## **Supply Chains**

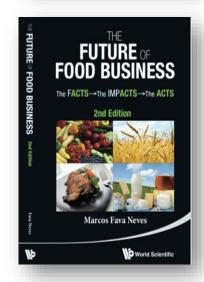
RAD2402 – Strategies in Agribusiness Chapter 41

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The world is worried with sustainability of supply chains?





## CLIMATE, CONFLICT AND GLOBAL FOOD SYSTEMS

**Findings and Recommendations** 



For the latest on global food security, as well as information, videos and testimonials from the game, please visit: FoodChainReaction.org















Food Chain Reaction exposed three critical gaps in global food systems. In order to create a more resilient, food-secure future, these gaps must be closed.

## 1

#### Addressing the Knowledge Gap

Develop a real-time global food security dashboard that allows public- and private-sector decision-makers to detect and address disruptions to the global food system before they occur. Engage a trusted global agent to collect and maintain data in a transparent manner.

- The dashboard incorporates existing datasets, and supplements them with data about resource scarcity; food supply and demand; food stocks, demographic trends; nutrition; the availability, usage and rights to land and water; production trends; a global inventory of degraded lands and other factors.
- The dashboard serves as an early-warning system for food system disruptions; it identifies at-risk areas, and tracks tipping points that may lead more severe crises.

- The approach requires countries to report transparently about their food stockpiles, agricultural and food subsidies, land leasing relationships, and efforts to reduce agricultural-related emissions which will help food producers plan for future production in the face of climate impacts.
- Efforts to boost productivity must be concentrated in low-income countries, where population growth will be faster, climate impacts harsher, and demand for protein will increase due to economic growth.

# Addressing the Productivity Gap Increase agricultural productivity in low-income countries in a sustainable manner, while minimizing its impact on the environment. Focus public, private and multi-lateral investments on research, improved farm inputs, expanded extension services, and in the physical infrastructure needed to more efficiently store and move food from production to demand areas.

- Invest in degraded lands to restore their use for agriculture. Reduce further destruction of valuable natural areas, such as tropical forests and conservation lands, for food production.
- Develop a global food waste reduction strategy. Invest in infrastructure to improve food storage, transport and delivery systems. Establish global standards for measuring and reporting food waste.
- Drive broad adoption of "trailing edge" agricultural technologies, which can maximize efficiencies and output and minimize environmental footprint. This will allow low-income countries to boost their production significantly, even when "leading edge" approaches are not available.

- Adopt climate-smart and sustainable agricultural practices to grow output and mitigate the impacts of climate change on food production. Widen the use of precision agricultural techniques, climate-tolerant crops, improved water and soil management tools, and advanced inputs.
- Expand targeted agricultural extension services to help farmers improve their crop management practices.

## "THE 'NEW NORMAL' IS VOLATILITY."

Molly Jahn, Ph.D., University of Wisconsin Team: Adjudication Cell

## 3

#### Addressing the Collaboration Gap

Create specialized forums to enable better decision-making in times of crisis, introduce long-term measures and engage public- and private-sector decision-makers on global food security issues.

- Improved coordination must lead to collaborative and sustainable global trade policies, greater integration of climate actions and food policies, and better management of the geopolitical implications of climate and food security issues.
- International trade policy-makers at both the multilateral and bilateral levels should take into account the potential impacts of their actions, such as tariffs, export restrictions, and subsidies on food security.
- Nations must fully implement agricultural emissions reduction programs to meet their climate commitments under the Paris Agreement. Private-sector actors have a responsibility to contribute to reducing carbon emissions in their operations.

- Leaders should investigate the possible implementation of a cross-border carbon tax and/or carbon emissions trading schemes.
   Gain a better understanding of the benefits and consequences.
- Food security should become a more integral element of nations' foreign policy considerations, with a focus on reducing food insecurity as a root cause of instability, conflict and human migration.





## What are the leaders doing?

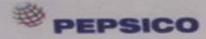




## What are leaders doing?

Become

Market



Logistics excellence Financial discipline Customer teams Performance with Purpose

Orchestrate the Demand-Driven Response

Supplier Segmentation Commodity/Category Mgmt Innovation Funnel



DOW CORNING

Driven

Design and Deliver the Customer Experience

**Build Value into** Supply Networks

Schlumberger

**Global logistics** Supply chain talent **Technology Centers** 

Customer segmentation Channel management

Cost-to-serve



Lean programs **Network Design** Sustainability S&OP

**Drive Innovation** Into Products and Services



Design for supply 14/02/2011 07:54



Lets warm up with a case in the vegetable industry?































#### What we do

The UNIVEG group of companies is a worldwide supplier of fresh produce, active in the fields of Fruit & Vegetables, Flowers & Plants, Convenience products, Transport & Logistics.

The UNIVEG group has operations across 4 continents and serves a global customer base in 25 countries; it generated a turnover of EUR 3.3 billion in 2009 and currently employs some 9,500 people.

UNIVEG has 2 focused Business Units: Fruit & Vegetables and Convenience & Non-Food. This structure creates various. synergetic effects, which enhance the efficiency of both sales and quality management.

**Key facts & figures** 

Turnover: EUR 3.3 billion in 2009 Workforce: 9,500 people worldwide

**Presence**: the UNIVEG group serves a global customer

base in 25 countries, across 4 continents











## Our strategy

#### **FRUIT & VEGETABLES**



UNIVEG's strategy is to bring a broad and well balanced line of secure, high-quality fruit and vegetables to strategic retail customers. This is made possible through detailed knowledge of our customers (their F&V strategy, goals and people) and ever increasing control over the entire value chain. In an environment of increasing (and differing) demands on the part of retailers, UNIVEG has the tools to continually meet these.









Citrus fruit



Organic produce



Deciduous fruit



Stone fruit



Fairtrade









## **Univeg – Growing Areas**





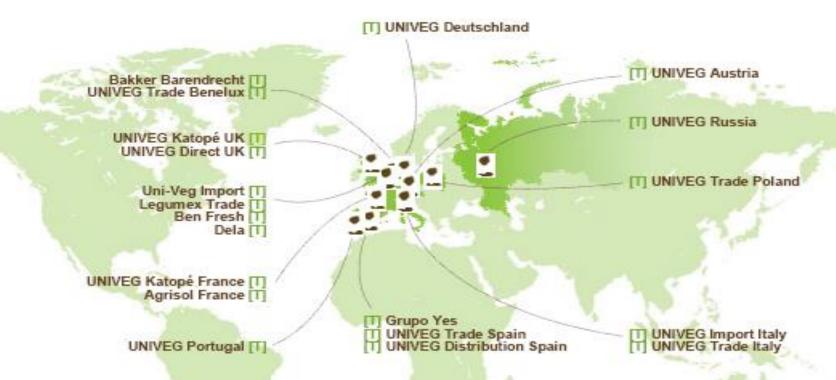








## **Univeg: Trading and Service**









ABOUT US OUR ACTIVITIES SUSTAINABLE DEVELOPMENT QUALITY & INNOVATION MEDIA CAREERS

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Contact

EN DE NL ES FR

FRUIT & VEGETABLES	
Our strategy	
Our products	
Our markets	
Our sourcing areas	
Our product brands	

CONVENIENCE

FLOWERS & PLANTS

TRANSPORT & LOGISTICS

#### Fruit & vegetables

The Fruit & vegetables business covers the entire value chain in the Fruit & Vegetable Category for supermarkets:

- Production: growing, packing, sourcing, quality control etc.
- Logistics: export, overseas shipping, import, long and short-haul freight, delivery to the retailers' warehouse or individual stores
- All related services such as packing, Category Management, private labels and special projects



#### Company profiles

Companies active in Fruit & vegetables:

Search this site ...

Country	•	Company

Argentina	UNIVEG Expofrut Argentina
Austria	UNIVEG Austria
Belgium	Ben Fresh
Belgium	Dela
Belgium	UNIVEG Import Belgium
Belgium	UNIVEG Legumex Trade
Brazil	UNIVEG Expofrut Brazil
Brazil	UNIVEG Katopé Brazil
Costa Rica	UNIVEG Katopé Costa Rica

#### **CONVENIENCE**



**UNIVEG Convenience** covers a wide range of fresh cut produce and meal solutions catering to every taste. It is a specialist supplier of ready-to-prepare vegetables, salads, meal salads, ready-to-eat meals, ready-to-heat meals, soups, meal components etc.

It operates state-of-the-art manufacturing plants in Belgium and the USA.

The company's unrivalled product capability, culinary competence and operational flexibility enable it to develop meal solutions tailored to the customer's requirements, in line with the characteristics of each particular market

UNIVEG Convenience consistently puts a great deal of effort into developing new products, with a strong emphasis on healthy dishes.

#### **Brands**



#### Fresh-cut produce for retail and foodservice



Leafy salads



Lunch time salads



Side salads



Prepared meals

#### **TRANSPORT & LOGISTICS**

#### Our services



- International transport, overland or short-sea
- Retail consolidation centres: consolidation points for fresh produce
- Retail distribution centres: goods reception, storage, order picking and shipping
- Local transport and groupage
- Packing of fruit and vegetables (nets, trays, bags, weighing & labelling)
- Ripening rooms (bananas, mangoes, avocados etc.)
- Returnable crate centres: sorting, washing, flow management.

#### Our core competencies

- High-quality services for all temperature-controlled products
- Multi-customer sites, enabling high performance at low cost
- HACCP, BRC, IFS, ISO-22000 certification.
- Online temperature tracking during the entire supply chain
- Multi-temperature trucks for optimised deliveries
- State-of-the-art warehouse management systems, featuring automatic exchange of information with customers' systems
- A committed team, eager to meet your demands and to exceed your expectations









PELL APART HERE ENJOYBY A30810BA193 > PULL APART HEK! < EAS! WASHED ENJOY BY & MEDO 11-12-13 RESERVATIVE A301100315:37 THOROUGHLY & GANADA CHATUHAL PRESERVATIVE FREE ALL NATURAL ESE Salad Guide TASTE SWEET & SURTEEN LINE TASTE & PORTER Romains - Currets - Red Cabbage CLASSIC ROMAINE Salad G YASTE SWEE, & SUUTLE and Gorgonzola C CLASSIC ROMAINE Pairs well with Balsamic Valarirette, grilled pork, Roma tomatoes, Italian olives CLASSIC ROMAINE CLASSIC ROMAINE Cities POLE CLASSIC ROMAINE SLD 19 09/11/2013 DOLE CLASSIC ROMAINE SLD 402 2.49 OTTIA STUBBLE 3.99























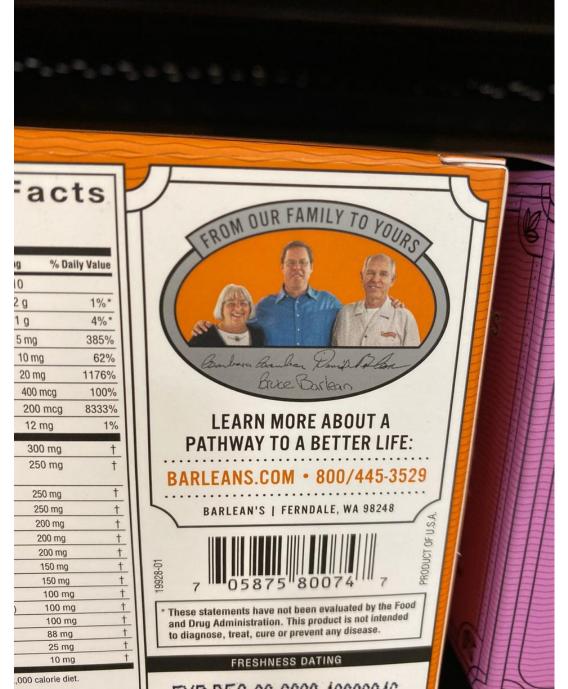






























How can we organize the supply chain planning and management in a strutured method?





### Understand the Company's Integrated Supply Chain Structure

- ✓ Major inputs (products or services) purchased or internally produced;
- ✓ Costs involved (procurement costs, handling, transaction costs, stocks);
- ✓ Way that the transactions are done (governance forms, like contracts, markets and other forms).

## **2** Market Analysis of Major Inputs

- ✓ Number of suppliers, products, brands, channels, prices;
- ✓ Concentration of suppliers;
- ✓ Selling behavior of suppliers (transactions);
- ✓ Services offered by suppliers;
- ✓ Locations;
- ✓ Major macro-environmental risks.

### **Q** Diagnosis of Each Input of Company's Integrated Supply Chain

- ✓ Company acquires x market characteristics;
- ✓ Resources given x benefits;
- ✓ Single supplier x multiple suppliers
- ✓ Degree of sophistication of the relationships;
- ✓ Vulnerabilities and risks;
- ✓ Degree of dependence on specific suppliers;
- ✓ Priority list for interventions;
- ✓ Long term goals of the Company and traditions;
- ✓ Internal resistance to change (cultural aspects and barriers).









## Proposal of a Governance Structure for Each Input

- ✓ Analyze economics and margins and value capture possibilities;
- ✓ Specialization gains;
- ✓ Reversibility if needed (technology switch) and adaptability;
- ✓ Building entry barriers for competitors;
- ✓ Promote development and inclusions and with this accessing public credit lines

## **5** Building the Contract (Relationship)

- ✓ Negotiation and how to consider macro-environmental changes;
- ✓ Regulation of products, services, communications, payment and information flows;
- ✓ Analysis of specific investments needed and the risks associated to these investments
- ✓ How to promote incentives and share results of competitiveness gains.

## 6 Management of the Relationship

- ✓ Governance forms, with boards and external evaluation committees;
- ✓ Search for continuous transactions costs reductions;
- ✓ Sharing benefits of experience curve and innovation gains and sharing;
- ✓ Continuous benchmark process and evaluation of alternatives;
- ✓ Bringing motivation and avoiding the risk of accommodation;
- ✓ Sharing open communication platforms;
- ✓ Flexibility and responsiveness improving services and support;
- ✓ Promoting networking and cooperation for learning and benchmarking;
- ✓ Permanently increasing trust.









### In What Should We "Think About" When Developing Our Supply Chain

COST	RELATIONSHIP	OTHER DIFFERENTIAL
<ul> <li>✓ % of inputs in total production cost</li> <li>✓ Knowledge/technology</li> <li>✓ Global Sourcing</li> <li>✓ Scale in Buying</li> <li>✓ Efficiency of suppliers</li> <li>✓ Innovation</li> <li>✓ Competition of suppliers</li> <li>✓ Avoid supplier concentration dependence</li> <li>✓ Quality/security</li> <li>✓ Inbound logistics</li> </ul>	<ul> <li>✓ Collaboration</li> <li>✓ Coordination (flexibility and responsiveness)</li> <li>✓ Transaction costs</li> <li>✓ Information Flow</li> <li>✓ Simplicity</li> <li>✓ Control/predictability</li> <li>✓ Year round supply</li> <li>✓ Look at the best (brands of suppliers)</li> <li>✓ Fairness</li> <li>✓ Ethics and behavior of suppliers (supplier code of conduct)</li> <li>✓ Stimulate benchmarking</li> <li>✓ Building committee</li> <li>✓ Trust</li> </ul>	<ul> <li>✓ Stimulating inclusion</li> <li>✓ Certifications</li> <li>✓ Direct connection</li> <li>✓ Buying local</li> <li>✓ Environmental issues         (energy, water, carbon, waist)</li> <li>✓ Social issues of suppliers         (treating employees, community, etc.)</li> </ul>





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ess (FEARP) of the University of São Paulo (USP) and FGV Business School, both in Brazil. He graduated as an agronomic engineer from /USP - Piracicaba in 1991. He earned his master's degree in 1995 and his doctorate in management in 1999 from the FEA/USP School of mics and Business — São Paulo. Marcos completed postgraduate studies in European agribusiness at ESSEC-IGIA in France in 1995 and in
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/networks at Wageningen University, in the Netherlands (1998-1999). In 2013 he spent the year as a visiting international professor a
e University (Indiana, USA) where he maintains the linkage as a permanent International Adjunct Professor. Since 2006 he is ar
ational professor at the University of Buenos Aires, Argentina.





- Also as an experience in the private sector, from 1992 to 1993 he worked in citrus juice exporter and from 1994 to 1995 in a veterinarian company. In 2008, he became CEO of Brazil's second-largest biofuel holding company, a position he occupied until 2009, when he returned to the University of São Paulo (USP) and Markestrat.
- At the academic side, since 1995 (when he was hired by USP), Marcos has advised more than 30 doctorate dissertations and master's theses and helped to form around 1200 Bachelors in Business Administration in Brazil with around 120 courses taught to undergraduates at USP.
- His writings are strongly focused on supplying simple and effective methods for business. He has published more than 100 articles in international journals and has been author and editor of 63 books by 10 different publishers in Brazil, Uruguay, Argentina, South Africa, Singapore, Netherlands, China, the United Kingdom and the United States. He is also a regular contributor for China Daily Newspaper and has written two case studies for Harvard Business School (2009/2010), one for Purdue (2013) and five for Pensa/USP in the nineties. Recognized as the Brazilian academic with the largest number of international publications about orange juice and sugar cane chain and one of the top 3 most cited Brazilian authors in the area of food and agribusiness. He has reached more than 4000 citations in Google Scholar index.
- Marcos is one of the most active Brazilian speakers, having done more than 1050 lectures and presentations in 25 countries. He received around 150 recognitions from Brazilian and international organizations, and is considered a "Fellow" of the IFAMA (International Food and Agribusiness Management Association), title received in Minneapolis 2015.
- Coming from a family of farmers, he is a worldwide defender of agriculture and farmer's role in the development of the society. In the social side, together with his parents, Marcos is one of the creators and maintainers of Mucapp, a NGO that in 20 years has built more than 450 houses for families in Brazil that face very unfavorable conditions.





