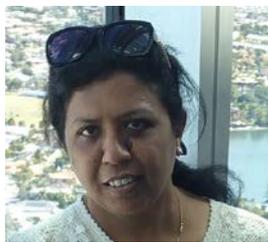




Australia Awards

Australia Award –Africa
2016 Agribusiness Short Course Award

VALUE CHAIN ANALYSIS OF SUSTAINABLE LEAFY SALAD CROP PRODUCTION IN MAURITIUS



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For the last 13 years, Chandranee has been working at the Ministry of Agro Industry and Food security as Senior Technical Officer in the Agricultural Information Division providing policymakers with agricultural information, and recently moved to the National Plant Protection Office (Bio-security). She has a BSc (Hons) in Agriculture, MSc in Information Technology with Management and MSc crop science from the University of Mauritius. After completing her degree, she worked as an Agronomist/Assistant Marketing Manager for about 2 years for a project called “Technology Introduction Development Scheme” whose mission was to introduce new technologies to small farmers. This four year project was funded by the Ministry of Agro Industry under the Economic and Marketing Consultancy Ltd.



Packaged salad leaves

VALUE CHAIN APPROACH

A value chain approach means taking a whole-of-chain perspective from primary producers and their input suppliers, through every stage until the product reaches the end consumer. It examines the flows of products, money and information, with a focus on how these are influenced by the relationships among chain members. Of particular importance is the need to understand markets and consumers, and the state of collaboration among chain members.

A value chain approach highlights how effective partners can align better their skills, resources and behaviour to deliver products and

services to different market segments and to reduce waste, with the resultant financial returns being distributed equitably so as to sustain partnerships within the chain. This improves the competitiveness of each business and helps chain members to recognise their interdependence, and the consequent benefits of solving shared problems.

Detailed advice on adopting a value chain approach is provided in *A Guide to Value Chain Analysis and Development for Overseas Development Assistance Projects*, by Ray Collins, Benjamin Dent and Laurie Bonney, available free at <http://aciar.gov.au/publication/mn178>.

HIGHLIGHTS

- Illustrates how value chain approach can be applied to food service as well as retail, but the priorities for chains and the final consumer may be different
- Exemplifies how VCAs can also result in policy recommendations

CONTEXT

The Government of Mauritius' vision is towards a green economy and ensuring safe food within a sustainable context. There is also growing demand for variety in diet, more nutritious food out of health concerns, and innovative and convenient products to match the modern lifestyle of the population and a growing tourism industry. Farmers are being encouraged and trained to adopt sustainable agricultural practices, including organic farming. Contrasting with the production-driven approach of most government programmes, Chandranee investigated market opportunities in supermarkets and among hotel guests for sustainable salad crops, both to help smallholders improve their livelihoods, and to make recommendations to policymakers.

APPROACH

Chandranee focused on the Riviere du Rempart District in the north of Mauritius, because it is close to coastal areas and hotels that are popular with tourists and expatriates. She began by conducting two consumer focus groups with local shoppers and university students, and also interviewed tourists and observed shoppers' behaviour at supermarkets. She interviewed the supermarket procurement manager, a hotel manager and the head chef to discuss whether offering semi-organic/eco-friendly vegetables would be a strategic advantage, especially if they were locally sourced. She also held discussions with the packhouse's marketing manager, ten farmers, four of whom were women, and input suppliers.

UNDERSTANDING THE MARKET

There was commonality in the attributes that consumers wanted, even if the weighting varied, and the supermarket manager reported increasing demand as shoppers became more health conscious. The most sought after characteristics were:

- Freshness, and long shelf-life (judged by expiry date)
- Taste and crispy texture
- Clean, with a bright green colour and very few blemishes
- Ready to use.

Tourists were much less price sensitive. Chandranee found that "Several commented that health has no price!" Another distinction was that local shoppers did not trust logos, because either they suspect that conventional and 'bio' crops had been mixed together but still certified, or because of doubts about government laboratories. Conversely, tourists had much more confidence in logos in verifying those credence attributes they wanted but could not test for themselves, like the use of chemicals.

Frequency of consumption also varied. Younger local shoppers consumed less frequently than older people (and were more price sensitive), but even older people might only eat leafy salads once a week, whereas tourists reported eating salad every day. Tourists were also more willing to go out of their way to buy healthy food, whereas for local shoppers convenience was critical.

Chandranee's investigations also highlighted the importance of understanding everyone's needs along the chain - "For example, the driver for purchasing decisions at the hotel shouldn't just be price, but also whether there is an opportunity to differentiate themselves from competitor hotels so they can attract more guests and so have higher occupancy rate."

MAPPING THE CHAIN

The supermarket's main consumers were 50% Mauritian (included restaurants) and 50% tourists, expatriates and white Mauritians. It stocked a wide range of sustainable salad crops like lettuce, rockets and mixed salad in packed and labelled bags. The quality audit officer made sure that the vegetables met the required specifications:

- Washed, cleaned and graded
- Fresh and with sufficient shelf-life
- No blemish and yellow leaves
- Labelled semi-organic
- Refrigerated supply chain from farmer to supermarket.

Any product not up to standard would be returned to the supplier. The staff also made regular visits to suppliers, which were mostly companies but included some growers who supplied directly. They were selected based on reliability, consistency, quality and freshness, including using refrigerated transport. Relationships were well established and payments made promptly, so there was no need for contracts.

Leafy salad products were ordered and supplied daily, and were generally sold within two days. After that, unsold produce was sent to landfill since there was no process for recycling or composting. In terms of information flow, the retailer had no formal feedback mechanism for its shoppers, but was in daily contact with suppliers, including receiving updates on availability, for example if there were problems due to disease outbreaks, allowing time to find alternative sources and maintain stocks on their shelves.

The hotel has capacity for 600 guests, and spends 30% of its total budget on food. Leafy salads are offered to guests everyday reflecting their expectations of healthy choices, amounting to about US\$300,000 annually. However, as part of a chain of hotels on the island, procurement is managed centrally, and they have been using the same supplier for the previous 2 years. It is the supplier's responsibility to source vegetables when there is a local shortage. There had been problems initially over timely deliveries and also quality, with some consignments being returned, but problems had been resolved. Suppliers are visited regularly to check on quality, and each daily delivery is checked too.

The hotel has a very similar specification as the supermarket. Guests are invited to make special requests and give feedback at the end of their stay, including about the food, and the head chef is often available in the dining room for informal feedback.

The pack house supplies a range of hotels and supermarkets using its own fleet of refrigerated vehicles. It employs 45 people, and supplements domestic supplies with imports from Egypt, South Africa and The Netherlands. "They have a core group of well trained and reliable farmers that they have been using for over two years, but they were prefer to source more vegetables locally, and would be willing to cooperate to expand their supply-base". Local supplies are sampled and tested in a private laboratory to check for pesticide residues, and provide advice on pest management that is consistent with ecological specifications. If vegetables do not meet their customers' specifications but are still usable, they are donated to charity homes. The pack house relies on supermarkets and hotels to tell them what their shoppers/guests want.

Eight farmers have grouped together to reduce the high costs of labour, and achieve economies of scale in mechanisation and purchasing of inputs. However, they still lack sufficient funds to build their own storage, access to technical advice, and feel there are low incentives to adopt more sustainable production practices. They harvest daily, and sell any vegetables which do not meet the pack house's grades or is in excess of demand, is sold in the local markets. Unsaleable leaves are composted. The farmers got only transactional information from the pack house, but were due to sign a contract with the pack house which reflected a good relationship. Some input suppliers offered them low interest loans to buy bio-fertilisers and seeds.

FINDINGS AND RECOMMENDATIONS

Chandranee concluded that, "The retailer was open to the idea of working with upstream chain members over information sharing, pooling resources or implementing quality systems, but there was less scope for the hotel management because of the centralised procurement."

The government has a responsibility to provide a policy and regulatory environment where members of the chain feel confident to invest in production, processing and marketing systems whose success will contribute to the country's vision for a green economy. For example, this may facilitate the grouping of farmers into co-operatives, providing them with training and support to target growing markets for sustainably produced salad vegetables, such as for the hotel, expatriate and tourist trade. This could also have flow-on benefits. "Hotels can organise visits for the guests to the farms where the sustainable vegetables are grown and they can spend time visiting the farms and talking with the local farmers." Over time, production could expand to other vegetables and even to exporting to other African countries. The aim should be for "value chain actors to work together to create value and reduce waste thereby improving the livelihood of all actors." (Chandranee Devi Moorlah).

If the pack house sought more feedback and suggestions from hotel guests and supermarket shoppers, it might well identify opportunities for developing new products.

"To improve the flow of information between the chain and end consumers, there should be some investment in product brochures both in-store and online, encouraging scope for feedback and suggestions to inform new products." (Chandranee Devi Moorlah)

Both the hotel and supermarket could differentiate themselves through CSR programmes which promote their local sourcing of sustainable vegetables, including leafy salads. For the hotel, this could extend organising visits for guests to visit farmers, which might allow farmers to generate extra income by offering meals to visitors, as well as getting direct consumer feedback about ideas for diversifying into different varieties and crops.

"The government might also take more of a value chain approach. Alongside its support for increasing production, it could promote consumption of sustainable vegetables for the good of people's healthy as well as the environment. This would also contribute to Mauritius' strategy for promoting itself as a green tourist destination." (Chandranee Devi Moorlah)

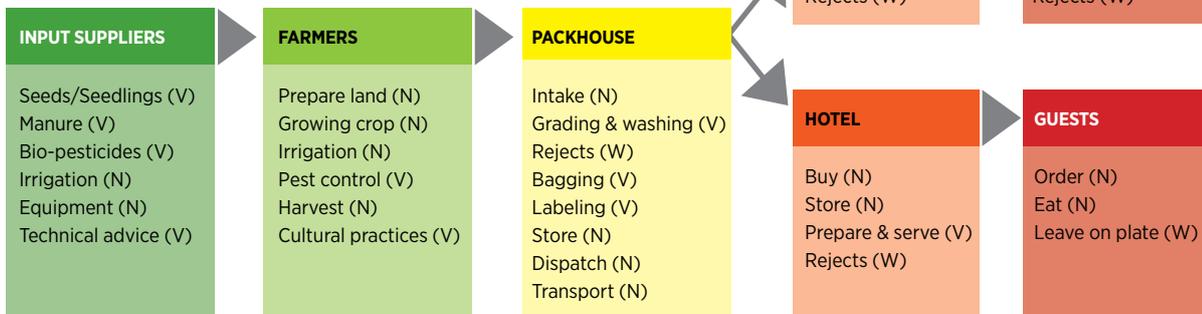
Another policy recommendation was to provide training in value chain management, and not just to farmers - "Government training usually focuses on improving production, but it would great if it could also facilitate meetings between potential value chain partners; present some consumer research and then help the chain to create a collaborative action plan." (Chandranee Devi Moorlah)

LESSONS

Chandranee found that tracking down who to meet, and then making appointments requires persistence, "Especially at the beginning of a project, when people can be sceptical of its potential benefits to them. You may need to invest time in explaining the bigger picture to someone in charge, but once you have them onside, they can ensure their colleagues make time to meet you."

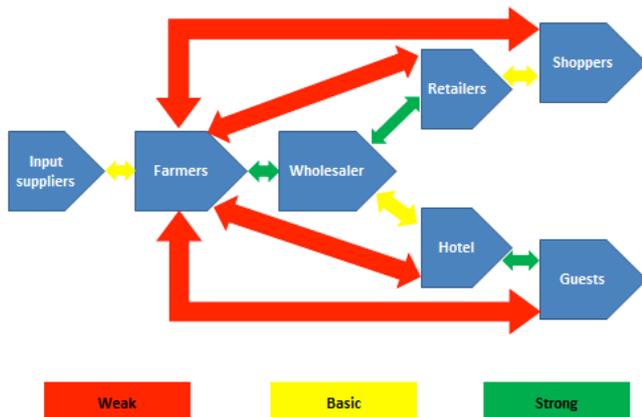
Logos and certifications on labels mean very little unless consumers trust them. Even government certifications need to earn this trust.

"Upstream firms like pack houses often rely on supermarkets for feedback from shoppers rather than conducting their own consumer research. However, they need to recognize that supermarkets are dealing with thousands of products, and so have limited time and interest in particular products and how to create more value from them." (Chandranee Devi Moorlah)

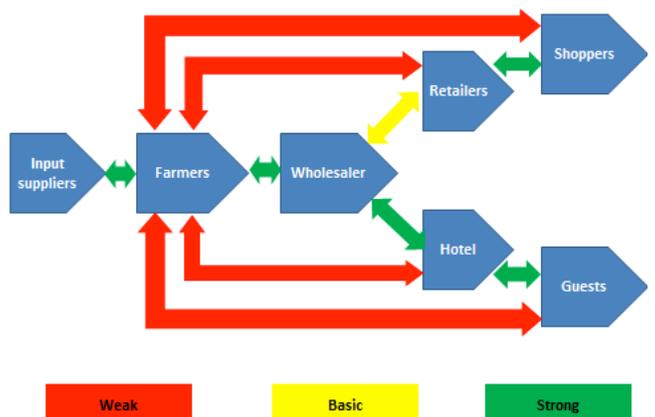


Key
 V = activity with scope to create consumer value W = activity currently creating waste N = necessary but non-value creating activity

Map of Information Flow



Map of Relationships





Signage to indicate organic fruit and vegetables



Shop assistant in supermarket



Australia Awards

AUSTRALIA AWARDS

The Australia Awards, delivered under the Australian aid program managed by the Department of Foreign Affairs and Trade, are prestigious scholarships offered by the Australian Government to individuals who have the greatest potential to drive development in their country and become leaders in their chosen field. Australia Awards contribute to the achievement of development objectives across a range of sectors and are a feature of nearly all of Australia's bilateral aid programs. The Australian Government works closely with its partners in developing countries to ensure that Australia Awards support the development priorities of each country.

They aim to:

- develop capacity and leadership skills so that individuals can contribute to development in their home country;
- build people-to-people links at the individual, institutional and country levels.

Australia Awards' Short Courses are a tailored program that aims to create skills development through short-term post-graduate training courses of three months or less that are delivered in Australia and/or the country or region specific to the course.

Australia Awards: <http://australiaawards.gov.au>

Australia Awards Scholarships: dfat.gov.au/people-to-people/australia-awards/Pages/australia-awards-scholarships

AUSTRALIA AWARD –AFRICA 2016 AGRIBUSINESS SHORT COURSE AWARD

The Agribusiness Short Course Award, designed by UQ International Development (UQID) specifically for Awardees from 10 African countries, provided learning experiences related to Agribusiness to enhance participants' ability to engage with and influence challenges regarding sustainable economic development in their home country, profession, workplace and community. Key features included using Value Chain methodology as the context around which the curriculum is delivered. The program balanced content and experiences to maintain engagement and interest, and enabled Awardees to access value chains of major Australian agricultural industries from a South-East Queensland training base. Furthermore, the course collaborated with African partners' during the course design phase to ensure participants were supported upon their return to Africa.

The course comprised of 8 x 1 week long learning modules: Week 1 – The Value Chain in Context; Week 2 – Value Chain Innovation in Practice; Week 3 – Smallholders and Small Business; Week 4 – Public Sector Perspectives; Week 5 – Analysing and Improving the Value Chain; Week 6 – Professional Skills for Agribusinesses; Week 7 – Business Development; Week 8 – Rapid Value Chain Analysis.

Awardees developed a Work Plan on Return (WPR) which detailed a unique project outlining an area of change that they will be addressing when returning to their organisation. These projects are devised with the expert knowledge and learnings gained from the course and enable the Course Leader, UQID and Australia Awards to monitor and provide feedback during various stages of the project.