supplementing their incomes,



24B. and people trying to develop other agricultural products from local species such as oil from the cohune palm that can be used for cooking, cosmetics, and as fuel, along with by-products such as charcoal and animal feed.



25. The Milan Declaration sets out the political commitment is that is necessary for developing long-term food security in the SIDS. But one of the most exciting parts of the Milan Declaration is its commitment to partnerships and engaging with local communities. As Ambassador Simati, the Permanent Representative of Tuvalu to the UN, said at the meeting: “SIDS communities are knowledgeable after generations of living on their islands, and they need to capitalize on this knowledge—they don’t need partners and other outsiders to intervene as experts. Partnerships should instead be rooted in equality, with the priorities set by SIDS”



26. The bottom line is that there is a lot of knowledge in the local communities of Seychelles and Maldives and islands everywhere that governments should support, learn from, and build on. And therein lies the real opportunity for enhancing island food security: harnessing the energy and ingenuity of island people to re-establish robust local food cultures. It would be a tremendous step that would allow islanders to take the lead in securing their lives, livelihoods and unique cultures in a rapidly changing world.

(And then maybe the next time I find myself visiting the Indian Ocean, I can partake of some Seychellois chicken with a side of taro.)



Thank you!!