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## *ADAPT Council Industry Newsletter*

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### **Atlantic Canada Network on Bioactive Compounds (ACNBC)**

On Wednesday July 13, 2005 the ACNBC held a lunchtime Bioscience Networking Session at UPEI. Rory Francis, Executive Director of the PEI Bio-Alliance opened the meeting. He introduced "Bioscience" as a new economic sector for PEI. The rationale for developing this new sector is in recognition that traditional primary resource industries are limited in the growth potential and may be in decline. Knowledge and innovation represent the new growth sectors for the future. Bioscience has the potential to carry our traditional industries in a more prosperous direction.

In order to be successful the PEI Bio-Alliance needs to attract and retain new people, increase core competencies of the existing workforce, identify research dollars, develop infrastructure and partnerships.

The PEI Bio-Alliance is developing a strategic plan from which they will assess priorities, develop a plan to focus on branding, developing collaborative efforts and measuring their results. Dr. Kathy Gottschall-Pass, UPEI Family and Nutritional Sciences, spoke of research that she is conducting on extractions from PEI blueberries and rose hips in order to develop new health products which are high in antioxidants and dietary polyphenols

Gary Reid of Biovectra ( a division of DCL) addressed the group by telling them that the "Bio-pharmaceutical industry is "booming." Biovectra focuses on the development and manufacturing of biochemical and enzymes.

Note:

Rory Francis has confirmed that he will be the lunchtime guest speaker at the July 28 ADAPT Board meeting.

### **PEI Value Chain Workshop July 21, 2005**

#### **Stanley Bridge, PEI**

This workshop, hosted by the PEI Fed. Of Agr. Farm Income Improvement Committee and funded in part by PEI ADAPT was very well attended with representatives from Beef, Horticulture, Potato, Hog, Fed. Of Agr., Future Farmers, Agr. Tourism, Food Trust, Dairy,

Blueberry, Organic, Canadian Council of Grocery Distributors, federal and Provincial Government, ADAPT and the ADAPT Value Chain Advisory Committee.

The session was facilitated by Paul MacInnes, who has extensive experience as a VC consultant. He explained that the need for VC's is growing due to the expanding market share losses that are being incurred by the traditional retail suppliers. These market share losses are being incurred due to the consolidation of the industry players, impacts of globalization and specifically the overwhelming dominate influences of Wal-Mart.

Value Chains allow alliances to form that can focus on product quality, service, human values, convenience and equity throughout the supply chain; concepts which the big box discount suppliers cannot effectively deliver on.

**In order to succeed, suppliers need to:**

- Develop new and unique products (things that Wal-Mart and discount suppliers don't sell and cannot get),
- Increase speed from development to market,
- Find solutions to reduce retail costs (i.e. returnable totes - Farm boxes that double as retail display cases),
- Lower transaction costs,
- Form alliances to provide year round supply.

**Important messages or concepts:**

1. No such thing as "the consumer."  
Producers and suppliers need to do market studies and target specific consumer groups (i.e. ethnic, income level, values based, health conscious, etc.).
2. Consumers respond differently to various products at different times of the day.
3. Most food is a "must" purchase not a luxury. Even as incomes rise, consumers search to save on "must" purchases.
4. When you add costs to a product make sure it adds value that for which the consumer is willing to pay. Studies show that consumers are not willing to pay for trace back systems on food. (Food Safety is not a marketing tool. It is a right of market entry.)
5. Non-differentiated producers will lose and be forced into the lowest price syndrome.

**Trends:**

1. Moves from homogenous consumer groups to an explosion of niches.
2. Large income differentials (particularly in the USA market).
3. Consumers are willing to pay for: convenience, want fulfilment, health, ego and feelings.
4. Health and Wellness is a big and growing bigger trend.  
94% of consumers purchase some organic or natural products,  
Organic market continues to grow at 16% per year,

Low carb food up 144% last year  
“Light” foods up 7% last year

5. Prepared foods and convenience items are a growing trend (i.e prepared chili +12%, all purpose cleaning cloths + 57.1%).
6. Premium Branded products are expected to become a \$100 billion dollar business by 2010.
7. Sell products that discounters cannot get (i.e. Atlantic Tender Beef, PEI Food Trust Potatoes).

### **Branding:**

Understand that branding must = trust

If the brand has no specific benefit that can be trusted then it has no value.

### **Brand Criteria**

- Be consumer focussed,
- Meet or exceed expectations,
- Supply to consumer demand 52 weeks per year,
- Continuously improve the product,
- Have strong value chains that sees a need and produces to it while equitably rewarding all.

### **VC Definition:**

“ An alliance of enterprises working vertically to achieve a more rewarding position in the marketplace.”

### **VC Benefits:**

Guaranteed Shelf Space  
Committed Partners  
Reduced Costs  
Costs Shared.

### **Steps to Build a Value Chain:**

1. Determine Consumer Needs
2. Determine Producer Needs
3. Determine Processor and Retailer Needs
4. Find an Opportunity
5. Determine How to Fill the Needs of All
6. Ensure Added Consumer Value
7. Build in Premiums for Producers
8. Protect VC Partners with Licensing Agreements

## **Finding The Right Feed Balance**

One of the biggest challenges facing beef and dairy producers is developing the right balance when it comes to feed. In the case of dairy cattle, an improper diet results in an animal that produces too much nitrogen. That in turn leads to a decline in milk production. For beef producers, an improper mix of starch and sugar content results in a product that will fetch less than a premium price in the marketplace.

With funding help from the PEI ADAPT Council (which funds the Canadian Adaptation and Rural Development Fund in the province for Agriculture and Agriculture Canada), Atlantic Nutrition Enterprises Inc. conducted research to determine the starch and sugar content of PEI forages and grains to improve feed ration formulation. Company researcher Les Halliday explained grains are used in rations primarily to supply starch for energy to the animal. However, he said there are wide variations in growing conditions and crop management practices across the province - that results in feed grains that have a highly variable energy content.

As well, he explained corn silage varies by variety, growing conditions and crop management. During the production of the feed, the starch and fibre in the grain and corn are broken down to yield sugars - then the sugars are fermented to various acids.

Halliday explained other feeds such as brewer's grain (which as the name implies is generally used to make beer) and cull potatoes are also available for feed. However, he said a system is needed to evaluate the energy content of these products so these products could be used more efficiently.

His project monitored the amount of two sugars - dextrose and sucrose - in the potatoes. In addition to looking at having the optimum cull potatoes, it will also help growers send better-quality spuds to processors like Cavendish Farms and McCains.

Dextrose is related to the eventually colour of French fries and with an accurate measurement of dextrose, growers will be able to manage their crop storage conditions to ensure optimum colour during processing.

Having a proper feed ratio also has beneficial environmental impacts. An improper ratio will see animals excrete more nitrogen, which adds to the nutrient load on the land and puts increased pressure on ground and surface water.

Halliday said previously used methods for determining starch and sugar were long and time-consuming. However, technology has developed an analyzer that is easier to use. Halliday said in his final report the information furnished by the new analyzer, is proving to be very useful in helping potato growers harvest their crop at optimum maturity.

"The beef feedlot industry is constantly struggling with off feed problems associated with feeding high starch rations," he said. "With accurate analysis now available, many of these problems can be averted." For the dairy industry, rations with a higher digestibility for the animal leads to the less nitrogen and phosphorus being excreted and less "off milk", or product

where there is an aftertaste.

## **Information and Communications Technologies in Agriculture**

Here are some interesting links to networks that focus on Information and Communications Technologies in Agriculture

### **Seed Savers' Network**

<http://www.seedsavers.net>

Australian NGO which views seed-saving as a vital means of preserving genetic resources. It provides financial and educational assistance to community development projects, and open-pollinated seed stocks (as an alternative to their hybrid and genetically engineered counterparts) to individuals, groups and communities.

### **Ecoagriculture Partners**

<http://www.ecoagriculturepartners.org>

Umbrella organisation embracing diverse actors who work to develop and scale-up Ecoagricultural systems (sustainable agriculture). Partners come from conservation NGOs, agricultural NGOs, international research organisations, farmers' organizations, universities, private companies, inter-governmental organisations, and public agencies. Individuals too. Based in Washington DC.

### **IUCN-World Conservation Union**

<http://www.iucn.org>

Global alliance for conservation and wise use of living resources. Headquartered in Switzerland.

### **Agroforestry Net**

<http://www.agroforestry.net/overstory>

Dedicated to providing educational resources about agroforestry. Based in Holualoa.

### **The Equator Initiative**

<http://www.undp.org/equatorinitiative>

UNDP partnership programme that aims to reduce poverty through conservation and biodiversity sustainability in the region between 23.5 degrees north and south of the Equator. This zone holds the world's greatest concentrations of both human poverty and biological wealth. Launched in 2002. Based in New York.

### **The Savory Centre**

<http://www.holisticmanagement.org>

International non-profit, helping people the world over to more effectively manage their resources in a sustainable way.

Based in Albuquerque, USA

**The People's Caravan for Food Sovereignty 2004**

<http://www.panap.net/caravan>

Raising awareness on the importance of food sovereignty in Asia.

**Course in Sustainable Environmental Management**

<http://cnr.berkeley.edu/BeahrsELP>

**Fallow discussion group**

<http://groups.yahoo.com/group/fallownet>

Avenue to exchange info among upland researchers, extensionists, and farmer leaders in Southeast Asia. Focussing on soil fertility and fallow management systems.

**National Sustainable Agriculture Information Service (ATTRA)**

<http://attra.ncat.org>

**Convention on Biological Diversity**

<http://www.biodiv.org> or [secretariat@biodiv.org](mailto:secretariat@biodiv.org)

Based in Montreal, Canada

**World Agroforestry Centre**

<http://www.worldagroforestrycentre.org>

In Nairobi, Kenya. One of the 16 Future Harvest centres, located throughout the "developing" world.

**Agroecology and small farmers in the "developing" world**

<http://www.agroeco.org>

Uses ecological theory to study, design, manage and evaluate agri systems that are productive but also resource conserving. Interesting paper by Miguel Altieri here.

**ODI Forest Policy and Environment Programme**

<http://odifpeg.org.uk>

**Rainforest Alliance**

<http://www.rainforestalliance.org>

Mission is to protect the ecosystems, people and wildlife that depend on them, by transforming land-use practices, business practices and consumer behaviour.

**Organic Eprints**

<http://orgprints.org>

International open access archive for papers related to research in organic agriculture. Contains full-text papers in electronic form,

together with biographical information, abstracts and other data.

**Wild meat, livelihood security and conservation in the tropics**

<http://www.odi-bushmeat.org>

United Nations has warned of an impending "bushmeat crisis" in many parts of the world, which threatens both the food security of forest communities and the survival of the species hunted.

**Hands On -- Ideas to Goa**

<http://www.tve.org/ho>

Information about what people across the world are doing to meet the practical challenges of Agenda 21, the Earth Summit's action plan to save people and the planet.

**FAO participation website**

<http://www.fao.org/participation>

Promotes participatory methods for development. Searchable Field Tools database.

**Films on Water**

<http://www.cseindia.org>

Compilation of 28 films on water, to help inspire solutions on the 'water crisis', from the Centre for Science and Environment in New Delhi. These video resources create awareness and understanding on issues of water like 'scarcity', pollution, politics and management.