



## 12 Agribusiness Incubation



Trainee Manual



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# Introduction to the Training Program



## INTRODUCTION TO THE TRAINING PROGRAM

This is the trainee manual for Module 12 - out of 12 modules in total - of *infoDev*'s State-of-the-Art Business Incubation Training Program for Business Incubator Managers in Developing Countries.

*infoDev* ([www.infodev.org](http://www.infodev.org)) is a research, capacity building and advisory services program, coordinated and served by an expert Secretariat hosted by the World Bank Group. It helps developing countries and their international partners use innovation and information and communication technologies (ICT) effectively as tools for poverty reduction and sustainable social and economic development. *infoDev* is a leader in business incubation of technology-enabled enterprises. *infoDev*'s global business incubation network reaches close to 300 business incubators, more than 20,000 small and medium enterprises, and has helped create over 200,000 jobs across 87 developing countries.<sup>1</sup>

*infoDev* has found that high quality leadership is a key factor determining the probability of success for an incubator. *infoDev* therefore seeks to increase the capacity of business incubation managers – and their stakeholders – through one-on-one technical assistance, regional and topical peer-to-peer networks, the bi-annual Global Forum on Innovation and Entrepreneurship, and its web-based networking and knowledge-sharing tool [www.idisc.net](http://www.idisc.net). This training program was designed in direct response to repeated requests from *infoDev*'s technology entrepreneurship community for an in-depth business incubation training program relevant to the developing country context.

This training program is the first-of-its-kind, drawing from the lessons, models, and examples in business incubation from across Africa, East Asia and the Pacific, Europe and Central Asia, Latin America & the Caribbean, Middle East & North Africa, and South Asia. More than 30 experts contributed directly to the writing of the training modules, and the materials were tested with more than 300 professionals in developing countries all of whom provided inputs to the final design.

This training program is designed for business incubation managers and other business incubation stakeholders wishing to increase their understanding and know-how of the business incubation process. It consists of 12 training modules ranging from basic introductory topics designed for professionals new to business incubation, to specialized topics such as Technology Commercialization and Virtual Business Incubation Services.

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<sup>1</sup> Source: *infoDev* activities from 2002 to 2009 - <http://www.infodev.org/en/Article.473.html>

The modules include:

#### SUITE 1 – BUSINESS INCUBATION BASICS

##### **Module 1 – Business Incubation Definitions and Principles**

This module provides an introduction to business incubation. It introduces key definitions and presents the main principles and good practices of business incubation. It aims to equip current and future incubator managers and policy makers with the knowledge, skills and understanding of the fundamentals of business incubation in order to effectively foster and encourage businesses.

##### **Module 2 – Business Incubator Models, Including Success Factors**

This module aims to illustrate various business incubator models based on practical examples of incubators from all over the world. The ultimate goal of this module is to empower current and future incubator managers with a thorough understanding of the various business incubator models and their critical success factors as well as to help them identify the best model to adopt for their own incubator to be successful.

#### SUITE 2 – BUSINESS INCUBATOR OPERATIONS

##### **Module 3 – Planning an Incubator**

This module, which divided in two parts, covers assessing the feasibility and designing the business model for an incubator. The first part is aimed at providing a thorough understanding of developing a feasibility study. This includes the steps to undertake a pre-feasibility study, the components that it should address, as well as how to gauge the market need and decide whether an incubator is the most appropriate solution. The second part of the module focuses on business planning to establish the incubator business model.

##### **Module 4 – Marketing and Stakeholder Management**

This module is designed to support efficient and effective communication of the incubator with key customers and other stakeholders based on a good understanding of the market place. This is important since it will help the incubator to establish and increase its reputation as a sustainable organization that fulfils its mission.

The first part of the module focuses on identifying, assessing, and reaching customers/ stakeholders, as well as potential ally organizations providing business support services to enterprises; while the second part is dedicated to defining the incubator's value proposition and engaging marketing channels.

##### **Module 5 – Financing an Incubator**

The first part of this module aims to guide current and future business incubator managers through mastering the incubator's financial data (such as costs and revenues) in order to enable them to identify the financing needs of the organization as well as to explore potential sources of financing.

Building on the first part, the second part of the module is dedicated to demonstrating, to current and future business incubator managers, how to develop a fundraising strategy and to monitor the financial performance of an incubator.

#### **Module 6 – Managing the Incubator**

This module provides current and future business incubator managers with an overview of sound management practices for a successful incubator.

The first part addresses the topics of incubator policies and governance and the second part is dedicated to operations and human resources management.

#### **Module 7 – Monitoring, Evaluation and Benchmarking**

This module aims to provide incubator managers with the required information, skills and insights to develop their own monitoring and evaluation system and to carry out benchmarking activities.

The first part of the module is dedicated to helping the incubator manager understand the added value of monitoring and evaluating the performances of his/her incubator; defining relevant and adequate performance indicators; and exploring how to monitor and evaluate, notably by studying existing tools and methodologies.

The second part focuses on empowering the business incubator manager to use the data collected through monitoring and evaluation activities to compare the business incubator's performance with those of similar organizations.

### **SUITE 3 – ADVANCED INCUBATOR MANAGEMENT**

#### **Module 8 – Implementing a Mentoring Program**

This module provides, in its first part, a conceptual framework for gaining a thorough understanding of the mentoring process and its purposes from three perspectives: that of the business incubator, the mentor, and the mentee.

The second part of the module focuses on how to implement a mentoring program.

#### **Module 9 – Deals and Financing for Incubator Clients**

This module aims to provide a thorough understanding of the alternative sources of financing for incubator clients by notably describing programs and processes that will enable the incubator manager to assist his/her clients in accessing financing.

The first part focuses on preparing incubatees to engage in the process of accessing financing while developing the capacity of the incubator to assist incubatees in accessing financing. The second part of the training module explores financing from the perspective of both the incubatees and the incubator.

**Module 10 – Technology Commercialization through Incubation**

This module describes technology commercialization divided in two parts. The first relating to challenges and lessons learned associated with this process as well as how to manage expectations regarding the results of technology commercialization. This part also concerns the role of the incubator in facilitating technology commercialization in the pre-incubation phase.

The second part of this module focuses on the role of the incubator in technology commercialization in both the incubation and the growth phases.

**Module 11 – Setting Up Virtual Services**

The first part of this module provides a conceptual framework for understanding virtual services. It is designed for current and future business incubator managers who are considering virtual incubation either as a stand-alone business model or as part of their overall incubator service portfolio to extend their current service offering.

In its second part, the module aims to guide current and future business incubator managers and help them to decide if virtual incubation is the right solution for their incubator. The module then explores the most common challenges and how to address them.

**Module 12 – Agribusiness Incubation**

This module describes how agribusiness incubators are different from standard business incubators and outlines the importance of engaging in agribusiness value chains rather than just focusing on individual businesses. It is designed to assist agribusiness incubator managers to understand different models of operation for success.

**TRAINING PREPARATION**

The training program is designed such that each training session can be structured according to the specific needs of the trainees, taking into account the available time.

Trainers will be provided with a pre-training assessment questionnaire designed to assess each trainee's level of understanding of the training topic. The trainer should use the inputs of this questionnaire to tailor-make the training.

In most cases, it is advisable to allocate one full day to a module, and at the very least three to four hours. Indications of the amount of time required to cover the module content and the various exercises are provided in the respective Teaching Plans.

**MODULE SELECTION AND SEQUENCE**

The 12 modules have been designed as independent training materials in a fashion that enables trainers to select modules or components of modules that will meet the specific needs of the trainees for a particular training session.



The goal is to offer a highly flexible program which covers all areas of incubation but allowing both trainers and trainees to focus on state of the art material in some depth.

It is not necessary (nor recommendable) therefore to follow the program sequentially from Module 1 to Module 12 and in any case it is highly unlikely that trainees would have the time to cover the full program “in one sitting”.

The module selection and sequence should therefore be matched to the experience of the trainees as indicated by Figure 1.



**Figure 1 – Module Selection and Sequence**

For example, incubation managers who have been operational for a number of years may not require further training on for example, Module 1 (Business Incubation Definitions and Principles) although in some cases a “refresher course” may be of value.

Each module highlights and cross references other modules where relevant, as there are some overlaps in subject matter, and thus the trainer is guided to other sections in the program when this is considered useful. It is recommended however (and especially for newly recruited, or soon to be incubation managers) to follow the following guidelines.

**Module 1** (Business Incubation Definitions and Principles) is for incubation practitioners who are “beginners” or incubator stakeholders (wishing to learn more about the subject) and could be followed by **Module 2** (Business Incubator Models, Including Success Factors) and **Module 3** (Planning an Incubator).

**Module 6** (Managing the Incubator) is a module suited for newly recruited and experienced incubation managers, and as such could be relevant at any stage of a manager’s professional career.

**Module 4** (Marketing and Stakeholder Management), **Module 7** (Monitoring, Evaluation and Benchmarking), and **Module 8** (Implementing a Mentoring Program) are modules that could suit incubator managers and their staff who have a particular interest in the subject matter covered and be of relevance at any time in their professional career.

**Module 5** (Financing an Incubator) is best suited for incubator managers who have already a thorough understanding of the principles of incubators and incubation models, and should not be the first module for a newly recruited professional. There are evidently links to **Module 9** (Deals and Financing for Incubator Clients) and it may be advisable for trainees to complete Module 5 before Module 9.

**Module 10** (Technology Commercialization through Incubation) and **Module 11** (Setting Up Virtual Services) are perhaps the two most “stand alone” modules in the sense that their subject matter may not be a core service offered by all incubators. However the interest for these modules is likely to be high on the agenda for incubation managers who, in the case of Module 10 are dealing with high tech entrepreneur projects, or in the case of Module 11 are looking at extending their service offer or considering alternatives to the classic incubation model.

**Module 12** (Agribusiness incubation) is intended for incubator managers who are primarily engaging with agribusiness companies and value chains.





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# Module Objectives





Module 12 on “Agribusiness Incubation” has two overall objectives:

The first objective is to provide a thorough understanding of the fundamentals of agribusiness incubation. This module is designed for development teams who are engaging in agribusiness incubation and want to do it better. Alternatively it is aimed at would be incubator developers or managers who are considering starting up an agribusiness incubator. The module therefore aims to address first and foremost the following questions:

- What is agribusiness incubation and how does it differ from typical business incubators?
- Why is the focus on agribusiness value chains so important?
- What are the various models for agribusiness incubators?

The second objective is to review success factors of leading agribusiness incubators and to assist incubator managers to develop a distinctive action plan for improvement of their incubator’s scope and operation.

#### TRAINEE TRAINING OBJECTIVES

This module is targeted at trainees who may be a member of an incubator development team, an incubator manager, a member of the incubator board of advisors or a staff member within an incubator. By the end of this training, the trainee will understand:

- The principles of agribusiness incubation;
- The basics of agribusiness value chains and marketings;
- Agribusiness networks and hotspots.



# Introduction to this Module



Agribusiness incubation has generally been conducted in the same way that general business incubation has, although the conditions for business success are substantially different. The key difference is the overall context and eco-system for agriculture and agribusiness risk-taking. Agribusiness takes place in a complex environment, involving farmers, intermediaries, government policy and markets. Often agribusiness incubators are more successful when they engage, at some level, with the entire agribusiness value chain, not simply individual businesses.

**Module 12 has 5 components:**

- Component 1: Agribusiness Incubation Basics
- Component 2: Agribusiness Value Chain Basics
- Component 3: Agribusiness Marketing
- Component 4: Agribusiness Networking
- Component 5: Challenges, Risks, and Solutions for Agribusiness Incubation



# Component 1

## Agribusiness Incubation Basics





## COMPONENT INDEX

- Section 1.1: Defining Agribusiness Incubation
- Section 1.2: What Makes Agribusiness Incubators Different
- Section 1.3: Purposes of Agribusiness Incubators
- Section 1.4: Five Basic Types of Agribusiness Incubators
- Section 1.5: Pros and Cons of Agribusiness Incubation Types

## COMPONENT OBJECTIVES

This component is designed to ensure that trainer and trainees share a common conceptual framework and terminology regarding agribusiness services.

At the end of this component, trainees should be able to:

- Communicate effectively with other participants and with the trainer about agribusiness incubation models and services;
- Communicate effectively with stakeholders about virtual incubation upon return to the incubator; and
- Understand the pros and cons of virtual services and decide whether or not agribusiness services would be the right choice for their incubator.

## Section 1.1: Definition of Agribusiness Incubation

Agribusiness incubation is defined as a process which focuses on nurturing innovative early-stage enterprises that have high growth potential to become competitive agribusinesses by serving, adding value or linking to farm producers. The agribusiness business incubation process typically provide some or all of the following:

1. Shared facilities and equipment;
2. Business development, market access, and technology assessment services;
3. Financial services; and
4. Mentoring and networking.

Agribusiness incubators open new entry points, which actors in the agricultural value chains can use to access new markets. They afford leverage via these entry points to accelerate agricultural development and offer the unique potential to develop small and medium-sized enterprises (SME's) which can add value along these chains in ways which other development tools do not offer.

There is no single "right way" to perform agribusiness incubation. Rather the work of agribusiness incubation depends on the state of development of the agribusiness ecosystem and changes over time as that ecosystem matures and develops. In its earliest phases, incubators demonstrate the viability of new business models and look to create and capture additional value from primary agricultural products. In underdeveloped agricultural economies, incubators help by strengthening and facilitating linkages between enterprises and new commercial opportunities. They open new windows on technologies appropriate to agribusiness enterprises and help agricultural enterprises discover new, potentially more competitive ways of doing business. In subsequent phases of development, incubators operate as network facilitators: they link specialized service providers to agribusinesses and link separate agribusinesses to one another. Finally, in a more advanced state of business development, incubators operate as conduits for the exchange of technology, products, inputs and management methods across national borders.

## Section 1.2: What Makes Agribusiness Incubators Different?

Agribusiness Incubators, which facilitate enterprise formation in the agricultural sector, must think and work differently than other types of incubators because the functions that agribusiness incubators execute are more complex and the risks that they manage are more severe than those faced by other sectors. The mission of business incubation in agricultural space, moreover, is broader, the points of leverage both larger in number and more complex in their execution and the risk aversion of participants in the sector generally higher than in other sectors. Subsistence or near subsistence farmers might be expected to be highly risk averse.

A number of factors distinguish agribusiness incubation from standard business incubation, including:

**1. Agribusiness incubators must compensate for unique, high-risk agricultural conditions and for high price variability in agribusiness markets.**

Agribusiness develops in highly risky ecologies defined by several unique categories of risk, including: commodity price risk, government farm policy risk, biological risks, weather and seasonality risks, and climate change risks.

Small-scale farmers possess very limited competencies and few assets. They are risk averse because of their close proximity to sub-subsistence and have limited assets due to their limited capacity to create value. Most small-scale farmers in developing countries lack access to economies of scale production and means of specialized production. To this end, the role of agribusiness incubators involves the creation of farm level organizations which are sufficiently large to sustain a minimum level of competitiveness, possess a minimum level of business skills and inculcate a minimum level of business oriented values.

Essential agricultural assets, like land or irrigation systems, are difficult to finance because investments tend to result in low cash flow to equity ratios and are characterized by long-term break-even points and may lose their value can be lost completely if their initial application fails to be sustainable. Entrepreneurs in agricultural sectors are typically risk-averse and conservative in their responses to new opportunities. Their values are closely linked to primary production processes, hard work and patient perseverance. Incubators enable entrepreneurs in the agricultural sector to mitigate the risk of investing in specialized assets and offer their use of joint marketing and joint selling efforts in ways push poor farmers out of poverty traps

They link a new generation of agribusiness entrepreneurs to chain integrators, supermarket chains and exporters and in doing so assist a new generation of pragmatic and practical entrepreneurs who are linked to agriculture by birth right but are increasingly aware of the need for a new agriculture based on effective competition in value added markets, such as: healthy food markets, convenience, modern packaging, functional food, and nutraceuticals. Agribusiness incubators identify, assemble and mobilize this small cohort of emerging entrepreneurs who are open to innovative technology, forming new forms of partnership along value chains and creating measure and manage carbon foot prints with the aim of making agriculture more sustainable and eco friendly. Incubators therefore must be activist and involved early on in generating interest in new business formation and encouraging entrepreneurs to be tested. They also must solve the product/service distribution challenge or even be prepared to develop their own retail distribution systems.

## **2. Agribusiness incubators fill in missing links in farm to market chains**

The most significant problem that most traditional agricultural sectors face is a lack of access to markets. Without market access, farming communities are cut off from opportunities to create wealth. As long as their trade is barter based and/or local or as long as no markets for specialized labor develop within farm communities, farm level organizations find themselves trapped in poverty. Once a wage economy develops in rural areas, opportunities emerge to buy and sell various products and services in addition to agricultural products. This opening up of local economies entails their integration into large economies and the building of commercial linkages with urban centers and with other rural economies.

Part of the strategic mission of agribusiness incubators is to foster the development of agribusinesses whose strategic role and value premise is to integrate new and various forms of farm to market value chains, link producers and processors to markets, input providers and to sources of technology.

## **3. Agribusiness incubators help move from low value commodities to valued added products**

Agribusiness incubators facing the challenge of how to diversify among different commodity markets and add value to commodities, thus moving agriculture entrepreneurs into differentiated product markets that offer more stable prices.

They play a role therefore in market tests to assess whether a product will be successful before incurring the entire cost associated with launching, producing and stocking new products. Agribusiness incubators need to develop partnerships or create their own mechanisms for undertaking such tests.

#### **4. Agribusiness incubators coordinate policy, strategy and investment priorities both within business ecosystems and with governments.**

Both bad policies and variable ones affect the fortunes of incubatees negatively. While policy reform is not the primary mission of agribusiness incubators, values that they inculcate in their graduates and the values that they demonstrate in their own commercial dealings can and do affect policy aspects of the business ecosystems where they operate.

Incubators can organize their incubatees and support networks to espouse sound policies that are “transparent”, “open”, “contestable” and “pro-competitive.” They also may be called on to assist their clients in securing financial assistance, such as venture capital or short term credit. This kind of financial entrepreneurship also entails leveraging of donor funds, the aggressive use of trade credits and the engagement of strategic buyers.

#### **5. Agribusiness incubators must build bridges between different rural and urban commercial cultures and different business processes.**

An important role that agribusiness incubators fulfill in developing countries is the integration of rural and urban economies. The two economies are separated not only by distance but more importantly by the way in which they are organized and frequently by the culture which prevails with them.

Markets (including product, labor, services and markets for farm inputs) that develop on either side of the urban/rural divide are not shared. Incubators operate in lieu of these missing markets to bring economic opportunities together.

Many rural communities in the developing countries do not trade outside their immediate vicinity and operate outside the mainstream cash economy. Creating services that allow for labor, products or remittances to be sold for cash greatly stimulates local economic activity and with it the formation of new service businesses. Incubators which foster businesses which surmount the market divide and which allow for the creation of wage earners are particularly effective in fostering second and third order effects within local economies.

Rural economies in developing countries are often monotonic and non competitive with respect to the means of production that farmers pursue, while urban economies are generally more diverse and competitive. Linking the two sets of economies together creates value at both ends. Agribusiness incubators create new dynamism in rural spaces. The products and services that are traded between the urban and rural economies are a source of comparative advantage at both end of the trade axis, which progressively deepens and broadens between the two separate economies as they integrate.

## Section 1.3: Purposes of Agribusiness Incubators

The key purpose of agribusiness incubators is to help support and develop competitive agribusiness SMEs and while doing so, to develop new models for growth, and contribute to job creation and farm livelihood diversification. Missions that are unique to agribusiness incubators include:

- Identifying and adopting technologies appropriate for specific agribusiness enterprises
- Identifying and motivating entrepreneurs in agribusiness enterprises, frequently in rural areas
- Building commercial conduits in the form of value chains which integrate new value creating activities in rural and urban spaces

To accomplish these objectives, incubators have available to them several instruments including but certainly not limited to the following:

1. **Market Institutions:** Agribusiness Incubators can create access to new markets for labor, capital and entrepreneurship in agribusiness
2. **Value chains:** Agribusiness Incubators can strengthen farm to market chains
3. **Networks:** Agribusinesses can lobby for greater alignment and coordination of disparate policies and actions in the agribusiness system
4. **Sector Level Competitiveness Enhancement Projects:** Agribusiness incubators are able to realize tangible success and multiply the strengths of individual agribusinesses by enhancing whole sector competitiveness

The overriding purpose of the incubator is to demonstrate that new business models can operate profitably and that primary sector production integrated into value chains can create sustainable wealth and new employment. Their additional role is to communicate this information to persons who may be interested in forming new businesses. Through their activities, their communications and their network formation, agribusiness incubators are able to create credible and actionable information about value addition. Once created this information has tremendous economic value for potential investors, who are hence challenged and motivated to undertake additional private investment.

In order to succeed, agribusiness incubators must operate in two realms: i) the insertion of new value adding business functions into traditional farm to market chains and ii) the creation of enablers, which operate outside these chains to add value. This latter set of activities involves capacity building, training, demonstrating access to new markets, etc. The two sets of activities taken together correspond to the economies of scope, which are essential for the transformation of agricultural economies.

The first of these activities is closely akin to the work which incubators in other sectors traditionally undertake, e.g. investment in private goods in the form of virtual and actual equity with which to create new business concerns. The second, however, involves investment in public goods or at least investment in assets, which have the dual characteristics of private and public goods.

This later set of activities needs to be closely coordinated with government entities, including Ministries of Agriculture, which provide some of the private goods, service gratis but which may not provide the right services or sufficient levels of service in order to assure improved competitiveness for specific value chains.

#### Alternative Paths for Agriculture and Agribusiness Development

The agribusiness incubation process focuses on nurturing innovative early-stage agro-based enterprises that have high growth potential to become competitive businesses. Agribusiness incubators often enable the start-up and growth of innovative value adding agribusinesses. Alternative approaches to transforming comparative advantages in commodity markets into competitive advantages in differentiated product markets have been tested over the past two decades by several development organizations such as the World Bank, the Food and Agriculture Organization (FAO), and the International Finance Corporation (IFC). In general development strategies for agribusiness involve one version or other of four general approaches, as the figure below represents.

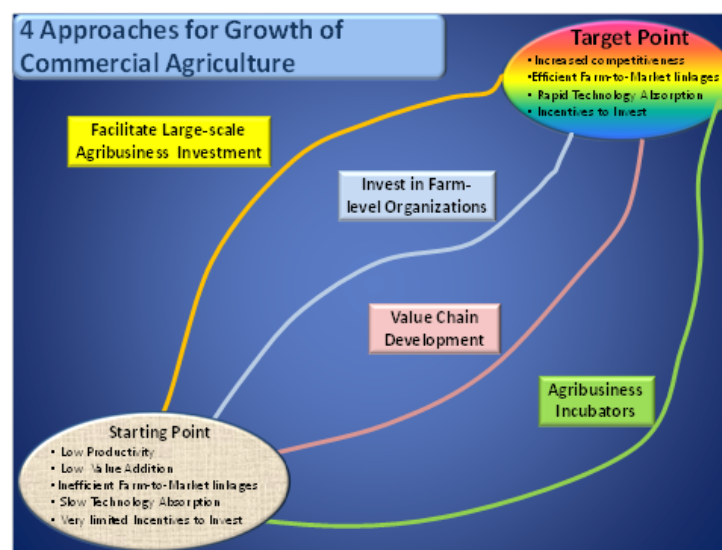


Figure 2 - Alternative Paths for Driving Agricultural Market Development

#### 1. Strengthening Farmer Organizations

In this approach, investments have been designed in order to enable farms to operate as for-profit businesses, even at small scales of commercial operation.

Some of the investment programs tested involved direct<sup>2</sup> investment in farm-based business models and others involved indirect investment in farmed -based business models and others involved indirect investment in supportive services, enabling rural infrastructure and policy reform. Examples include the strengthening of agricultural extension services, the reform and modernization of public sector agricultural research centers and the transformation of both into more farmer demand responsive institutions. Other programs with similar designs and comparable objectives involved the strengthening and reengineering of farm level organizations. Programs designed to strengthen farm to market linkages and to acquire quality farm inputs have been particularly popular among donors. Examples include the Cereal Banks of Kenya which the Rockefeller Foundation has supported, the Commodity Trading Company and network of subordinate commercial farming organizations in Mozambique which the International Fund for Agricultural Development (IFAD) has helped to launch and which continue to be supported by Fair Trade International, and the expanded networks of farm input stockists in Zambia and elsewhere in East and Southern Africa which the Gates Foundation is supporting. The approach to strengthening linkages between farms and markets which these donors and others are pursuing operates at the base of the rural pyramid. Typically the social benefits which they afford extend beyond commercial farm viability and increased farm wages to include various aspects of social life in rural areas, through investment in education and health.

## 2. Large Scale Agribusiness Investment

A quite opposite approach is through the investment of large agribusiness companies and to rely on trickle down effects to benefit other participants in the value chain. This approach involves the following: Enhancing private investment in agribusiness by improving the investment environment for agriculture and by investing in missing or weak infrastructure. The premise underlying this approach is that large companies possessing the essential competencies, strategic market access, technological “know how” and complementary business interests can create significant incremental value for their shareholders by applying these core competencies in the markets of developing countries. In this way they are able to transform latent comparative advantage in agricultural production into sustainable competitive advantage. This approach would have donors committing resources to reforming and removing government policy failures and market coordination failures. It would also make infrastructure development an agribusiness development priority. Importantly, it would leave much of the implementation and execution of detailed tactics for sector development to large agribusinesses. The collateral dynamism which these businesses are able to create would be disseminated to other private companies through example, affiliation, and spinoff.

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<sup>2</sup> IFAD have pioneered in designing various programs for stringing farm level governance, re-skilling and teaching farmers, building out supply chains with a base in farm level organizations. The World Bank has also been active in testing and strengthening various forms of farm level organization.



### 3. Value Chain Development

Value chain development has gained enormous momentum over the last decade. In this approach the key idea is to increase competitiveness and bridge the gap between farmers and markets through the development of contracts and partnerships with agribusiness enterprises; this in turn will ensure that farm production is responsive to market demand and value addition is increased and shared among the stakeholders in the chain. Typically instruments to implement this approach are matching grants to SMEs and farmer groups, policy dialogue, strategy development for enterprises and subsectors, and public private partnerships to promote investment in the agribusiness sector.

### 4. Agribusiness Incubation

Agribusiness incubation entails directly working with early stage enterprises and facilitation of their growth through a number of services (shared facilities and equipment, business development, technology, finance, mentoring and networking). The approach tends to be less investment intensive than the approaches mentioned above while emphasizing building capacity, facilitating access to market, decreasing risk and increasing the competitiveness of the enterprise.

## Section 1.4 Three Basic Types of Agribusiness Incubators

This section discusses the merits of specific incubator designs and the circumstances under which these specific designs afford the best choice for developers of new agribusiness incubator institutions. Recent research on agribusiness incubation indicates that there are three basic alternative types of agribusiness incubators (see Agribusiness Incubation: Good Practices Assessment, 2011).

### 1. AGRIBUSINESS VALUE CHAIN/SECTOR DEVELOPMENT INCUBATORS

- Aim to develop entire agribusiness sectors and provide a range of services;
- Incubators that specialize in integrating critical elements of the value chain, providing market access and supporting the creation of new enterprises that fill gaps in the value chain;
- Mobilize multiple resources to respond quickly to new opportunities.

### 2. AGRICULTURAL RESEARCH AND COMMERCIALIZATION INCUBATORS

- Facilitate transfer of technology from institutions of higher learning and research centers
- Stimulate the commercialization of research and the creation of new enterprises
- Foster diffusion of new technologies

### 3. TECHNOLOGY TRANSFER INCUBATORS

- Incubators that focus on facilitating the transfer of technology at the low tech end or at the high tech end of the spectrum.
- At the low-tech end, with incubators specializing at the grass roots, supporting innovation and entrepreneurship and incubating a diversity of small scale in under-served rural areas.
- At the high tech end, supporting technology transfer across borders and across corporate boundaries in the multiple forms of Intellectual property (IP), contract manufacturing, joint technology ventures, and access to venture capital.

The table below describes three types of agribusiness incubators encountered in the case studies, namely (1) agribusiness value chain/sector development incubators; (2) agricultural research commercialization incubators; and (3) technology transfer incubators. The rest of this section discusses the merits of each incubator type and the circumstances under which these specific designs afford the best choice for developers of new incubator institutions.

TOOLS & INSTITUTIONS	DEFINING FEATURES	EXAMPLES
<b>AGRIBUSINESS VALUE CHAIN / SECTOR DEVELOPMENT INCUBATORS</b>		
SUPPLY CHAIN NETWORK MANAGER	<ul style="list-style-type: none"> <li>Targets qualified small holder farmers</li> <li>Organized as supply chain manager</li> <li>Active only in specific sectors where prior studies indicate comparative advantage exists</li> <li>Profit oriented</li> </ul>	Fundación Jalisco (Mexico)
FARM TO MARKET CHAIN FRANCHISOR	<ul style="list-style-type: none"> <li>Targets qualified small holder farmerS</li> <li>Organized as supply chain franchise operator targeting specific sectors</li> <li>Profit oriented</li> </ul>	Timbali Industrial Incubator (South Africa)
ONE STOP- AGRIBUSINESS SECTOR DEVELOPER	<ul style="list-style-type: none"> <li>Large start up endowment</li> <li>Strong internal research capability; Professional management corps</li> <li>Capacity to apply its own market and tech research, enterprise management, and equity funding to new business startups</li> <li>Profit oriented</li> </ul>	Fundación Chile
ENTIRE SECTOR INCUBATOR AND BDS SUPPLIER	<ul style="list-style-type: none"> <li>Pragmatic and sector focused</li> <li>Leverages BDS to transform entire sectors</li> <li>Makes strategic interventions at multiple levels within supply chains</li> <li>Effectively engaged in policy reform both at high levels and at local levels</li> <li>Mix of for profit and non-profit</li> </ul>	Technoserve of Mozambique
<b>AGRICULTURAL RESEARCH COMMERCIALIZATION INCUBATORS</b>		
AGRICULTURAL TECHNOLOGY ORIENTED INCUBATOR WITH RESEARCH CENTER AFFILIATION	<ul style="list-style-type: none"> <li>High tech focus</li> <li>Strong affiliation with a world class research center</li> <li>Strong initial financial support</li> <li>Classic research park incubator with strong affiliation with research center</li> <li>Non profit oriented</li> </ul>	ABI-ICRISAT of India UIRI of Uganda
BUSINESS INCUBATOR WITH UNIVERSITY AFFILIATION SPECIALIZING IN AGRIBUSINESS	<ul style="list-style-type: none"> <li>Strong affiliation with a university</li> <li>Classic research park incubator with strong university affiliation</li> <li>Enjoys only weak outside financial support</li> <li>Non Profit Oriented</li> </ul>	IAA-IPB of Indonesia
TECHNOLOGY-BASED BUSINESS INCUBATOR	<ul style="list-style-type: none"> <li>Classic university spin-off business incubator;</li> <li>High tech focus.</li> </ul>	Technology Based Business Incubator, Fed. Univ. of Viçosa, CENTEV (Brazil)
<b>TECHNOLOGY TRANSFER INCUBATORS</b>		
LOW TECH-DOMESTIC: RURAL INNOVATION FACILITATOR	<ul style="list-style-type: none"> <li>Rural low-tech and rural consumer focus</li> <li>Links up innovators and entrepreneurs</li> <li>Leverages multiple methods for promoting innovation</li> <li>Weaver of strong networks</li> <li>Visionary and dynamic leadership</li> <li>Non-profit</li> </ul>	Villgro (India)
HIGH TECH-INTERNATIONAL: TRANSNATIONAL STRATEGIC ALLIANCE	<ul style="list-style-type: none"> <li>High tech focus;</li> <li>Classic VC design;</li> <li>Strong capitalization;</li> <li>Clearly defined mission;</li> <li>Competent trans-national management;</li> <li>For profit.</li> </ul>	MLSCF (Malaysia)

Table 1 - Features of Different Types of Agribusiness Incubator

### 1. Agribusiness Value Chain / Sector Development Incubators

Agribusiness incubators that specialize in developing value chains or entire sectors include those specializing in providing market access to small-scale farmers. Timbali and Fundación Jalisco fall under this category. Both have developed simple farm level business models that can be learned and applied commercially by large numbers of small-scale farmers. Both provide essential supply chain support services to their clients, including marketing, value added packing, order fulfillment, logistics and cash management. Both of them also specialize in producing, selling and delivering high value horticulture; in the case of Fundación Jalisco packed fresh berries, and high end floriculture (e.g. cut flowers) in the case of Timbali. Neither incubator attempts to work outside its competency and primary business know how. Both incubators work avidly to refine their business models. Timbali's model is a flower growing franchise. Fundación Jalisco's is a contract marketing and logistics management service company fused with an incubator function. Both incubators also strive to remain competitive by introducing new agricultural inputs, new cropping methods and new handling technologies to their incubatees.

Both incubators are also intensely focused on improving the livelihoods of small-scale farmers who in most developing countries, including South Africa and Mexico, possess limited competencies and few assets, and are at risk of adverse. A good deal of the work Timbali and Fundación Jalisco undertake is the creation of farm level organizations in possession of a minimum of business skills and which inculcate a minimum level of business values.

Other important activities of agribusiness incubators which support specialized supply chains involve the creation of networks to input providers and other sources of technologies appropriate to their clients' needs.

Both Timbali and Fundación Jalisco have created a supportive environment which shelters its client farmers from many of the risks associated with agricultural production and, at the same time, allows them to benefit from direct and efficient access to distant niche markets which they could not access on their own.

Importantly as well, new food products require a market test before their launch. Market tests are both too expensive and too complex for small-scale farmers to conduct on their own. Both Timbali and Fundación Jalisco have developed marketing partnerships with other specialized market research companies, as well as their own internal market sounding competencies for undertaking such tests.

Examples of agribusiness incubators specializing in entire value chains include Fundación Chile and Technoserve of Mozambique. Both Fundación Chile and Technoserve of Mozambique possess strong, multi functional agribusiness development competencies.

By virtue of their superior market research capabilities, for example, they both afford clients a clear vision of where sources of comparative advantage exist within their respective agricultural economy. They transform comparative advantages in commodity markets into competitive advantages in differentiated product markets. As a result of the strong investment banking skills they both possess, they are able to engineer capital structures for new undertakings, which are appropriately adapted to the business, market and policy risks investors face. Because of the abundant management resources, which they possess, both organizations have the ability to respond flexibly, quickly and pragmatically to various challenges and opportunities across multiple agribusiness sectors simultaneously, although Technoserve tries not to undertake more than three agribusiness transformations at any given time. Fundación Chile's project research department, on the other hand, is able to deal with more than 100 projects every year.

Both one-stop incubators are able to offer their clients advantages, as a result of their distinctive abilities to analyze agricultural supply chains and to determine where in those chains economies of scale and of scope may be missing and could be added at low investment cost. Fundación Chile has the capital reserves and the corporate mandate required to undertake large investments for its own account and with its own management. It operates as a private merchant banker. For its part Technoserve is able to advise private investors and to work with them as a financial advisor to direct their investments in Mozambique. Both organizations are called on frequently to provide government officials at various levels within government with policy advice.

Ultimately the comparative advantage of both one-stop agribusiness organizations comes from the breadth of their capabilities to respond to new opportunities and from their ability to recruit highly competent people quickly. Both organizations are agribusiness problem solvers first and foremost, even before they are incubators. Incubation is one method among others which they apply to stimulate growth in the specific agribusiness sectors which they target.

One-stop agribusiness development organizations are particularly effective in situations in which markets for equity capital, specialized business services, expert management and corporate control have not yet developed.

Both of these models are difficult to replicate in other countries given their complex design structure. With that said, forming alliances with them and encouraging them to extend their expertise across borders through some form of joint venture is possible. Indeed, in recent years, a number of efforts have been launched to create entities that use elements of the Fundación Chile model to grow new agribusiness value chains. Among these are two based in Mexico: Fundación Jalisco (FJ) of Guadalajara, which is the subject of a case study included in this report, and Fundación Sonora (FS) of Hermosillo.

## 2. Agricultural Research Commercialization Incubators

As Mian (1997) has pointed out, incubators afford mechanisms to facilitate the transfer of technology from higher learning institutions and from research centers to new enterprises. The key function of incubators strongly affiliated with research institutions is to accelerate technology transfer<sup>3</sup>.

Arrangements for technology transfer determined solely by a university or research center, as part of their mandate, tend to be more rules based and less flexible. In general the stronger the affiliation the less open to experimentation and refinement are subordinated incubators<sup>4</sup>. Moreover, resource allocation decisions made by the academy tend to relate more to the academy mission than to market opportunity criteria. There is therefore a risk that the technologies developed do not correspond to market opportunities.

Incubators anchored in research centers or in higher learning institutions typically have a broad governance platform involving many diverse stakeholders as indicated by Lalkaka (2001)<sup>5</sup>. An important tradeoff which is designed into most university or research center affiliated incubators is one between faster rates of innovation and broader community or business goals. These generalizations appear to apply to the three incubators included among the case studies---ABI, affiliated with ICRISAT in India and fully committed to fast rates of technology innovation; IAA-IPB, affiliated with Bogor Agriculture University in Indonesia and committed to community development; and Technology Based Business Incubator, affiliated with the Fed. Univ. of Viçosa, CENTEV in Brazil. The latter incubator is also committed to fast rates of technology innovation.

Strong affiliations with institutions of learning and research carry both benefits and risks. Thus, IAA-IPB's primary sources of value addition derives, at least in part, from the expertise and technology "know how" of members of the university's faculty. At the same time, the incubator's flexibility and its degrees of entrepreneurial freedom are constrained by the university's control and by university's own agenda, which is different from that of the incubator.

Over time, the IAA-IPB incubator management has put a greater effort in networking with government organizations responsible for SME development, financial institutions, local government, and other national and international incubator associations. This networking has resulted in better access to resources which have recently resulted in new infrastructure and equipment investment.

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3. "Assessing and Managing the University Technology Business Incubator: an Integrative Framework," Sarfraz A. Mian, *Journal of Business Venturing*, 1997, vol 12, pp 251-285

4 Ibid

5 "Best Practices' in Business Incubation: Lessons (yet to be learned)." Rushtqam Lalkaka, EU Conference on Business Centers, Bussels, November 2001.

Technology-Based CENTEV/UFV Incubator at the Federal University of Viçosa (UFV) has been recognized as the best incubator among Brazil's 83 incubators in 2006 by ANPROTEC, Brazil's national association of incubators. The incubator, created in 1996, was launched in close association with UFV, Brazil's top agricultural university.

It quickly became a pioneer in breaking a new path for technology commercialization. While the incubator was organized originally as a university adjunct, a unique combination of leadership and solid alliances within the university and between the incubator and state and federal funding agencies enabled the incubator to create a highly effective system for launching successful agribusiness and high tech companies. Both faculty members and their students have become enthusiastic participants and high tech entrepreneurs. Since 1996, the incubator graduated 25 incubatees, with a 100% success rate with all businesses graduating within 2 years. The average annual revenue which the incubators clients generate after three to five years of graduation is US\$2.5 million.

CENTEV/UFV's success depends on its excellent deal flow as well as on the unique entrepreneurship/science mix found among UFV faculty members. CENTEV/UFV's well-structured operating procedures, its customized software for supporting new business development, its ready access to the best available state and federal research, as well as its strong working relationships with venture capital agencies provide it with additional advantages. Most importantly, however, is the continuing legacy of leadership excellence, which the founder of the incubator provides and which continues to inspire its current management, staff, and incubatees.

ABI is affiliated with ICRISAT, the international crop research center for semi-arid tropics. Initially, the mandated crops of ICRISAT and the associated technologies defined the scope of work for ABI. Very soon, however, the scope of work expanded and ABI has been engaging with the promotion of companies ranging from biotech to organic farming, from agricultural equipment to biofuels. The success of ABI in promoting agribusiness and innovations is largely based on a tradition of excellence of the research programs at ICRISAT and partly on a new business orientation provided by ABI's management trying to bridge the gap between scientists, farmers, and the market. ICRISAT's strong brand in India has facilitated the work of ABI in agribusiness development. The success over the past decade has also led to the Government of India choosing ABI-ICRISAT as the lead incubator in the national network of agribusiness incubators (NIABI) with the task to help new agribusiness incubators to grow. One limitation of the ABI-ICRISAT model is the difficulty in replicating the ICRISAT brand name. ABI-ICRISAT is progressively moving towards the incubation of other incubators in India, rather than replication of its own model. In Africa, ABI-ICRISAT has been trying since 2007 to study opportunities for developing agribusiness incubators in Mozambique and Uganda but so far there have not been results.

### 3. Technology Transfer Incubators

Technology transfer incubators operate either at the low tech (e.g., Villgro) or at the high tech (e.g., MLSCF) end. Villgro works at the grass roots of rural India aiming to build wealth at the base of the rural pyramid. Villgro incubates a diversity of small scale businesses which sell their innovative products into under-served rural areas and it supports the development of new productivity enhancing farm products, new consumer products designed for rural households and new services which interconnect economic opportunities between rural and urban spaces.

This non-profit organization with fewer than 90 employees has as its overriding goal nothing less than the replacement of a technologically static rural space in India with one that is dynamic and highly absorptive of relevant new technologies. Villgro employs a variety of methods, programs and incentives to accomplish its mission. It disseminates the commercial knowledge which it generates broadly through example, through competitive challenge and through high visibility promotion. The incubator has developed strong relations with a number of network partners. Importantly Villgro operates its own network of retail outlets, called Villgro stores.

Villgro includes multiple resources to accelerate indigenous technology take up. These ancillary methods include knowledge creation, knowledge sharing, competitions and awards, and own operated retail distribution chain and brokerage between technology innovators and entrepreneurs. It entails a nascent cultural transformation, a transformation in rural confidence, speed to change, adaptability and network interconnectedness.

A new form of a jointly managed and jointly invested biotech venture capital fund is being tested in Malaysia where a local development institution is partnering with a biotech venture capital fund based in San Francisco to develop a local fund, called the Malaysian Life Sciences Capital Fund. What is most interesting about this undertaking is that the Fund is attempting to transplant transformative technologies into Malaysia which hold out the promise of significantly expanding the usefulness of oil palm and other basic farm commodities in Malaysia.

The methods and the skills required to develop cutting edge biotech companies are unique and difficult to learn except by doing. The challenge associated with transferring these skills to Malaysia involves not so much the launch of a new biotech companies as it does the transfer of advanced technology across borders from concept to product and ultimately to market.

Incubators can play a useful role in the zero stage development of cutting edge biotech companies. However, several echelons of funding and mentoring support are required to bring new biotech products to market. Each of these echelons become more specialized and more expert. MLSCF specializes in developing first stage companies (ones aiming to fully test market their products at the end of their first round of venture capital financing). Its larger role, however, is to facilitate the transfer of biotechnology across borders and across corporate boundaries in the multiple forms of IP, contract manufacture and joint technology ventures into Malaysia.



## Section 1.5 Pros and Cons of Agribusiness Incubation Types

Type	Example	Pros	Cons
AGRIBUSINESS VALUE CHAIN / SECTOR DEVELOPMENT INCUBATORS	Fundación Chile Tns Mozambique  Fundación Jalisco (Mexico) Timbali (S. Africa)	<ul style="list-style-type: none"> <li>Strong network and management basis</li> <li>Abundant and patient capital</li> <li>Effectively leverages services to transform entire sectors</li> <li>Effective in linking smallholders to niche markets</li> </ul>	<ul style="list-style-type: none"> <li>Costly to startup</li> <li>Difficult to duplicate</li> <li>Highly dependent on external funding</li> <li>Limited sector impact</li> </ul>
AGRICULTURAL RESEARCH COMMERCIALIZATION INCUBATORS	ABI-ICRISAT (India) IAA-IPB (Indonesia) CENTEV (Brazil)	<ul style="list-style-type: none"> <li>Access to a pipeline of technology</li> <li>Strong linkages with research community</li> </ul>	<ul style="list-style-type: none"> <li>More production than market oriented</li> <li>Subordinate to the research organization to which is affiliated</li> </ul>
TECHNOLOGY TRANSFER INCUBATORS	High Tech MLSCF (Malaysia)  <u>Low Tech</u> Villgro (India)	<ul style="list-style-type: none"> <li>Pioneering trans-border high technology transfer</li> <li>Abundant capital</li> <li>Works effectively at the bottom of the pyramid launching continuously new programs</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to mix different high-tech cultures</li> <li>Rapid launching of new programs may diminish capability to carry out core incubator tasks</li> </ul>

Table 2 - Pros and Cons of Agribusiness Incubation Types

### COMPONENT CONCLUSIONS

Trainer will ask you to come up with the major conclusions.



Component 2:

Agribusiness Value Chain Basics



## COMPONENT INDEX

Section 2.1: Agribusiness Value Chains

Section 2.2: Transforming Supply Chains into Value Chains.

Section 2.3: Strengthening the Agribusiness Value Chain

Section 2.4: Intervening in Agribusiness Value Chains

Section 2.5: Creating a Supportive Business Environment for Agribusiness Value Chains

## COMPONENT OBJECTIVES

At the end of this component, trainees should be able to:

- Assess alternative modes of value chain association and choose the mode that is most appropriate for specific incubatees.
- Assist incubatees in determining whether it is best for them to develop value chain support functions internally or to rely on third party value chain support functions externally.
- Explain the difference between a supply chain and a value chain.
- Explain how agribusiness ecosystems influence value chain development.
- Develop an action strategy to strengthen linkages between incubatees, on the one hand, and suppliers and customers, on the other hand.

## Section 2.1: Agribusiness Value Chains

Agribusiness value chains are forms of industrial organization that link suppliers to farmers, farmers to agribusinesses, and agribusinesses to markets. In so doing value chains synchronize the starting, stopping, pacing and quality relevant performance of distinct business processes which take place within chains, which stretch between farms and retail food outlets and other farm product markets.

Value chain integrators can also play a special role. Integrators make decisions for, and provide decision support to, all other participants in a value chain. Incubatees often assume the role of value chain integrators for chains, which previously lacked guidance and involved unguided, one off transactions. By organizing and scheduling farm production, processing and delivery within an organized chain, chain-integrating incubatees are able to add a great deal of value in the forms of process cost reductions, reduced inventory losses and service improvements which can be divided among chain participants.

Incubators need to be able to diagnose deficiencies in competitive capabilities within legacy chains, which incubatees inherit. Incubators need to be able to identify and array options before incubatees for value chain capacity investment. They need to be able to assist their incubatees with an array of value chain design and management issues. Value chain development entails the following discrete steps:

1. Selection of qualified trading partners
2. Diagnosis of missing economies of scale and/or of scope within the legacy chain
3. Identification of appropriate technologies and industrial organizational structures to remedy competitive weaknesses and to capture missing economies of scale and scope
4. Build out of chain infrastructure which is commonly accessible and which may require some form of cost sharing with government.
5. Adoption of quick decision support capabilities within the chain, which operate as the chain's governance mechanisms.
6. Adoption of appropriate chain linking ICT technology, which fully supports the preferred chain governance mechanism and internal decision-making process.

The diagram below represents the integration of three basic processes—farm production, value addition and delivery to buyers—into a single, integrated value chain. The chain itself can take a number of different organizational forms and members bound and governed in different ways, including, for example, through long term supply contracts, through franchise agreements between farmers and value adding processors/marketers or through a joint venture which is jointly owned by farmer groups and strategic investors.

In all case, four flows—products, credit, cash payments and information—are managed through standard systems, which are adopted and managed at the chain level. The governance mechanisms applicable to this chain help to determine the obligations and residual degrees of freedom available both to the value chain integrator and to other value chain participants. These governance rules are typically specified in long term supply contracts, franchise agreements or charters for joint venture or other types of jointly owned corporate entities.

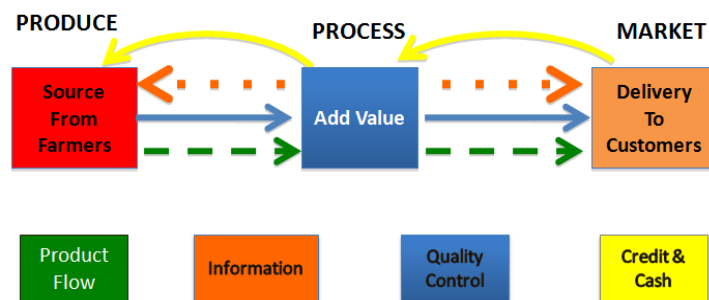


Figure 3 - Agribusiness Value Chains Facilitate the Flow of Products, Credits, and Information from Farm to Market

Value chains and supply chains are alternative perspectives of the same value creation and production process, and allow participants to realize different kinds of competitive advantage<sup>6</sup>. Supply chains allow participants to compete based on the low cost delivery of products to the point of retail sale. They are mechanisms useful for minimizing cost. On the other hand, value chain integrators create value by creating new products and services or by selling established products and services into new markets. The kind of competition which they are most effective in enhancing is value added based. In this training manual, for simplicity, we have elected to simply call the value creation/production process a “value chain.”

<sup>6</sup> Simply put, agribusiness supply chains and value chains are complementary views of the same phenomena—an extended industry with integrated farming and business activities ranging from basic inputs to final consumer. Supply chains focus on the farming and business processes enabling the flows of products and services in one direction (typically farm to market), while value chains focus on demand from consumers and cash flow in the other direction from market to farm. Both chains overlay the same network of companies and farmers. Both are made up of companies and farmers that interact to provide goods and services. When we talk about supply chains, however, we usually talk about a downstream flow of goods and supplies from the source to the customer. Value flows the other way. The customer is the source of value, and value flows from the customer, in the form of demand, to the supplier.

## Section 2.2: Transforming Value Chains

The diagram below presents a schematic of an agribusiness value chain. It identifies points of leverage within the chain where changes in the chain process control can result in significant cost savings for all members of the chain. Examples, of process control improvement include: i) the location of the “re-order point” (every chain contains a single “re-order point” where projected demand and actual demand are reconciled and buffer inventories held) or the precision of internal forecasting capabilities which schedules production (every chain also contains a single forecasting function which drives production scheduling and inventory accumulation) or the effectiveness of the internal order fulfillment system (chains are controlled by “demand pull” mechanisms whereas traditional farm supply systems are “pushed forward by supply.”)

Other investment related process reforms include integrated inventory management and customer service support at the retail end of the chain. These kinds of investments also result in cost savings for the entire chain. Part of what good chain integrators do is to array all of the potential points of intervention in the chain and select those for immediate investment/process transformation, which offer the largest ROI.

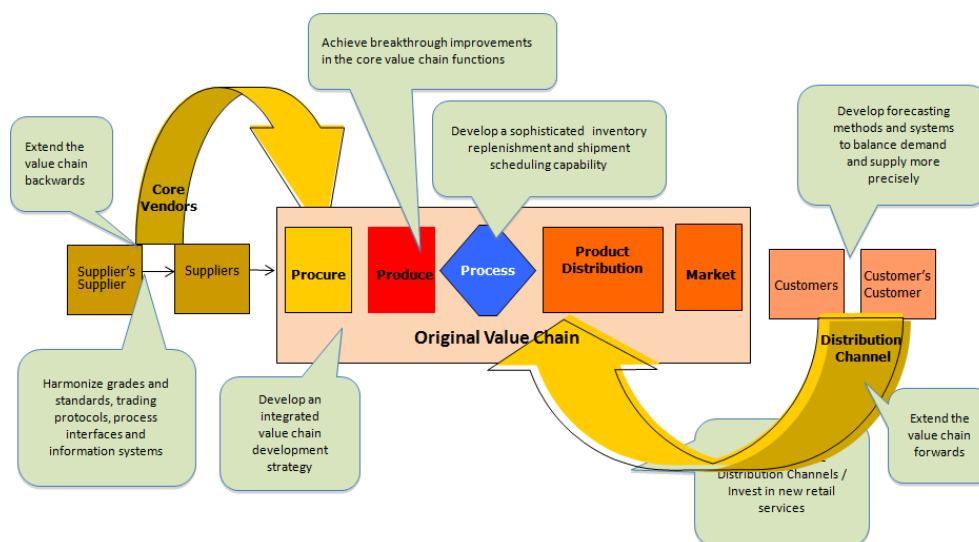


Figure 4 - Agribusiness Value Chain

Value chains allow participants to compete based on a number of chain competencies other than lowest cost production. Depending on specific competitive contexts these sources of competitive advantage may include: superior service; superior product differentiation gained through superior quality, brand or freshness; closer integration with the operating systems of target customers, etc.



Value chains create distinguishing characteristics either in the products that they deliver, in the distinctive services, which they wrap around the products, which they deliver, or in the specialized ways that the chains support the operations of targeted customers. Value chains are mechanisms for competing based on the creation of added value and on the strength of win-win relationships developed with customers.

Combining (integrating) previously separated chains, which operate back-to-back, increases possibilities for product and service differentiation. Combining chains is one avenue, which incubators can recommend to their incubatees for changing the way in which they complete. Typically this kind of company or process combination under a single enterprise structure allows incubatees to perform more complex and better-synchronized chain operations and hence to create additional degrees of competitive advantage. Thus, one way to transform value chains is to forge end-to-end combinations or mergers between chain partners.

Another way, to transform value chains is to move chain participants from the production and processing of traditional farm commodities into the production and processing of non-traditional farm products. This kind of transformation, sometimes referred to as the “new agriculture” involves transforming chain production, post harvest processing and delivery from food staples into the production of cash crops which are quality differentiated. Examples include berries, hallal fruits and vegetables, cut flowers, mushrooms, organic vegetables, veal, range grown chicken, etc.

Value chains can also be upgraded by developing deep operational connectedness with customers. Value chain relationships may be based on contracting the exclusive right to produce packed, shipped and sold under house brands, including those of major supermarket chains; the exclusive right to use/apply bio technologies supplied by the owner of these rights, or to comply fully with the specifications of “organic,” “hallal,” “kosher” or other food standards of an appropriate authority.

## Section 2.3 Strengthening Agribusiness Value Chains

Strengthening agribusiness value chains begins with benchmarking the cost performance of chains being championed against competing value chains. The objective of this benchmarking is to determine where cost disadvantages reside in each incubatee's chain and how these disadvantages can be transformed into lower cost advantages.

An incubator needs to be able to assess the cost absorbed in each step in the farm input, farm production, abattoir processing, packaging, shipping, delivery, and redistribution chain which characterize Brazilian chicken supply. Next, the incubator must be able to compare the cost performance of existing chains of which the incubatee is a part. Then the incubator needs to identify specific value adding steps which are missing in the local chain or which are redundant in that chain.

It is not enough for an incubator to simply benchmark. Incubators need to confirm study findings in the real world by supporting real experiments in the form of demonstration projects, which prove that hypotheses concerning economies of scale, chain cost improvement and the effectiveness of technology insertion and organizational reengineering. Demonstration projects need to be designed which confirm that cost advantages can be regained by making specific changes. Once, these changes have been demonstrated to be real and sustainable, efforts can be made to transform entire sectors.

The entire transformation process from high cost to low cost production and from high fixed cost to high variable cost structure opens up opportunities for agribusinesses and points the direction toward reengineered business models, which involve chain integration.

The table below represents some of the transformations, which typically take place when a traditional farm to market distribution system is transformed into a value chain.

BEFORE VALUE CHAINS	AFTER VALUE CHAINS
<ul style="list-style-type: none"> <li>• Economies of Scale in Production and Food Processing</li> <li>• Weak Commercial Linkages</li> <li>• Supply Push</li> <li>• Primary Risks Relate to Price</li> <li>• Limited Opportunities for Product or Market Differentiation</li> <li>• Limited Opportunities for Managing or Selling Risk</li> <li>• Limited Set of Investment Quality Asset Classes</li> <li>• Limited Opportunities for Partnering and Risk Sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Network Economies from Control Systems and Process Integration</li> <li>• Strong Commercial Linkages</li> <li>• Demand Pull</li> <li>• Primary Risks Relate to Meeting Customer Expectations</li> <li>• Extended Opportunities for Service, Quality and Network Differentiation</li> <li>• Extended Opportunities for Managing or Selling Risk</li> <li>• Extended Set of Investment Asset Classes</li> <li>• Extended Opportunities for Partnering and Risk Sharing</li> </ul>

Table 3 - Value chain Transformation Opportunities Provide a Rich Source of New Agribusiness Concepts

Each competitive disability associated with a traditional chain, which an incubator identifies, diagnoses and finds technology or advanced management methods to remedy, is a new business model, which is worth testing and starting up. Improving farm to market value chain competitiveness provides a rich and ample reserve of new business concepts and new business models worthy of strong agribusiness incubator support.

## Section 2.4 Intervening in Agribusiness Value Chains

Developing agribusinesses which drive value chain reform is typically more complex but also typically more profitable than developing agribusinesses whose business is in value chain integration. Testing the viability of new value chains requires more than benchmarking to point the way toward new value enhancing business models.

New value chain launches require the development and testing of new value premises. These premises may include: i) new products, ii) old products appropriately revised, rebranded and retargeted for new markets, iii) new services, and/or iv) the transformation of established products into new service delivery platforms. For the purpose of testing the market merit of these various innovations, an incubator needs to develop its own market testing capabilities. Alternatively it must affiliate itself with specialist market testers who are able to judge the appropriateness, affordability and market acceptance of new value premises.

## Section 2.5 Creating a Supportive Business Environment for Agribusiness Value Chains

Rural and urban economies are complex and change resistant economic spaces and they make the start up of new businesses particularly difficult. One of the most difficult challenges which agribusiness incubators face is the discovery of capable entrepreneurs with knowledge of and interest in rural economies. Urban agriculture presents different challenges, but both spaces share the challenge of finding capable entrepreneurs. A closely related challenge is deal flow: access to and knowledge of viable and sustainable agribusiness plans.

The resources required to realize significant and sustainable changes in economies (be they rural or urban) exceed those available to all but the very best capitalized incubators. For this reason as well, an important role which almost every agribusiness incubator must undertake is early in its own development is the cultivation of partnerships with other providers of business support services, with universities and technical institutions, with farm level organizations, with institutional buyers of products and with local governments.

The diagram below represents some of the critical dimensions of agribusiness ecosystems, which incubators need to strengthen, activate and influence. The diagram identifies three key stakeholders and outlines some of the issues, which are of concurrent vital interest to both potential collaborators and to incubators over the long term.

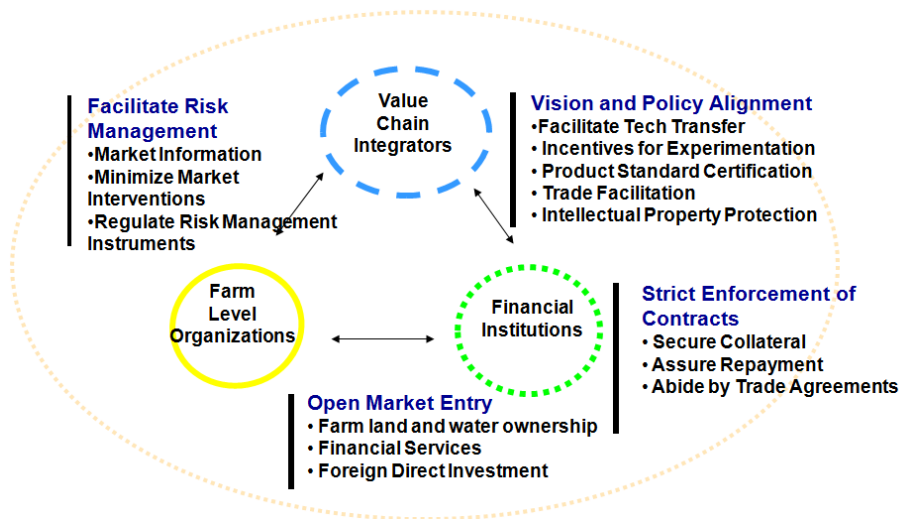


Figure 5 - Key Dimensions of Agribusiness Eco-Systems

A first and essential step that agribusiness incubators need to undertake whenever they support an incubated company to enter or expand into a new product or service market is to map all of the existing stakeholders and the future potential stakeholders who may be affected by the success or failure of their new market entering incubatee. In this way, incubators need to separate out natural potential partners and potential adversaries in each new market opening effort. Next, the incubator needs to develop an engagement strategy for stakeholders. The strategy should identify what interests may influence each to support new incubatees, what knowledge, opportunity or personal influence needs to be applied in aligning their actions so that they support the incubatee and ultimately the ways forward to engaging them in providing whatever support they can realistically be expected to provide.

Business clusters sometimes catalyze around new, energetic, market entrants and around the incubators, which help them to start up. One demonstrable success can over time invite imitation, business experimentation, specialization and ultimately clustering.

Agribusiness incubators have a tremendously powerful instrument in their own alumni associations, which they can mobilize in ways, which cross-fertilize, mutually support and accelerate learning at the enterprise level.

Various incubators have found various ways of engaging peripheral business supporters. One of the best is to create systems of recognition and award. These can be used to highlight and to draw out people with commercially valuable new ideas. An ancillary mechanism is the brokerage function, which allows incubators to bring together people with good ideas and people with small enterprise start up experience. Yet another tactic for reaching out beyond the periphery of an incubator's everyday base is the implementation of fellowship programs which allows bright young and highly trained young people to be recruited and engaged directly in the agribusiness incubation process when they complete their university or technical school studies.

## COMPONENT CONCLUSIONS

This component provides an understanding of the conceptual framework and terminology related to value chains. It helps the trainee to understand how investment by incubatees in value chains can enhance their own competitiveness. The key take away points from this component include the following:

- Incubators can and often do operate in lieu of missing markets to create new enterprises whose value adding function is to link rural and urban economies.
- Value chain integrators create value by creating new products and services or by selling established products and services into new markets. They also create value by reducing transaction costs associated with moving products between rural and urban economies.
- Benchmarking and process reengineering are valuable tools for enhancing the competitiveness of value chains.
- Combining value chains, transformation a product orientation into a service orientation and the development saleable service platforms are valuable tools for enhancing the competitiveness of value chains.
- Discovering partners, building networks and ultimately developing agribusiness clusters are important tasks, which incubators need to take up on day one of their operations.



Component 3:

Agribusiness Marketing





## COMPONENT INDEX

Section 3.1: Adding Value to the Market

Section 3.2: Beyond Commodities: Differentiated Products

Section 3.3: Market Innovation Process

Section 3.4: Selecting a Market, Competencies and Certification

Section 3.5: Market Positioning.

Section 3.6: Execution

Section 3.7: Export Market Development

## COMPONENT OBJECTIVES

This component will address the critical area of agribusiness marketing. Incubator staff need to support incubatees in understanding where the market opportunities exist, and how the entrepreneurs can take advantage of them. Incubator staff must blend industry knowledge, entrepreneurial drive and creativity to maximize the opportunities on behalf of their clients. In today's economic climate, it becomes even more critical for agribusiness incubators to think "outside of the box", to analyze each client's competitive advantage and to work with them to reach that objective.

## Section 3.1: Delivering Added Value to Customers

The primary goal of any agribusiness incubator is to support the development of SME entrepreneurs into profitable and sustainable business enterprises. The commodities that many client fledgling entrepreneurs produce, deliver and sell often, lack distinctive customer value in local, regional or international markets into which they are sold. Value is determined in the many individual judgments of customers, aggregated into homologous demographic/socio-economic niches within specific markets. The first lesson, which every incubator needs to teach, is the strategic merit of moving from products, which are indistinguishable from others based only on their price—i.e. from commodities--to products, which are distinctive in multiple dimensions. Understanding the relationship between perceived customer value and the cost of repositioning over these multiple dimensions, is the essence of agribusiness marketing. For example, an incubatee producing sugar could easily increase their profit margin tenfold by branding their products as a “specialty sugar”, and packaging them in an attractive, smaller-sized unit. Turning cocoa into chocolate bars, oranges into orange juice and tomatoes into pasta sauce are all examples of how value addition can improve the marketability of a said commodity. It is critical for the incubator manager to assist incubatees in the study of the market, and to help them determine where the opportunities exist and further to understand the costs, benefits and risks of delivering specific products into open opportunity spaces in target markets.

## Section 3.2: Beyond Commodities: Differentiated Products

It is particularly useful for small to medium sized enterprises to understand the differences between commodities and products. In the old days agriculture was all about producing commodities, producing corn, wheat, coffee, and beef. These are commodities. Commodities can be graded; quality standards apply to many commodities; the markets into which they are sold are more or less formally organized which is to say that well defined procedures and explicitly delegated authorities exist in more formally organized markets for setting rules and enforcing these rules among market participants. Formal markets are less risky than informal commodity markets. Both however are generally more risky than markets in which products are differentiated.

For example, wheat is a commodity. The final processed product is white bread. Fifty years ago there were two types of bread, perhaps three. Now if you go to the super market anywhere in the world the many different types of bread on offer can confuse a consumer. Large companies do not produce bread. Small and medium sized companies produce most breads. If you try to compete against General Mills, a small company will lose, but if it runs a small bakery and its own distinctive product—one that does not look, feel and taste just like a General Mills product; it can survive and make money.

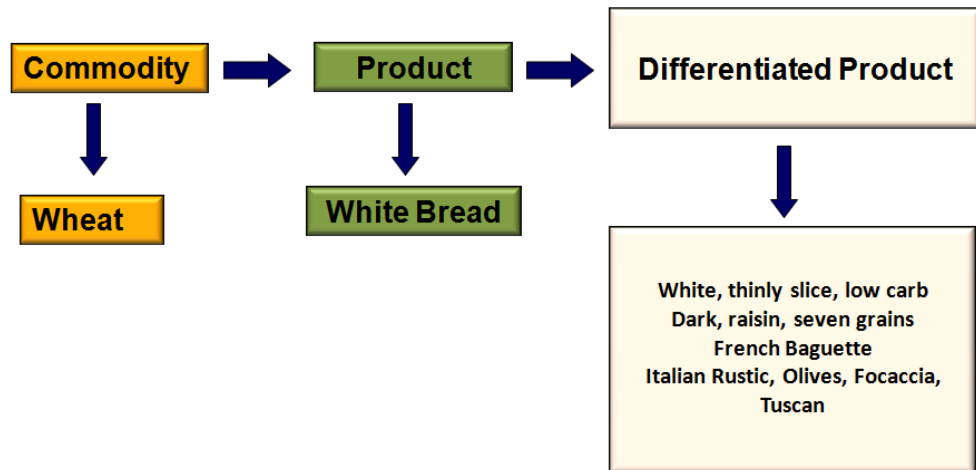


Figure 6 - Beyond Commodities: From Markets to Value Chains

What makes one food product different from the next? Why does one brand of “pasta sauce” lead the market while others struggle to stay in business? The answer is simply the “Four P’s”: product, pricing, packaging, and promotions.



Figure 7 - Examples of Successful Products

## Section 3.3: Market Innovation Process

Over time, how does an incubatee go about adding value to its initial product offering?

An incubatee has two options, either: i) It must deliberately test positions in the marketing space, which are not already occupied by incumbent competitors and develop and launch products which correspond to customer value relevant attributes associated with these positions, or ii) it must try to develop completely new markets by forming or joining value chains which access these markets.

### FIVE STEPS TO ADDED VALUE

- **Step 1:** Choose a market that corresponds to the incubatees brand domain e.g. poultry products, agricultural hand tools, nut cracking equipment.
- **Step 2:** Identify a need in that market which is underserved or served unproductively
- **Step 3:** Create a value added product or service to meet that need
- **Step 4:** Test, refine and confirm the value, affordability and salability of the new product in the target market
- **Step 5:** Communicate the value proposition associated with the new product

## Section 3.4: Selecting a Market, Competencies and Certification

Several different market alternatives exist for incubates to target with their agribusiness products and their market outreach efforts. Different market choices afford different entry challenges. They require the development of different internal competencies and the embracing of different types of external certification processes. Different market entry choices also imply very different risks and different potential rewards.

Basically, four market entry options are available to an incubatee. These include traditional markets, institutional markets, incubator-affiliated markets and export markets. Each of these markets entails different types of strategic affiliation with different types of partners, different value propositions, different competitive positioning strategies and different price levels.

As the diagram below suggests, some of these markets are more difficult than others to access profitably and to sustain profitable operations.



Figure 8 - Selection of a Market in which an Incubatee Chooses to Compete

Examples of possible markets for agribusiness SMEs producing both food and non-food agricultural products include:

**Traditional Markets include:** i) rural retail outlets, ii) street vendors, and iii) urban wholesale markets. Traditional markets are the easiest to access. Barriers to entry are de minimus for traditional markets, which in many developing countries operate in the informal sector. Profitable opportunities are limited in these markets because product differentiation is difficult to establish and even more difficult to sustain. Small-scale enterprises can realize extraordinary profits in traditional markets, however, to the extent that they are able to develop value chains, which are faster, more adaptable and more efficient than those which their competition operates. Investment in value chains which can be duplicated in different circumstances and which entail the application of 21st century technologies afford particularly attractive opportunities in these markets.

**Institutional Food Markets include:** i) school food programs, ii) government agencies, iii) restaurant and hotel industry food supplies; and iv) suppliers to foreign embassies. Access to institutional food markets typically entails the development of specialized food service, food preparation and logistics capabilities. It also typically requires investment in food safety certification competencies and in other competencies related to bidding on public tenders. These markets pose higher entry barriers than do traditional markets. These barriers take the form both of capital investments and specialized competency development. However, for this reason they afford more attractive opportunities for sustained profitability.

**Institutional non-Food Markets include:** i) processors and manufacturers requiring high quality agricultural inputs; i) specialized consumer product retailers seeking handicrafts and other farm products; iii) rural artisan marketing coops. Because non food markets require higher degrees of product development and individual product design and production, developing sustainable channels typically requires strong strategic alignment in farm to market chains and additional investment in product inventory management, order fulfillment and quality control systems.

**Incubator Affiliated Markets:** include access to marketing channels, which are owned by incubators or managed through incubator affiliates. Examples include Villgro Stores, Timbali, and Technoserve Mozambique. Incubators are able to develop new markets where none existed before either through their own investment in downstream outlets or specialty shops or through their incubation of businesses which become specialized downstream retailers/wholesalers, e.g. organic food or halal food outlets, farm to market distribution of fresh milk, non-food rural product marketers, etc. Access to this category of market is somewhat earlier for incubates which have grown up within the business ecosystems surrounding specific incubators.

**Export Markets include:** i) specialty food and non-food markets, ii) supermarket sales, iii) specialized retailers ( e.g. museum shops, artifact importers, etc.) and ii) sales to brokers & agents. These markets are both the deepest and the broadest including multiple niches and multiple distribution channels. Competition in this market is intense. Market entrants come from different countries and different size companies. Proprietary product rights are difficult to protect and buyer demands are exacting and challenging for small companies to comply with. In the export market, change is always accelerating and specialized knowledge is required in order to understand the merits and demerits of different products formulations, of different market positions and of affiliating with different importers,

distributors and retailers. Relevant knowledge comes only from deep immersion in export markets. It comes from understanding the marketing space in foreign countries, which as explained above can be quite different than the marketing space for the same product in the country of origin. Individual incubatees typically look to their mentoring incubators to provide advice and direction.

### Competencies

Ultimately investment in specific products, strategic channel affiliations or even market positions can be competed away. All of these aspects of a small agribusiness's on-going operation require perpetual reevaluation and reinvestment. Companies with large size, superior capital access or simply a shorter turning radius can undercut any competitive advantage which a small to medium sized company is able to develop on this basis.

What cannot be challenged as easily, however, are the internalized competencies in which a company invests. These include the soft assets of distinct management competence, strong brand reputation or relationships of trust and mutual support within channels.

One competency that has become increasingly important for agribusiness incubatees is competence in quality control and specifically in conformance with the process and asset conformance standards associated with various food safety regiments.

Incubators must be able to not only guide incubatees to identify and assess market opportunities, but also to help them understand the standard compliance thresholds, which restrict access to specific markets. Relevant knowledge runs the gamut from legal compliance to nutritional analysis to branding and packaging standards. By complying with quality and safety related criteria, incubatees are able to take full advantage of all business opportunities, which present themselves.

Specialized competencies are likewise required to guide incubatees in non food markets, which involve discrimination of value based on a diversity of criteria including workmanship, length and strength of fibers, consistency with traditional designs and/or artistic merits of new designs.

### Food Safety Certification

Safe food certification requires the development of internal competencies within incubated enterprises, which aspire to sell food products across national borders in the following international systems:

- **HACCP** – Hazard Analysis & Critical Control Points is a critical food hygiene management system for consumption product processing and production. Buyers view HACCP certification as a basic standard for quality processing and assurance.
- **ISO** – International Organization for Standardization is a global network that identifies international standards for businesses, governments and societies. ISO 9000 is for Quality Management. ISO 14000 is for Environmental Management.
- **Organic** – Organic content requires certification of the registered entity by ECOCERT, the US Department of Agriculture and others. Organic certification is an internationally recognized seal of superior growing standards, and generally adds twenty to thirty percent more value to the commodity crop. Organic certification can be cumbersome, but its value is undeniable, particularly for growers who are already utilizing organic standards.
- **Fair Trade** – Fair trade guarantees fair pricing for producers in the value chain. There are a number of international Fair Trade certifying agencies that certify the value chain of various commodities. Fair Trade certification can add ten to thirty percent value to value-added products, and is widely marketable, particularly in the European Union and other international markets.
- **Ethnic/Religious** – Halal (Muslim) or Kosher (Jewish) are two most common religious certifications in the US market. There are a diverse variety of certifying agencies for each, so it is important to view each certification's validity for the target markets.
- **Regional/National or Cause certifications** – branding initiatives based on region/nation of origin or highlighting support for a social initiative. Popular options include branded support for national social issues, including disease prevention, poverty reduction, child welfare, "farmer friendly", and raising money for a host of causes. Regional or national certification is generally a government-led seal of quality or authenticity (i.e. "Proudly South African", "Green Morocco", etc).



## Section 3.5: Market Positioning

Understanding each product's market position is critical for success in each market in which an incubatee chooses to compete. SME entrepreneur clients must define who their target customer is and develop a marketing plan in order to deliver value to them.

Beyond the market position of SME clients, it is also important to develop the market position of the incubator itself. Incubator managers must clearly define their role in their respective markets, and do their best to market themselves in a positive, efficient way. This concept is discussed in more detail in Component 4 (Networking).

## Section 3.6: Execution

A great deal of market success relates to execution. Marketing is not a true or false test. Companies shape and mold the markets in which they participate. To the extent that incubators are "in the markets" which they choose to serve they are both affected and effective. To the extent that small companies are able to learn from interacting with their customers and, to the extent that they are able to respond positively and creatively to this learning, they possess a tremendous source of competitive advantage, which larger and less agile competitors do not possess.

In the 21st century not even the largest companies are able to foresee the future or to anticipate or position or develop new products precisely right. Competition is simply too great, the pace of technology development too fast and the preferences of consumers too variable. In this environment, the ability to recognize mistakes and to change direction trumps acuity in market planning. In this context incubatees need to understand that the old varieties of listening to customers, understanding their needs and their problems and providing them with solutions still hold. The following key points are worth taking away:

- Listen systematically to customers and respond to their problems quickly
- Listen systematically to network partners and respond to their advice and admonitions
- Continuous adjustment and improvement: compare actual against planned revenue, market share and positioning. Fix problems quickly.
- Celebrate successes and learn from failures
- Incorporate lessons learned in current marketing methods and keep moving forward

## Section 3.7: Export Market Development

Export markets are the ultimate target for many value-added entrepreneurs producing food and non-food products. They offer the largest market volume, the greatest opportunity for price differentiation, and the largest money making opportunities. However, they also open the door to the most intense competition and they afford the fewest local market advantages to new entrants.

Rising demand in the United States, European Union, Japan, Brazil and many other places has created a never-ending realm of possibilities for the motivated SME client. As an agribusiness incubator manager, it is critical for you to familiarize yourself with these international opportunities, as well as the requirements for entry and competitiveness.

Understanding the value-chain associated with each market is of the utmost importance for an incubator manager. You must be able to guide your clients in the direction of various opportunities that exist internationally, and how to take advantage of them.

In the international value-added processed foods industry, there has historically been a strong attraction to large, western markets. The United States' market is by far the largest in the world, followed by the European Union. These markets can offer your clients a real opportunity to grow, especially in higher-value "specialty" products. However, it is important for you to not ignore other, perhaps less competitive yet equally available market opportunities. The "specialty" food industry is thriving in places like Kenya, South Africa, Mexico, Korea and other often less considered countries. Work carefully with each SME client, and together; figure out what global opportunities you shall pursue.

### Agribusiness Incubation & Food Security

The direct role of agribusiness incubators is to promote the development of client SMEs operating in the sector. This, obviously, has a direct impact on commercial activities, job creation, market development and value-chain equality – but did you know that incubation can make serious strides in the development of food security? It can!

According to the US Agency for International Development, there are three distinct variables central to the attainment of food security: availability; access & utilization.

- **“Availability”** refers to sufficient quantities of food available for consumption. Without a doubt, agribusiness incubators who focus on systematically growing the value-chain, contribute to this initiative. Constraints on knowledge, technologies, practices, inputs, marketing, transportation and storage are all key issues successful agribusiness incubator managers address with their respective SME clients.
- **“Access”** refers to an individual’s ability to purchase food products that are available. In short, “no money” means “no food”. Agribusiness incubators work tirelessly to help their SME clients grow, which contributes directly to job creation and sustainability. As most agribusiness incubators operate in rural areas, there is a direct impact on creating employment opportunities/income generation for the rural poor.
- **“Utilization”** refers to the storage, packing and usage of food products for proper nutrition, which is something that value-added food processing addresses quite well. Proper labeling, as well as the ability to seize shortfall opportunities within a specific market, is a main focal point of incubation.

The link between agribusiness incubation and food security is undeniable. It is the commercial activities, a business-led solution to economic concerns that truly lead change. Agribusiness incubators are on the front lines of this initiative, and the social impact of incubation remains equally as important as the commercial impact.

## COMPONENT CONCLUSIONS

Marketing is all about identifying and creating value. The value which is created exists in the mind of the customers which incubated companies target. Understanding the buying preferences of those customers in the context of all of the other buying options available to them in any given market is the basis for market positioning. While a “me too” market positioning competition strategy based on offering the lowest price to target customers in some cases is adopted, in pricing wars all competing parties loose. However, small start up enterprises have the most to lose.....their business.

Marketing agribusiness services and agribusiness practices requires knowledge of the position of competitors in the market, the preference of specific categories of potential buyers and the ability to test market offerings (product formulations, packaging, pricing and promotion before product launch. Once launched, value needs to be introduced in new products through product modifications and/ pr changes in market positioning or by opening entirely new markets through value chain affiliations. Over the longer term it is investment in competencies retained within the enterprise rather than investment in specific products or market development efforts, which will pay the most significant dividends. In particular it is the ability to change direction, to learn quickly and to internalize market information more than any other competency, which separates market leaders and market losers.

The market advice and direction, which an agribusiness incubator manager is able to provide to her clients, is essential to their success. Clients require outside advice, which is market tested and market savvy. The best kind of incubator support comes from developing internal capabilities, which include a mixture of business experience, business acumen and creativity.





# Component 4:

## Networking





## COMPONENT INDEX

- Section 4.1: Why Network?
- Section 4.2: Some Pointers on Networking
- Section 4.3: Priority Networks
- Section 4.4: ICT Tools for Networking
- Section 4.5: Hotspots for Networking
- Section 4.6: Networking Incubator Graduates

## COMPONENT OBJECTIVES

Networking is a major concern of every organization based on sales and business development. The old saying “it’s who you know”, applies to almost every aspect of business, and most certainly applies to agribusiness incubation. It is critical for incubator managers to not only implement meaningful networks on behalf of their SME clients, but equally as important to develop the incubator’s own network. The objectives of this component are to define the attributes of a properly functioning network, its uses and how to go about achieving it.

## Section 4.1: Why Networks?

No incubator is an island with all the technical and entrepreneurial expertise in house. They need networks outside their entities to complement their expertise and expand their opportunities. In particular they need networks to facilitate access to funding (including favorable contacts with suppliers and traditional funding options) and access to markets. This includes technical expertise in what legal requirements are necessary for entry into particular markets, where the demand/opportunities are, and key points of contact with buyers, importers and distributors in said regions. Agribusiness incubators need to develop a network for each and every service their clients need. If these critical services are not available “in-house”, then the need is still present and the incubator manager must address it. Financing, input/output/production supplies, legal services, market dynamics, nutritional analyses, distribution, transportation and business development remain the key areas of focus for network development.

Networks range from the informal (soft) where groups of firms may be involved in the exchange of ideas or the development of broad initiatives (such as training programs and capability brochures), to the more formal (hard) where the association between participating firms is more focused, such as in establishing a joint export venture. Soft networks usually encompass a larger number of firms than hard networks, with membership often open to all who meet a minimum requirement (such as payment of an annual fee). Hard networks are much more commercially focused, involving a limited number of pre-selected firms, sometimes formally and tightly linked through a joint-venture/strategic alliance. Non-firm organizations, such as a university, are only occasionally seen as members of a hard network. A network can be defined as a group of firms using their combined talents and resources to co-operate on joint development projects. Through complementing each other and specializing in order to overcome common problems, participants are able to achieve collective efficiency and conquer markets beyond their individual reach.

Networks, in particular soft networks, are not necessarily geographically concentrated. Once trust between participating firms has been established, and the strategic direction agreed, operational dialogue can be facilitated through electronic means. Even ‘virtual’ networks require a personal interface, especially in the early stages. Networks do not always emerge spontaneously, reflecting the isolation of many SMEs from each other.

Networks in their various forms help SMEs build critical mass in key areas, and facilitate their specialization. Through networking, firms are able to learn from each other rather than from support organizations. The concept of ‘networking’ is not new – it can be seen in bidding consortia, buying clubs, trade associations and lobby groups. However, it is only in the last decade or so that public policy makers have introduced interventions to facilitate inter-firm networking.

Networks, especially firms linked to each other in a value adding production chain, are key components of any cluster. All forms of networks facilitate the development of trust and linkages within a cluster, and beyond.

Determining what type of networks incubator managers must address will be largely based on the needs of the SME entrepreneur clients.

Agribusiness Incubators have two constituencies to serve:

1. the internal constituency of their clients, and
2. the external constituency of the business ecosystem in which they are immersed.

**As an agribusiness incubator manager, with whom do you want to network?**

- Technology sources (e.g. University, research centers, technology companies)
- Suppliers (inputs, intermediate products, equipment providers)
- Farmer organizations (cooperatives, associations, groups)
- Financiers (banks, venture capital)
- Government agencies that sponsor programs for SME development
- Political leaders relevant to your business in your locality or nation
- Regulators (issuing licenses, permit)
- Chamber of commerce
- Trade associations
- Professional associations
- International network
- Business development services providers (accountants, management consultants, trainers, etc.)
- Logistics agents
- Lawyers

## Section 4.2: Some Pointers on Networking

Why network at all? You are busy as an incubator manager; you do not have time to waste in lunches and meetings; you do not have money to attend all these events; you do not see the return on these investments anyway.

The “why” is easy to explain: you cannot do things alone. The difficult part is the “how” to do it efficiently and effectively.

- Define the priorities for your network
- Monitor your contacts
- Select the trusted contacts
- Keep in contact with the selected ones
- Cut out the not so productive contacts
- Enjoy the networking experience
- Aim at personal contact in the network
- It is not the number of contacts in your database that counts, but their quality and trustworthiness.

The “How-To’s” of Networking (the following could be subsections instead of sections)

1. Priority Networks
2. ICT Tools for Networking
3. Hot Spots for Networking
4. Networking Incubator Grads

## Section 4.3: Priority Networks

### PARTNERSHIP IS EVERYTHING

1. Incubators should generate partnerships on behalf of their members, including:
  - Government agencies
  - International organizations
  - Raw material suppliers
  - Value chain membership
  - Shipping companies
  - Trade organizations
  - International standards organizations
  - Certifying agencies
  - Private enterprise partners
2. Where do you spend your time now?
3. Where should you spend your time?

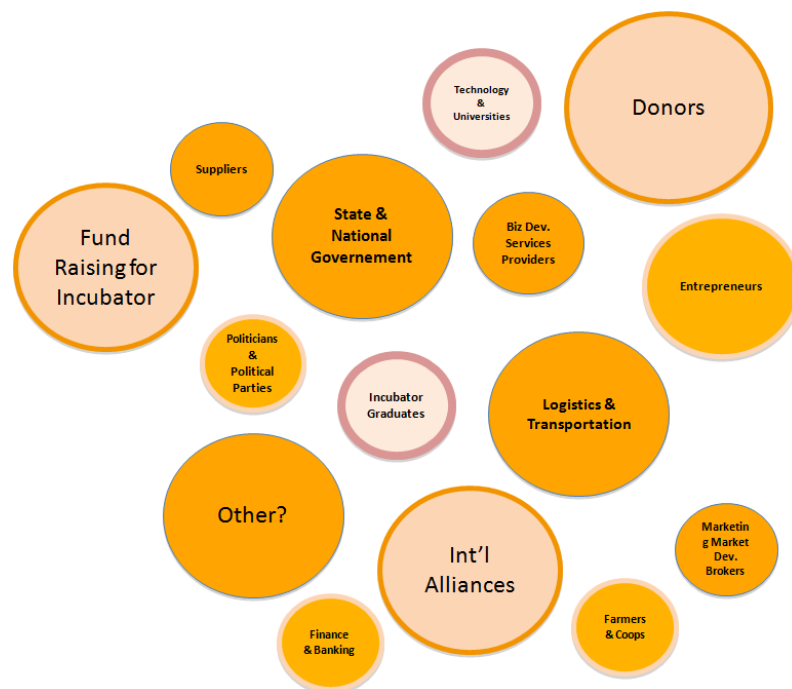


Figure 9 - Which are your priority networks?

## Section 4.4: ICT Tools for Networking

A variety of ICT tools are available for networking, including such popular tools as LinkedIn and Facebook. These on-line social networking services provide platforms for social and business relations and make it possible to connect people who share interests and activities across political, economic, and geographic borders. Social networks connect people at low cost; this can be beneficial for entrepreneurs and small businesses looking to expand their contact bases. These networks often act as a customer relationship management tool for companies selling products and services. Companies can also use social networks for advertising in the form of banners and text ads. Since businesses operate globally, social networks can make it easier to keep in touch with contacts around the world.

One example of social networking being used for business purposes is LinkedIn.com, which aims to interconnect professionals. LinkedIn has over 100 million users in over 200 countries.

Companies have found that social networking sites such as Facebook, LinkedIn, and Twitter are great ways to build their brand image. Five major uses for businesses and social media: 1) to create brand awareness, 2) as an online reputation management tool, 3) for recruiting, 4) to learn about new technologies and competitors, and 5) as a lead generation tool to intercept potential prospects. Using these ICT tools for networking, companies are able to drive traffic to their own online sites while encouraging their consumers and clients to have discussions on how to improve or change products or services.

These ICT tools for networking provide a platform for linking agribusiness incubator managers and incubatees to network partners. Another useful ICT tool is the platform provided by the infoDev Community of Practice.

## Section 4.5: Hot Spots for Networking

### WHAT ARE AGRIBUSINESS NETWORK HOT SPOTS?

- International Food and Agribusiness Management Association (IFAMA)  
[www.ifama.org](http://www.ifama.org)
- Consultative Group for International Agricultural Research (CGIAR)  
[www.cgiar.org](http://www.cgiar.org)
- Community of Practice of Agribusiness Incubator (infoDev)  
<http://www.idisc.net/WorkGroups/Home.aspx>
- International Finance Corporation (IFC) Global Agribusiness Program  
[www.ifc.org/ifcext/agribusiness.nsf/content/home](http://www.ifc.org/ifcext/agribusiness.nsf/content/home)
- Asian Association of Business Incubators (AABI)  
[www.aabi.info](http://www.aabi.info)
- Trade Associations (eg New Zealand flower exporters association at [www.nzflowers.com](http://www.nzflowers.com); Farm Equipment Manufacturing Association or [www.farmequip.org](http://www.farmequip.org))
- Professional Associations (eg American Association of Agricultural Economics AAEA at [www.aaea.org](http://www.aaea.org))

### HOW TO GUIDE YOUR SEARCH?

1. Get a young brilliant assistant (preferably < 25) to do a search for you.
2. Ask him/her to make a list of 20 hot spots. For each write 1 paragraph about the content
3. Browse on 10 of the most interesting spots (10 minutes each).
4. Select 3 that look useful to you.
5. Ask your assistant to repeat the search using the 3 spots you have identified. Repeat steps 2-4.
6. Ask colleagues you respect what sites are useful to them.
7. Compare with the 6 you have identified.
8. Signal useful sites to your colleagues.

## Section 4.6: Networking Incubator Graduates

### HOW CAN YOU IMPROVE YOUR NETWORK WITH YOUR GRADUATES?

#### WHY?

- Your graduates are part of your branding strategy. The more successful your graduates the higher your reputation.
- Your graduates are an inspiring model for your new incubatees.
- Your graduates can be your own teachers. They can tell you what you could do better as an incubator.
- Your graduates can be a source of partnership for the incubator (example of ABI-ICRISAT)
- Your graduates can help you to expand your network.
- Your graduate can be a source of profit for your incubator (example of IAA-IPB)

#### HOW?

- Establish an association of graduates
- Keep them informed: launch a newsletter
- Start a yearly reunion Event
- Monitor their performance over time (growth indicators)



### COMPONENT CONCLUSIONS

This component provides an understanding of the conceptual framework and terminology related to agribusiness incubation and helps the trainee to understand the critical need for proper networking. It is important to reiterate that these networks, on behalf of your SME clients, needs to be sustainable. If you are developing a funding network for your clients, work with the institution to ensure that it is your client, and not you, who is establishing a line of credit. Make sure it is your client who graduates with established relationships with suppliers, shipping companies, equipment repairs, etc. This is critical to their long-term success, and their success directly affects your success.



## Component 5:

# Challenges and Solutions with Agribusiness Incubation



## COMPONENT INDEX

Section 5.1: Key Challenges for Agribusiness Incubation and Strategies to Meet the Challenges

Section 5.2: Phases of Incubator Development

Section 5.3: How to Move Up the Incubator Value Chain

Section 5.4: Role of Agribusiness Incubators in Enhancing Sector Competitiveness and Business Eco-System

Section 5.5: Risk Management

Section 5.6: Key Actions and Developing an Action Plan

## COMPONENT OBJECTIVES

Participants will be able to: Plan an action strategy to support bringing client businesses to market in the current and emerging agribusiness context.

## Section 5.1: Key Challenges for Agribusiness Incubation and Strategies to Meet the Challenges

Against the backdrop of these challenges every new agribusiness incubator team needs to ask themselves the question: What is our unique contribution to the agribusiness ecosystem in which we will be operating? What, in other words, is our strategy for coping with the challenges enumerated above? Answers to these questions, should address the following subordinate issues and questions: i) what are the core competencies of the incubator and how does the incubator propose to strengthen and sharpen these core competencies? ii) How does the incubator build active networks and collations among expert groups outside itself whose support is essential for enterprise development? iii) How does an incubator create unique value or competitive advantage?

In the case of agribusiness incubators, strategy entails the kinds of linkages (forward and backward), the depth of the competencies created through mentoring new businesses and the deepening and strengthening of new food and agricultural product markets which support new enterprises with the offer of complementary business services.

An important aspect of strategy involves finding and then applying economies of scope, of network association, of specialization or of scale - whichever offer the greatest sustainable advantage. Business synergies result when portfolios of incubatees are connected to one another in one or more dimensions or when they cluster together in ways, which create internal economies of mutual support among them. One of these synergies is the use of basic technology across an array of new products, another is the cross selling of multiple products or services to other incubatees or alternatively to the same set of customers. Another potential synergy comes from leveraging joint procurement and still another from sharing overhead functions—these are all valuable lessons for startup companies which are learned early in their development while they are still operating as incubatees.

One frequently sought source of synergy is the combination of new technology, technical knowhow, finance and entrepreneurship which emerges around technology business incubators which are closely linked to universities or to research institutions.

Importantly, strategy in a competitive market also involves market positioning. That is the concentration of resources and activities in well-defined segments of a larger market which the incubator chooses to serve uniquely well. Strategy also entails the deliberate application of resources for building up specific internal competencies and the explicit reliance on outside strategic partners for the supply of other essential competencies, which the incubator chooses not to invest in.

Another form of strategy involves the skillful use of information concerning markets, consumer preferences, technology and actions and plans of competitors. Incubators operating in developing countries must be able to scan their business environments and understand where critical service or resource gaps exist in the agribusiness ecosystems of which they are a part. Once identified they must be able to determine how to go about filling these gaps; e.g. by influencing the use of government resources, by leveraging other public or private resources or by committing their own resources.

Sound strategies, once formulated, afford strong and effective means for multiplying efforts and for aligning business processes within an organization. Thus, strategies need to be articulated so employees, stakeholders and ancillary service providers and other stakeholders in the success of the incubator can embrace them. They also need to be understood by potential collaborators and potential competitors.

## Section 5.2: Phased Development of Agribusiness Incubators

Agribusiness incubators evolve in different directions over time in response to an evolving agenda for enterprise development which is determined in large part by changes in their business ecosystem and corresponding changes in incubator strategy. The project team's review of diverse agribusiness incubators suggests that all pass through similar early stages of development, but subsequently pursue alternative pathways of development over time. The figure below depicts three stages of "early stage development" and five alternative pathways for more advanced development and scale-up of agribusiness incubation.

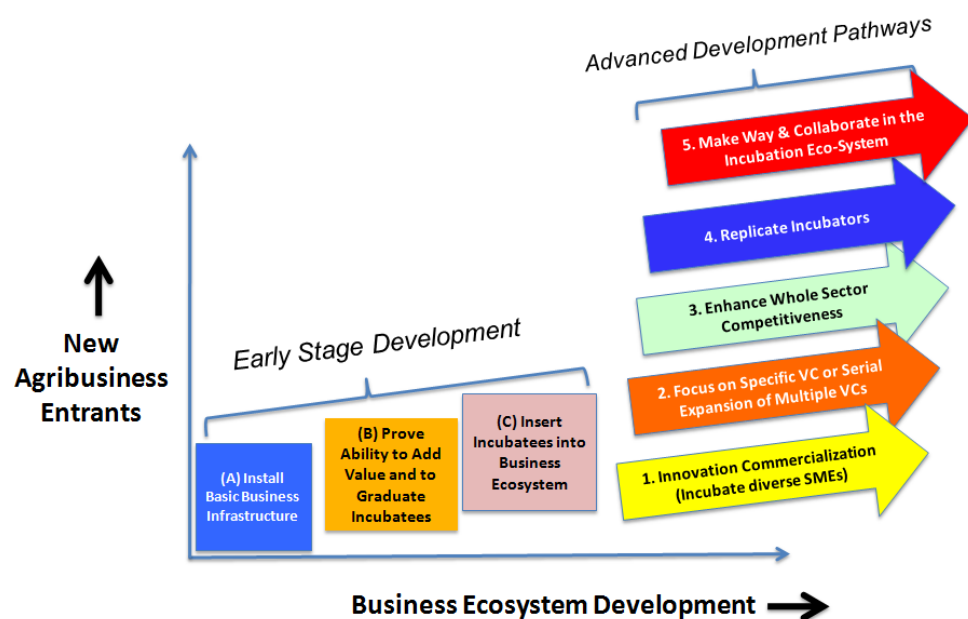


Figure 10 - Phased Development of Incubators

### Early Stage Development

Agribusiness incubators typically engage in a series of early stage development activities on the way to establishing themselves as viable players in the incubation process. These stages might be called the ABC's of establishing an agribusiness incubator:

#### A. Install the Basic Business Infrastructure

Building an institutional foundation sufficiently sturdy to support the delivery of business support services and, at the same time, sufficiently transparent to satisfy the requirements of donors and financial supporters poses a first and significant challenge for many incubators. This first stage entails a number of steps, each of which is simple to state but which may be difficult in practice to implement:

1. Feasibility study and risk analysis regarding the likely success and specific management action agenda for the incubator;
2. Development of a clear and comprehensive mission statement and corresponding set of results indicators;
3. Recruitment of a competent and inspired management team. Ideally, one with prior agribusiness experience at the executive level;
4. Initial fund raising;
5. Development of selection criteria and a selection process for accepting enterprises into the incubator;
6. Defining core business processes and developing systems to support them. These systems would include accounting systems, budgeting systems, costing systems, and client activity monitoring systems;
7. Development of network connections sufficiently strong to generate desired deal flow;
8. Design of layouts and equipment for facilities suitable for supporting incubatees;
9. Selection of an independent board of directors which includes experienced, knowledgeable and principled persons of good character; and
10. Implementation of appropriate methods of corporate governance and management accountability assurance. Good practices for business incubation are generally outlined in further detail on [www.idisc.net](http://www.idisc.net).

#### B. Prove Ability to Add Value and to Graduate Incubatees

Testing the effectiveness of a new incubator's enterprise support systems for the first time marks a second critical development plateau. The ultimate proof of an incubator's ability to create value is their demonstrated ability to graduate clients who continue to grow after graduation and to generate progressively increasing levels of profit.



Most clients enter a business incubator as “zero stage” companies. “Zero stage” means a company which has developed a business plan but which lacks a market ready product and has not generated any revenue. Incubators make their best efforts to raise the enterprise maturity of their clients to “stage one” before they graduate. Stage one companies possess market ready products, which they have successfully test marketed and as a result they have generated limited revenue. The first class of graduates marks a successfully completed final exam, of sorts, for the incubator itself, an exam which proves its ability to create value within emerging companies through the services which it offers and the mentoring which it provides.

### C. Insert Incubatees into Business Eco-system

Understanding the importance of full integration into a national agricultural system and being able to effectively introduce new enterprises into that system marks a third critical development plateau. Agribusinesses can be only as successful as their suppliers, their service providers and ultimately their customers. The nexus of commercial relationships into which incubators introduce their clients are their business life support system. These relationships must serve incubatees effectively until they are capable of realigning and reinitiating them on their own. This typically takes one to two years.

Every emerging agribusiness has different needs for external support, but in general the higher the quality and reliability of its trading partners, the more competitive the enterprise. Agribusiness ecosystem support is essential initially on four fronts: i) farm inputs, ii) other supplier inputs, iii) service inputs, and iv) customers. In order to provide their clients with useful advice and effective network introductions, incubators must possess tacit and up to date knowledge of all four markets, which support their incubatees. Incubators can only provide this kind of tacit knowledge if key members of their staff have been involved recently in these markets as buyers, sellers or ancillary service providers. In order to deliver value to their clients, incubators need to be fully versed in all elements of the business ecosystem. In this aspect of incubation, “know who” is more important than “know how.”

### Advanced Development Pathways

As incubators pass through the initial development stages, they face alternative development pathways. Based upon our review of incubators we identified five advanced development pathways. These pathways are not mutually exclusive, but they are presented by increasing degrees of complexity,

1. Technology Commercialization—the incubation of diverse agribusiness SMEs
2. Focus on Specific Value Chain and/or Serial Expansion of Multiple VCs
3. Enhance Whole Sector Competitiveness
4. Replicate Incubators
5. Make Way & Collaborate in the Incubation Eco-System

One of the critical choices that agribusiness incubators make is whether to specialize or remain open to diverse technologies and value chains.

### 1. Technology Commercialization—the incubation of diverse agribusiness SMEs

Many agribusiness incubators choose to support the commercialization of agribusiness innovation, irrespective of the value chain or sub sector involved. This kind of incubator most resembles a general business incubator but with a focus on agribusiness industry.

### 2. Focus on Specific Value Chain and/or Serial Expansion of Multiple Value Chains

Other incubators choose to focus their attention on the development of companies and support activities within one or more specific value chains. Once they have succeeded in designing and refining franchiseable business models in one subsector, they look to replicate the business franchise development success in other promising value chains.

### 3. Enhance Whole Sector Competitiveness

Some agribusiness incubators never reach the stage of being able to operate at the level of an entire agribusiness sector, as contrasted with operating at the level of accelerating individual enterprises. However, those which reach the sectoral level are able to effect significant improvements in the lives of tens of thousands of rural and urban households. In order to operate at this level an incubator must have professional and visionary leadership. It must also have the analytic capability needed to assess comparative advantages within specific sectors and competing value chains.

In addition, stage four incubators require staff capacity to assess new opportunities strategically. For example they require the capability for benchmarking and analyzing value chains so that they are able to diagnose strengths or weaknesses and develop programs for strengthening farm to market chains in each link. They need to be able to assess the appropriateness of alternative technologies for carrying out specific business functions within chains and further they need to be able to assess the kinds of financial structures and the potential returns to investors associated with undertaking investment commitments within specific chains.

Other pre-requisites for operating at this level include: i) the ability to transfer appropriate technologies across borders; ii) the ability to form and motivate apex organizations which represent the sector in the public policy arena; iii) the ability to operate as a business broker and in this capacity to facilitate structural changes within the sector through mergers, strategic combinations, acquisitions and reassignments of fixed assets; iv) ability to mobilize equity private capital in order to respond to specific opportunities; v) ability to carry out transactions which facilitate the consolidation of target sectors horizontally as well as affecting its integration vertically; and vi) the capability to secure access to government policy makers at the highest level and to present policy positions to them which are well justified and empirically supported.

Their advocacy should deal at a high level with a host of issues affecting sector competitiveness; and vii) ability to build strong network linkages with a) specialized logistics service providers; ii) capital equipment manufacturers; iii) venture capital and private equity investors and iv) with the managers of multiple distribution channels, including both export and domestic.

#### 4. Replicate Incubators and/or Densify the Incubation Eco-System

Advanced incubators replicate and scale up through the incubation of new incubators. Scaling up and replicability are the real test of the efficacy of the incubating approach to agribusiness development. The evidence reviewed so far shows promise. Fundación Chile has been incubating the development of other incubators in Mexico (Fundación Jalisco and Fundación Sonora) and in Peru (Fundación Peru). Similarly, ABI-ICRISAT has been incubating 10 incubators in India. Replication and up-scaling will be facilitated by a policy framework favorable to the emergence of agribusiness incubators.

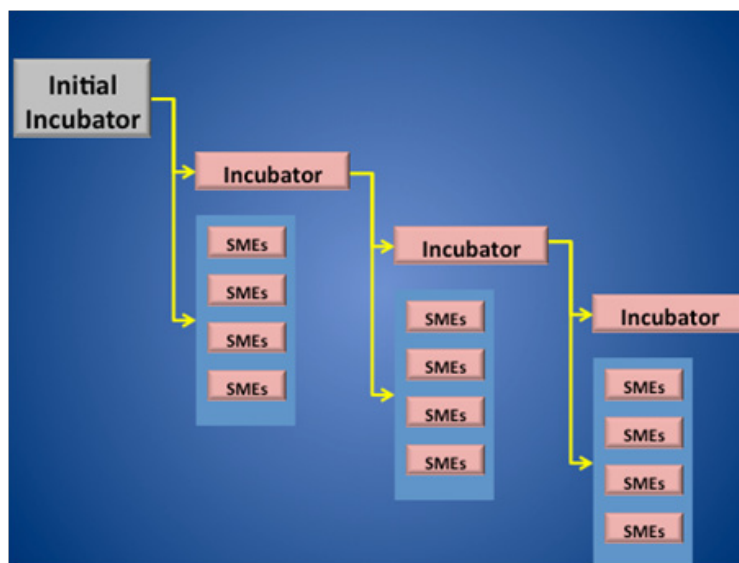


Figure 11 - Incubator Replication

#### 5. Make Way & Collaborate in the Incubation Eco-System

Ironically, as agribusiness incubators mature they are confronted with the need to become smaller or, at least narrower, in the array of services, which they provide and the ways in which they interact with their business ecologies. The challenge, as business environments mature, is to adapt the business incubation model to always stay at the forefront where other actors have not yet entered, thus fulfilling its demonstration purpose.

At this point, a broad mission committed incubator needs to become almost exclusively involved with sector statesman ship, developing new visions, managing other, more vital experts and thus removing themselves from participating in every phase of the incubation process.

## Section 5.3: How to Move Up the Incubator Value Chain

Agribusiness clusters pose some unique development challenges for the very reason that activities taking place at the farm and at the industrial processing end of chains need to be synchronized and interconnected. In most developing countries these two sets of activities are separated not only by distance and time but also by culture and in some countries by language. Linking farm and plant activities is a complex undertaking. Without local, hands-on expertise in organizing farm level efforts it is very difficult to cross this cultural and economic divide. With that said, every agribusiness ecosystem contains leading companies whose source of competitive advantage is their ability to work effectively across these barriers and in the process to change the behaviors of chain participants. Incubators need to be aware of these sector leaders and need to engage them in further sector strengthening activities.

Essential farm product inputs typically come from a diversity of sources scattered among a number of geographically dispersed providers. Primary providers need to be linked to secondary value added processors by value chains, by risk management systems and by a reliable telecommunications system. To the extent that incubators test, refine and demonstrate new modes of value chain integration they are able to make a significant contribution to improving sector competitiveness.

### Oleotop – A SUCCESSFUL CASE OF FARM TO MARKET LINKAGE

The case of the Fundación Chile is particularly instructive because they have had success in developing farm to market chains in agribusinesses ranging from asparagus, berries, salmon, and meat. A recent company co-developed by Fundación Chile, Oleotop, spawned the creation of an entire chain of canola oil production destined to supplement salmon feed and human consumption. The production of rapeseed (for canola oil) entailed the mobilization of hundreds of Chilean small and large farmers to switch to this new crop. The founder of OleoTop, Karina Von Baer, with the support of Fundación Chile, put together the business plan and got the initial funding of US\$7 million to create the seed company and oil processing plant. Through her business, Karina is in turn able to help small farmers gain a firmer foothold in the marketplace. “We provide technology and help them reach government programs that support production and provide market access.” She also offers business loans to the small farmers with whom she works directly to ensure that they can produce the following year’s crop. The technical backing and reputation of Fundación Chile enabled Karina to launch this ambitious project that involved intermediating between farmers and the businesses involved in the commercialization of canola and related products. The Fundación Chile placed a key “bet” in backing Karina, like they had done in so many other pioneering agribusiness ventures. While the technical details were important, a Fundación Chile manager, Marco Velazquez, chose to “bet” not only in canola, but in the entrepreneur. Karina Von Baer grew up in a rural part of Chile. Her parents were farmers. From an early age, Karina knew the richness of her country’s agricultural resources. As a result of her initial investment in Oleotop in 2000, she is now the major shareholder in five enterprises – Saprosem, GranoTop, AvenaTop, OleoTop and TreeTop – that combined employ almost 100 staff and have an annual turnover of US\$50 million. While each of the five businesses focuses on a different agricultural product, they are all dedicated to improving the agricultural process, principally related to the wheat and rapeseed (canola) value chains. In 2007, Karina was named Entrepreneur of the Year for Chile by Ernst & Young. Karina’s and the Fundación Chile’s success is largely due to their key role in connecting and synchronizing the activities on the farm with the industrial and market ends of the agribusiness value chain.

#### Box 1 - A Successful Case of Farm to Market Linkage

The need for collaboration among and between farm level producers and agro-processors and marketers is no less essential than it is between manufacturers or service industry start ups and supportive wholesalers/ retailers in their distribution channels. An entire agricultural economy can become more competitive, more adaptive and more responsive to opportunities depending on the coordination which incubators are able to foster between value chain participants.

## Section 5.4: Role of Agribusiness Incubators in Enhancing Sector Competitiveness and Business Eco-System

Agribusiness incubators can act as agents of change in the context of the larger business ecosystems in which they operate.

Agribusiness incubators operate in business environments which are dynamic and in which the competitiveness of an entire sector is determined, in large part, by the sector's ability to learn more rapidly than its competition. The process of competitive enhancement entails continuous learning: learning about new technologies, new market trends and new challenges, which competitors are initiating. Incubators can play a significant role in this process of continuous sector level learning.

Ecosystems, which evolve from agribusiness agglomerations into agribusiness clusters, possess an additional capability for collective response to what they have learned. This process of structural development within an ecosystem entails increasing specialization and, with it increasing mutual dependence. It is the multitude of competing and cooperating activities undertaken by individual agribusinesses together and their tacit acknowledgement of leading firms and their deference to their leadership, which ultimately leads to the creation of industrial clusters. Cluster structures once developed create a set of "internal economies", between and among individual cluster members, which improve economic return for risk undertaken for all participants. Individual members can rely on other members to make investments and to refine their service delivery in ways, which improves their own bottom line, and to discover new business processes, new technologies and new markets, which make all participants in the cluster, better off.

Incubators can help to facilitate these developments. They can assist, for example, with the development of competitively robust agribusiness spaces in which knowing more and more about an increasingly narrower sector/market domain becomes a generally accepted strategy among industry leaders. They can assist individual management teams refine their competencies both broadly and deeply. They can provide information through market research, new product testing and commercial demonstration projects. Incubators can help agribusiness identify best available technologies and adsorb it more quickly. They can assist with developing value chain structures, which serve increasingly refined market segments.

At the same time, individual agribusinesses need to develop sufficient confidence to rely on other members of their agri-industrial cluster to invest in competencies, which complement their own. When they do the result is the development of new industrial structures which promote both cooperation and competition and which facilitate the adoption of end-to-end compatible technologies and which fit easily into value chains. At the same time transverse or horizontal sources of competitive advantage develops across sectors, including better access to bio technology, better packaging materials and methods, lower cost temperature controlled transport, etc.

The strategy underlying cluster development is simply the strategy of investing more narrowly in competencies, which encourages companies of the first rank within their respective domains to link up with other companies, which have invested in becoming the best in their respective service classes. Incubators can assist these developments by providing information and strategic direction and by brokering end-to-end linkage.

The internal dynamics, which emerge from this kind of approach, are both competitive and collaborative. A few years ago two game theory professors at MIT coined the term, 'Co-opetition' to describe the process of shifting the basis of competition away from price and onto other bases (e.g. quality, time to market, value addition, etc.). Under such circumstances first movers can enjoy advantages and are able to further segment entire markets into increasingly narrower and more profitable niches. Within each of these niches non-price competition prevails until the second and third movers enter the market.

### Inserting Incubatees into the Ecosystem

#### Inserting Incubatees into the Ecosystem

To the extent that new market entrants are able to join with established companies in enhancing their own set of market differentiating competencies, they are more likely to be successful in this kind of co-opetition environment. In order for start-ups to join the ecosystem, however—in order for them to work with and through established firms—they must concentrate their start up efforts on creating competencies which other members of the ecosystem do not already possess or at least do not possess at “best in class” levels.

Two sets of linkages within the business ecosystem are fundamentally important for successful incubator operations: i) vertical linkages between incubatees and their suppliers, vendors and customers. Linkages in the form of reliable contracts, structured trade relationships or joint venture are particularly important with farm level suppliers. However, linkages with retail customers such as independent food retailers, organized street vendors, contracted sales forces, supermarkets, fast food outlets, institutional buyers are almost as important; and ii) horizontal linkages among incubatees and with specialized businesses outside the incubators which support its activities. Interaction among these various stakeholders should allow them to alternatively compete, cooperate and recombine into new enterprises as opportunities emerge.

In order to develop these various linkages, incubatees need to be surrounded in a rich media of concentric markets—markets for venture capital, for specialized business support services, for farm inputs of uniformly consistent quality, for specialized skills, for capital equipment, and for niche market access.

## Section 5.5: Risk Management

Agriculture is inherently risky. The job of the agribusiness incubator is to help SMEs to mitigate the risks. Successful agribusiness incubators help clients reduce the risk inherent to agricultural production and distribution. Successful incubators help clients to reduce these risks through a combination of technology, institutional, and networking strategies.

Technology-based strategies to reduce risks include seed technologies such as drought tolerant seeds (e.g., Developed at ICRISAT and commercialized by ABI-ICRISAT) or pest-resistant biotechnology innovations such as BT cotton. Institution-based strategies include franchising to ensure market and price (e.g., cutflowers in Timbali and berries in Fundación Jalisco). Networking-based strategies include improve access to finance and facilitation in obtaining licenses and permissions.

The core competency of any incubator is its ability to manage risk. Incubators incur several different kinds of risk among their incubatees but the most important of these is “management risk,” the risk that the core management team within an incubatee does not possess the right character, aptitude, skill and ability to drive a start up business to success.

As incubators mature, their ability to analyze and to control for management risk improves with experience. If it should fail to improve the incubator will find itself without graduates, with high incubatee failure rates and ultimately will be out of business. Other important take away lessons with respect to incubator risk management include the following:

- Become comfortable with an ownership stake of 20-50%. Leverage your investment with other sources of equity. Avoid investment opportunities that don't involve other investors who are willing to partner or to undertake risk jointly. The first investment into any incubatee and the last investment out should be the equity of the founder/leader....even if that equity involves perspiration and inspiration without pay.
- Investment partners can help to lower an incubator's monitoring costs as well as to lower direct incubator exposure. Investment partners worth having will say “let's close this business” when risks outweigh opportunities. They will minimize the possibility that an incubator manager falls in love with his/her company.
- Insist on a board of directors that is independent of the management, knowledgeable and mature.
- Ensure that you have the right entrepreneur, one with a high level of skills, commitment, and flexibility to adapt the business plan to changing conditions. The entrepreneur must be able to work effectively with a good board of directors.
- Know your “value at risk”, that is, be clear about the initial investment amount that is being made both in kind and monetary, up until specific development milestones have been reached. Be clear about how much will be lost if things go badly.



Treat small companies as if they were big companies. That is ensure that all companies keep current and complete accounting books and comply with high standards of legal, administrative, and governance practice.

## Section 5.6: A Summary of Good Practices for Agribusiness Incubators: What Works Best?

The following six good practices were uncovered from the ten case studies of leading agribusiness incubators and are recommended to incubator managers as what works best.

1. Incubator Design Basics
2. Learning by Doing
3. Applying Value Chain Concepts
4. Strong Capital Structures
5. Strong Brands
6. Dense Network Structures

### 1. Incubator Design Basics

Incubators need to be designed in ways, which assure that they can perform their core functions efficiently. This implies a sparsely staffed organization, which blends a diversity of skills that typically include mentoring skills, analytic skills, technology transfer skills and seasoned agribusiness management experience. There is no substitute for having been there and actually managed an agribusiness successfully. Incubators also need to develop competencies in early enterprise problem detection and in problem solving and an attitude, which encourages rapid business-like responses to new market opportunities and positive attitudes toward customers.

Good design also entails a mixture of internal competencies and external competencies. Strong relationships with a peripheral set of specialized service providers, like law firms specializing in intellectual property (IP), consultants specializing in package design, etc. are quite useful. Villgro has developed precisely this kind of periphery. IAA-IPB can access a broad range of technologies through its network of research centers within the university. ABI-ICRISAT can draw upon a community of internationally recognized scientists present on campus and the link with the research centers system in India. Successful incubators operate effectively both inside and outside their organizational periphery.

More generally, incubators need to be able to fold their operations flexibly around those of other institutions, which operate within the same agricultural system. Their interfaces with government officials, other incubators and incubatees who have graduated are particularly important. Porous interface portals can be fostered through exchanges of personnel, scheduled consultations and joint problem solving sessions. An effective strategy going forward is for individual incubators to invest further in their own strengths and compensate for their weaknesses by cooperating with each other.

At the same time individual incubators need to design their own organizations in ways, which create sufficient flexibility to respond to new opportunities. Incubators need periodically to reevaluate their strategies, reengineer their activities and update their internal competencies. They also need to be able to start up new value adding activities when they identify unsatisfied needs within their own business ecosystem. Good examples of this activity are the two new for-profit activities—franchising and business advisory services—which TechnoServe Mozambique has taken up in Mozambique. Both IAA-IPB and ABI-ICRISAT are also reorienting their business strategies from revenue growth to capital gain growth through investment in equity of incubatees.

## 2. Learning by Doing

In order to successfully support incubatees whose needs are diverse and whose market focus is typically specialized, it is important that incubators are able to learn quickly and are able to transfer knowledge learned from each engagement with a new incubatee to other engagements. **Organizational agility and a capacity for rapid institutional learning are valuable assets, which are best inculcated through the recruitment of fast learning and highly motivated staff**, through a level of staff turnover which is moderate (i.e., internship programs offer an effective way for injecting new thinking and new knowledge into the incubator) and by developing strong trusting relations with leading firms in the sector.

To the extent that the incubation process is successful learning extends from incubator to incubatee and continues beyond. Good examples include two graduates of ABI-ICRISAT's incubation program. Aakruthi Agricultural Associates of India (AAI) is a start up venture, the second venture to graduate from the incubator. Its four founders launched it in 2004 as an attempt to offer a for profit alternative to agricultural extension services in Andhra Pradesh Province which the government provides. Today, AAI participates in three lines of business. It is a multiplier and distributor of new seed varieties. It is also a matchmaker and agent for farm level groups wishing to undertake contract-farming operations with major agro-businesses. In addition, AAI provides consultancy and technical support services on a project-by-project basis to international and national organizations.

## 3. Applying Value Chain Concepts

It would appear that case study incubators, which support agribusiness development within the framework of value chains, are more successful in achieving their goals than are ones who develop agribusinesses outside such structures.

The value chain paradigm offers a useful structure for framing agribusiness development efforts generally. Chains are anchored in farm level organizations and are typically market driven and market connected. Two of the biggest challenges in developing agribusinesses exist at the farm and market ends of the chain. Applying the value chain paradigm forces incubators to deal with mission critical supply and demand issues. Their use, for example, compels holistic consideration of farm product quality and cost and at the same time of consumer preferences, retail channels considerations, inventory tracking and financing and the willingness of buyers to pay.

#### 4. Strong Capital Structures

No incubator included in this set of case studies is able to fund its operations solely from fees, which it collects for providing incubation services. All of the case study incubators depend on outside funding either from governments, donors or foundations. They can also benefit from either equity investment (see Fundación Chile) or from profit sharing (see IAA-IPB).

In general, incubators who enjoy strong donor support in the form of endowment equity, like Fundación Chile, are better off than incubators who enjoy support based on multi-year grants or financial support tied to program commitments, like the Uganda Industrial Research Institute (UIRI). The UIRI, in turn, is better off than incubators who are financed based on annual budgets or other multiple, short term funding sources like IAA-IPB Bogor.

#### 5. Strong Brands

As incubators mature their “brand”, their distinctive place in the larger ecosystem becomes increasingly important. Incubators depend on their brand both to sustain their competitive advantage vis-à-vis newly emerging incubators and, just as importantly, to sustain cooperation with other complementary participants in their larger ecosystem.

The best way to build a sound market reputation in any service market, including one for incubation services, is to continuously exceed stakeholder expectations. In the case of agribusiness incubators the most important stakeholders include donors and foundations, which finance their activities, incubatees, government policy makers and already established agribusiness companies. This reputation has certainly been gained and exceeded expectation in several of the most successful incubators among the case studies: first and foremost Fundación Chile, but equally important ABI-ICRISAT, Technoserve Mozambique, Timbali, IAA-IPB, etc.

#### 6. Dense Network Structures

Many incubators concentrate on the internal side of incubation. They lack the contextual knowledge, the “know who” which is needed to help insert their incubatees into the larger business ecosystem. Rather they concentrate on “know how.” **However, both “ know how and “know who” are essential for success in agribusiness.**

Gaining entry into local markets comes about through networking. The distribution and marketing networks into which an incubator is able to introduce its incubatees are as important for sustaining its growth as the technical knowledge which the incubator can impart concerning appropriate technologies, production processes, pricing and service strategies and post graduate financing options. Likewise the farm product sourcing networks to which an incubator can introduce its incubatees are just as important for their success than access to a well-equipped business center, laboratory, industrial kitchen or demonstration factory and warehouse.

## Section 5.7: Key Actions and Developing an Action Plan - Case Study of Indonesian Agribusiness Incubator

This section uses the case study of Indonesian agribusiness incubator. The key question is “what actions are necessary to upgrade the incubator?”

- Background
- Where are we now?
- Where do we want to be?
- What key actions are needed?

### Background on Incubator for Agribusiness and Agroindustry (IAA) – Bogor Agriculture University

- Started in 1995
- Affiliated with Agricultural University of Bogor, the premier agriculture university in Indonesia
- Funded by a Faculty who has been the leading force from the beginning until 2010. Currently acting as Advisor to the new leadership
- Lean staff
- Recently obtained new center facilities (to host 15 clients) and new processing equipment.
- Recently asked by local government to offer incubating services also to handicrafts, IT, and textile (but 70% of client will remain agribusiness)

### IAA-IPB (Indonesia)

- Graduates since 1995 = 38
- Current total sales of incubatees = about \$ 8 million
- Average sales per enterprise = \$210,000
- Initial Investment in the incubator in 1995 = \$300,000
- Able to sustain itself and create sustainable agribusiness SMEs
- Able to mobilize funding and make investment in new infrastructure and equipment (about \$1 million in 2009-2010)

### Goals for the Next 5 years

- Graduate 20 enterprises
- Ensure at least 40% of these become sustainable medium size enterprises (sales more than \$2 million/year)
- Increase Revenues of Incubator to \$200,000/year

### Recommended Actions:

- Adopt value chain approach. Identify 1 value chain to support, not just heterogeneous startup enterprises. At least 50% of your incubatees in this value chain.
- Network and pursue support of key policy makers to sponsor program for supporting creation/strengthening of value chain
- Invite potential funders/sponsors of the investment, both from Indonesia and abroad. They could be enterprises part of the value chain, or finance sources.
- Ensure that your senior leadership in the university is backing you up.
- Aim at a governing board or a Standing Advisory Committee (SAC) that can give you serious and useful advice. Composition of key people who have commitment to the success of the incubator.
- Select the new leadership carefully: competent, charismatic, dedicated. Provide incentives.
- Strengthen your incubator brand.
- Elicit all the help from your graduates.

## COMPONENT CONCLUSIONS

At the end of this component the trainee should understand some of the major challenges they may face in implementing agribusiness services and how to overcome them. In the final section, trainees are encouraged to consider how to implement an action plan and provided with a checklist, which can be used as a template to implement agribusiness services in their region.



# Case Studies





## Whole Value Chain Approach and Self Sustainability

**Incubator Name:** Fundación Chile

**Sector:** Agribusiness and Technology

**This Case Study Examines:** How a public-private institution uses entire value chain interventions to launch self sustaining companies.

**Start-up Date:** 1976

### SUMMARY

Fundación Chile is a pioneering public-private institution that has been both a midwife and incubator to many of Chile's successful export industries and firms. FC was launched in 1976 as a joint venture non-profit corporation between the government of Chile and ITT with an initial endowment of US\$50m and a mission to undertake R&D and foster development in agribusiness and industries where Chile had little presence. Over its 35-year history, it has combined a variety of roles as a pioneering public-private research institution involved in incubating Chilean companies and industries, conducting agribusiness and industrial R&D, facilitating government-sponsored development programs and making private equity investments in pioneering companies.

Whereas the Fundación Chile has been highly successful as an R&D institution capable of investigating promising agribusiness sectors and subsectors for development, a key challenge has been the identification of suitable entrepreneurs. One of the key lessons learned has been to put more emphasis on the finding of entrepreneurs, then to support the entrepreneur to develop tangible results, pilots, or initial commercialization successes.

Over the years, Fundación Chile has been involved in the incubation and/or private equity investment of over 75 companies—many of which have been the pivotal pioneering investment in the launch of new industries, ranging from Berries de la Union (fruit berries), to Salmon Antartica in salmon, to Oleotops in canola (rapseed) oil.

Today Fundación Chile focuses its own resources on those activities where it can add the greatest value to the enterprises, which it supports. In the more robust business ecosystem of today, more specialized business support services are available outside Fundación Chile than inside. In this context the incubator must stay in front of the business system transformations taking place around it and must continue to transform itself from being a general provider of multiple support business services to a broadly diversified set of incubatees into a more specialized providers of business services to more mission focused incubatees.

**1. The success of the Fundación Chile relates generally to the following principles:**

- a. Develop a clear sense of mission and vision. The mission of the Fundación Chile has been two-fold and has remained consistent over the years—(i) public mission is to develop the Chilean economy by addressing and solving market failures; and (ii) create wealth opportunities for investors and prove that new and pioneering market opportunities can be successfully tapped
- b. Establish a top leadership team from diverse sectors.
- c. Provide a large initial endowment, such that development strategies can be consistently pursued for 10+ years.
- d. Focus on certain sectors, and at the same time, balance your portfolio.

**2. Key lessons for incubators that are engaged in investing in companies and spin-offs (direct value creation) include:**

- a. Don't consider any opportunities that don't have other investors who are willing to partner. In other words, don't go alone into an investment.
- b. Get comfortable with a lower ownership stake (20-50%). Leverage your investment.
- c. Ensure that you have the right entrepreneur, with a high level of skills, commitment, and flexibility to adapt the business plan to changing conditions.
- d. Know your "value risk", that is, be clear about the initial investment amount that is being made, up until the milestone is reached. Be clear about how much will be lost if things go badly.
- e. Treat small companies as if they were big companies, that is, ensure that all companies keep excellent books, comply with high standards of legal, administrative, and governance practice.

## BACKGROUND

### Establishing Fundación Chile

On August 3, 1976 a law decree officially created Fundación Chile as an "independent entity, a private non-profit corporation, with its own endowment, and a corporate governance structure in equal shares by ITT and the Chilean Government". Fundación Chile initially focused on "scientific and technological research, development, and its subsequent application to the economy" in agribusiness and other industries where Chile had little or no presence.

The mutually beneficial relationship between the government's market-based priorities and ITT's social investment interest produced an approach within the Foundation that focused on market feasibility and operational management designs. Additionally, Fundación Chile's Board of international ITT executives helped reinforce its corporate development.

The Foundation's privately endowed R&D department proved crucial when the Military Government withdrew subsidies from research institutions. Consequently, many organizations were forced to undertake short-term, less innovative projects. However Fundación Chile was able to maintain its R&D standard and technological advancement.

### **Fundación Chile's Role in Technology Transfer and Incubation**

Fundación Chile's effectiveness in protecting the benefits of R&D against market failures comes from its perception of technology transfer as an adaptation process. Fundación Chile's incubation and technology transfer process employs several phases:

1. Detecting potentially profitable subsectors
2. Developing and/or importing technology suitable for specific subsector
3. Selecting appropriate technologies
4. Implementing and adapting technologies, including incubation support and/or investment in pioneer firms
5. Diffusing technology results

Fundación Chile's market impact is one of value creation through mitigation of inherent market failures, the incubation and co-investment in pioneer firms and industries, and the adaptation of technologies essential to Chile's economic growth (see Appendix 1: Market Benefits of Fundación Chile).

## **STRATEGIC VISION, MISSION, AND TARGETS**

### **STRATEGIC VISION, MISSION, AND TARGETS**

#### **Objective**

Introduce innovations and to develop human capital in the Chilean economy's key clusters through technology management and in alliance with local and global knowledge networks.

#### **Vision**

Become the country's leading technological institution, acclaimed nationally and internationally, for the creation and dissemination of innovative businesses that have a high impact on the institution's target sectors."

#### **Target Industries**

Agribusiness, marine resources, forestry, environment and chemical metrology, human capital, and information and communication technologies.

In the 1980s the onset of self-financing policies and lower interest rates provided the organization cheaper investment opportunities in companies desperate for financing. The pervasive self-financing culture also forced Fundación Chile to rely less upon institutional funding and more on revenues earned from increased prices of its goods and services. These complementary circumstances enabled Fundación Chile to take risks ("make bets") on businesses in new sectors that consequently yielded large returns. Successful businesses sectors (and companies) include:

- Farmed Pacific oysters in Tongoy
- Salmon farming in the Puerto Montt region
- Boxed beef in Osorno
- Raspberries & blueberry in Araucania region

#### FUNDACION CHILE'S INSTINCTIVE FEATURES

- Public-private alliance. Privately controlled
- Market Oriented
- Networks as basic assets for value creation and project scale-ups
- Creation of companies to spread the innovation
- Self-Financing

“...by 1982, Fundación Chile had already implemented and was operating its first salmon farming plant. Seven years later, it was sold to a Japanese company for US\$22 million”

*Businessweek*

#### BRAND AND ITS MARKET POSITION

Without an updated direction from which the organization could strategically reposition itself, in 2006 Fundación Chile participated in a diagnostic review that determined exactly how organizational stakeholders viewed its brand. From this analysis, Fundación Chile created a base line from which it could develop a new organizational media concept to better market its services. Studies showed that entities involved in the innovation and technology transfer sector, viewed Fundación Chile as a “serious, trustworthy, and transparent organization committed to Chilean development.” Using these results, Fundación Chile consulted with Samara to design a new logo that included the phrase “Movemos la Fronteras de lo Posible.” Fundación Chile’s 30th anniversary, its 2008 Innovation Dialogue, and the addition of BHP-Billiton (Minera Escondida) as a new partner are all actions that solidified its new positioning as an organization that extends the boundaries of possibility. Fundación Chile’s marketing approach has since increased by three times that of 2006 as it pursues enhanced relationships with popular media outlets in Chile. Additionally, Fundación Chile redesigned its website to include a more simple, accessible method for disbursing its information to the public and can now be found on social media sites like Twitter, Facebook, and YouTube. The Fundación Chile’s strong brand provides its incubatees and direct investment companies with exceptional access to investors, finance, and government programs.

#### APPROACH TO INCUBATION

##### Phase 1: Identify opportunities to add value to an innovation

- Focuses on “relative innovations” where it applies technology for the first time within sectors new to Chile.
- Conducts a market evaluation in which it searches for market needs.

- Innovations are then designed to fulfill these needs and include changes to products, services and/or productive processes, and adjustments to business models that bring more value added.
- Concluding the innovation phase, Fundación Chile eliminates information asymmetries by providing investors evaluations of R&D projects.

Results: Create new businesses or new “technological packages” that can be sold to established entities with abilities to disburse technologies to pertinent markets.

#### **Phase 2: Obtain technologies**

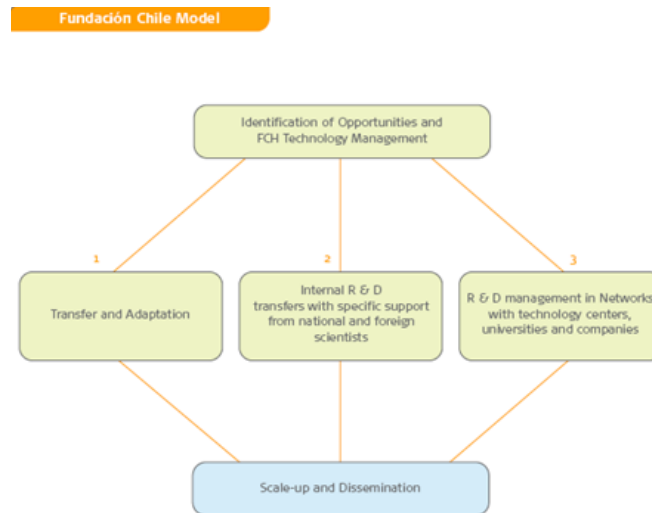
- Obtains technology as a complement to innovations made in phase one.
- When the organization receives foreign technologies, Fundación Chile locates financing sources for the company through which the technology transfer will occur
- Legitimizes the technology and provides the necessary coordination amongst various actors.
- When the technology source is domestic, Fundación Chile applies its technical capabilities to further develop the technology and reduce associated risks.
- As the project becomes more attractive to investors, Fundación Chile searches for partners that can contribute relevant technical and organizational assistance to the project.
- With respect to the management of R&D networks, Fundación Chile acts as a liaison between national and international institutions with similar focuses on sector-specific technologies.
- Additionally, Fundación Chile locates commercial outlets for the technology and creates skills within sectors that enable them to maintain long-term commercial developments.

#### **Phase 3: Scaling-up and diffusion of technology**

The organization increases the presence of established technologies by recognizing the following exit strategies:

- Creating new companies and supporting the incubation of clusters
- Developing, adapting, or transferring technology to clients by selling or licensing technologies and by providing technological services or assistance.
- Supporting the application of certification and implementation standards
- Disseminating technologies to many users through trainings and media publications
- Using partner and business alliances to nationally promote innovations with new technology transfer approaches

This direct approach to incubation focuses on value chain creation by determining where and how



technologies are best incorporated into business models to create a positive market impact. Often these types of services cater towards the individual needs of agribusiness incubatees.

Fundación Chile is also an “indirect enabler” that seeks companies and projects with high impact value creation, large-scale changes, and minimal private returns. As an indirect enabler, Fundación Chile embarks upon projects that reach more stakeholders, have greater continuity through time, and generate large positive externalities to multiple stakeholders.

## TIMELINE OF EVENTS

### TIME LINE OF THE FUNDACION CHILE’S AGRIBUSINESS INCUBATION AND DIRECT INVESTMENT

#### Big Bets

The evolution of Fundación Chile’s incubation process began in the late 1970s and 1980s, the “big bets” era. Fundación Chile invested directly in companies and developed programs especially aimed at encouraging export in agribusiness sector, first with asparagus then salmon and aquaculture, then meat, then fruit.

**1979-** Fundación Chile initiated the “Asparagus Cultivation” program, encouraging its export while providing technical assistance to farmers. Fundación Chile operated 40% of the national acreage dedicated to asparagus crops. As a result of this program, cultivation techniques were adopted that led to improved product quality and to considerably increase exports. Asparagus exports went from 6.2 tons to 7,550 tons towards the 1990s.

**1980-** The Salmon Project centered on establishing a local knowledge base to learn how to farm salmon in captivity, drawing from salmon ranching technologies and activities in Norway.

Fundación Chile acquired “Domsea Farms”, an aquaculture company, which eventually became “Salmones Antártica”, that would begin salmon ranching activities in Chile. At the time of the Domsea Farms acquisition, Chile’s exports of salmon and trout went grew from 300 tons to over 24,000 tons in the 1990s.

**1982-** Creation of “Cultivos Marinos Tongoy”, a company geared towards cultivating and exporting oysters to Japan.

**1982-** Creation on the “Boxed Beef” project, which aimed to process cattle in the livestock production areas and to transport the meat to consumption centers, in vacuum packaging.

**1983-** “Boxed Beef” initiative led to the creation of Procarne, which was later transferred to the private sector. The main impact of this project was the creation of a new industrial activity, which together with creating jobs introduced more hygienic and better quality products in this industry.

**1985-** Established “Berries la Union” and a berry program aimed to introduce new species and varieties of berries and to expand their growing zone.

**1987-** Creation of Tenagro Cautín (Berries in the BioBio region) and Salmones Huillinco (Alevin, first juvenile Atlantic salmon company in Latin America)

**1988-** Salmotec and Tecnofrío Cautín

**1989-** Granjamar (Turbot)

Part of the motivation for this back-to-back creation of companies springs from an apparent concern of an imminent law that would regulate the State’s role as a business owner, impeding Fundación Chile to continue its modus operandi of creating demonstrative businesses. Another factor was the absolute commercial success of Salmones Antartica, which after being acquired in 1981 for USD\$ 1 million, was sold in 1988 for USD\$ 22 million.

The success with the salmon industry ultimately validated Fundación Chile’s work with the business community. From then on, every time the organization sought to develop a new project, it was easier to find new private partners. This success however had its flipside. An explosive growth meant that many of the later business initiatives would end in mixed results, and some in outright failures, marginally eroding Fundación Chile’s prestige at times.

In synthesis, the 1980s ended with Fundación Chile fully positioned as a catalyst agent for innovation and export development within the country. The salmon farming initiative was a true accomplishment, while the name of Fundación Chile remains permanently tied to the creation of an entire world-class cluster. From “learning-by-doing”, the organization anticipated the need to solve all aspects of the productive chain, from hatchery to its commercialization, even including the elaboration of special feed. The institution also saw the importance of creating a robust trade organization, contributing to the formation of the Salmon and Trout Producers Association in 1987, the precursor to Salmon Chile, an association recognized for its cohesion when addressing the new challenges faced by the industry.

### INSTITUTIONAL SET-UP

The Fundación Chile was set up as a public-private joint venture, with a clear public mission and a strong private sector, corporate structure. It was structured as a “do tank” rather than a “think tank.” Company governance gave the Fundación Chile stability and guaranteed that the funds are well used. The Fundación Chile was structured such that it is isolated from political influences. Fundación Chile has developed and maintained a strong neutral brand as an independent broker.

Fundación Chile’s now has Board of Directors representing the co-founders and founding partners including the State of Chile, ITT, and since 2005, BPH Billiton. The partners appoint the Board of Directors to head the internal operational structure of this private, non-profit corporation. The general manager heads the Corporate Holding division responsible for management and support activities. The Technology Center, Business Unit, and Companies & Investment divisions represent the base of this moderate hierarchical structure and constitute the source of Fundación Chile’s principal activities. The Business Unit specializes in the sale of technology products and services. The Companies & Investment unit manages those companies incubated and created to support the spread of technology innovation.

At the core of Fundación Chile’s activities, the Technology Center maintains over 100 projects annually that are relevant to the organization’s principal interests. The Technology Center conducts research, development, adaptation, and promotion of innovations. In addition to identifying market opportunities in its market assessments, it also facilitates interactions between different sectors and technologies in its control of “transverse technologies.” The effective maneuvering of “transverse technologies” are important so that “market opportunities can be identified and materialized in innovations and undertakings that are critical for our [Chilean] economy.”

The Technology Center is divided into the following sectors: Agribusiness, Marine Resources, Forestry, Center for Human Capital Innovation, Education, and Environment and Energy. These sectors are connected through common themes such as Sustainability, Natural Resources, Renewable Energy, and Food and Certification.





## BUSINESS MODEL

“The main business model developed by Fundación Chile begins with the identification of an innovative opportunity with high potential, based on a technology transfer or development, that is then adapted to the local conditions.”<sup>7</sup>

The evolution of funding for Fundación Chile’s business model is unique to non-profit entities. Despite Fundación Chile’s social mission, ITT’s corporate identity combined with Pinochet’s business-centered policies initially promoted a corporate governance structure within the organization. Complete funding from these two partners also enabled Fundación Chile’s financial stability. With the onset of self-financing policies in the 1980s, Fundación Chile’s business configuration persisted even as partner funds subsided. Since then, Fundación Chile has applied its corporate structure to successfully leverage competitive funds from CORFO (Chile’s Economic Development Agency) and CONICYT (Chile’s Science and Technology Ministry), revenues from the sale of its products, contracts with public organizations, and eventually revenues from private companies.

Once Fundación Chile acquires and adapts technologies, it incorporates private partners to create a company around the new technology. More than 75 companies—dominated by agribusiness companies—have been created through this practice, and most recently have existed with the help of private and majority partner funding and business skills. Despite its role as a minority partner there is an increased demand for Fundación Chile’s R&D initiatives.

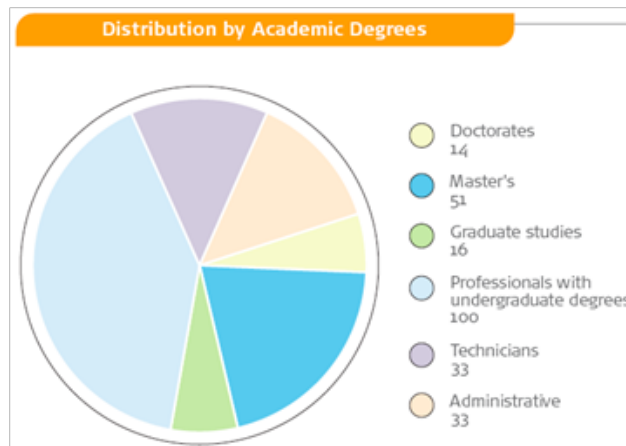
YEAR	Level of operation Millions of US\$ at 2005	Self-financing
1976	2.5	0%
1983	5.6	32%
1991	11.4	53%
1997	11.7	77%
2005 (1)	31.5	88%

(1) Includes activities resulting from the merger with Intec

## STAFFING

The Fundación Chile currently has 350 professional staff and nearly 300 external consultants. The majority of Fundación Chile staff is professional with a skill profile equivalent to that of a Bachelor of Arts or Science. Technical and administrative employees combined create the second largest cohort, followed by employees with a master degree. Those with a doctorate degree represent the minority within the organization.

<sup>7</sup> Los 30 Anos de Fundación Chile, “Visualizando y Construyendo Futuro” pg. 15



## OUTCOME AND CONCLUSIONS

Fundación Chile strategically focused on value chain elements in the following ways:

- Focused on “relative innovations” where it applies technology for the first time within sectors new to Chile.
- Conducts a market evaluation in which it searches for market needs.
- Innovations are then designed to fulfill these needs and include changes to products, services and/or productive processes, and adjustments to business models that bring more value added.
- Concluding the innovation phase, Fundación Chile eliminates information asymmetries by providing investors evaluations of R&D projects.

Results: Create new businesses or new “technological packages” that can be sold to established entities with abilities to disburse technologies to pertinent markets.

### Fundación Chile’s most recent successes

#### Compania Chilena de Esterilizacion (CCE)

Created in 2002 in a collaboration between Fundación Chile and Brazilian Sertilization Company, CCE uses modern technology in the form of ionizing energy to increase the quality, safety, and competitiveness of materials in different food products.

### Chevrita

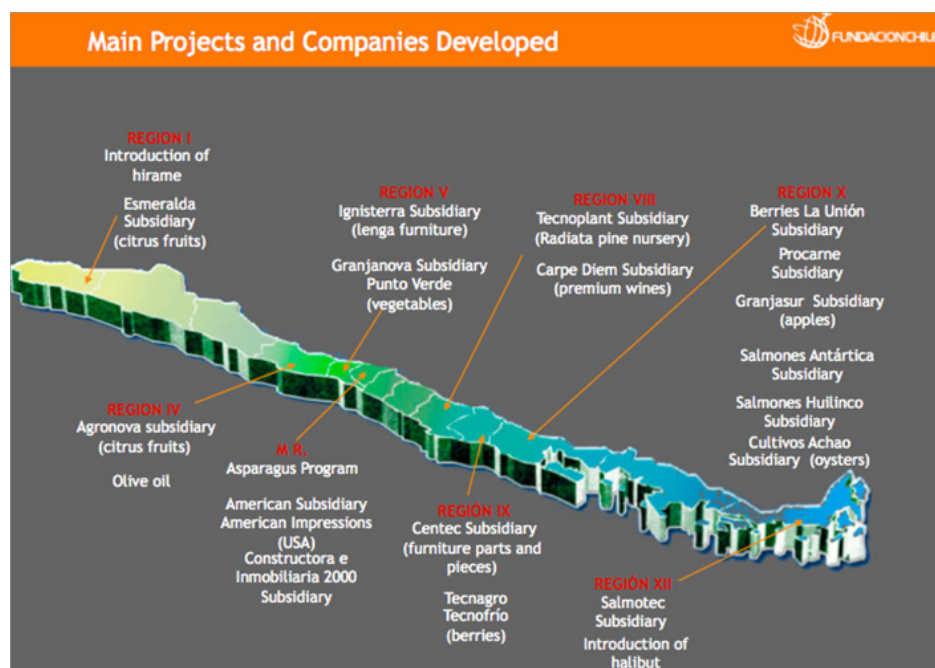
Created in 1994 as a joint venture between Fundación Chile and the French firm Lescure Bougon, Chevrita produces and sells gourmet goat cheese for third parties and under its own brand name. It also developed a new production and commercialization process for cow's milk cheese.

### Vitro Chile

Fundación Chile collaborated with the Viollier family to create Vitro Chile in 2003 in order to meet the increase in world demand for flowers and flower bulbs. Vitro Chile has biotechnological capabilities it uses in the micropropagation of genetic material to be exported to Europe.

### Oloetop

Founded in 2004 with three partners including Fundación Chile, Granotrop, and the Schiess Group, Oloetop "produces canola oil (rapeseed) for the salmon feed industry, and sells bran in bulk or pressed as a by-product." Its product has the capacity to produce 24 thousand tons of rapeseed per year which yields 8,500 tons of oil.



### CRITICAL SUCCESS FACTORS

- Diverse project portfolio
- Openness towards international partners
- Consistent financial base provided initially by its private partners.

## LESSONS LEARNED, IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

### Micro Lessons

#### Lesson 1: Sufficient Funding Promotes Organizational Sustainability

While not all organizations can mimic Fundación Chile's financial structure and significant private endowment, it is important that they maintain balanced base financing. A large financing base can create space for organizational inefficiencies while a narrow financing base can limit innovation and the attainment of organizational goals.

#### Lesson 2: Local Impact Depends Upon Global Associations

Increasingly partnerships are becoming valuable sources of expertise and financing. Therefore, organizations relying upon the presence of innovative technologies or special knowledge must be willing and able to expand its networks to include global partners.

#### Lesson 3: Pick Partners Wisely

Fundación Chile's truly successful partnerships with entrepreneurs have been much less than ideal over the years. The Fundación Chile is constantly scanning for entrepreneurs that manifest the following characteristics:

1. Strong business knowledge combined with management support through good networks and valuable experience
2. Contribution of experience and networks to support good management
3. Direct involvement in conflict resolution
4. An entrepreneurial and flexible vision of the business

### Macro Lessons

#### Lesson 1: Identify the Project's Impact at Its Inception

While the project "metric" may be indefinite, its presence can allow for project discipline, accountability, and the ability to track progress over time. Such a metric should judge the project by the following criteria:

1. Will the project alter the "rules of the game" or prompt a change in industry operations
2. How large is the project's scale
3. Will the project attract relevant stakeholders
4. Will the project resolve a pertinent problem
5. Can the project be replicated

#### Lesson 2: The Organization Should Have a Portfolio Approach

A varied project portfolio is necessary to reduce the uncertainty associated with innovation and investment in new businesses. Such a portfolio should have a combination of risk and return, short-term and long-term results, and both limited and high impact ventures.

### Lesson 3: Successful Impact Models Include both Direct Value Creation and Indirect Value Enablers

in participating in direct value creation, an organization can maintain valuable connections with the private sector. Alternatively, indirect value enablers that provide certification standards and support for public policies, generate broader impact, coverage, and maintain an ownership role that is less evident. In making use of both innovation methods when appropriate, organizations can diversify the manner in which promote development.

### Lesson 4: The Path to Innovation is similar to a “Poker Game”

While project management objectives and preliminary processes should be established in the initial planning phase, adaptability to changes in these plans must occur in order to allow for successful innovation. Nonlinear project management capacities best cultivate innovation.

### GOALS MOVING FORWARD

As climate change, water, CO2 emissions, and human capital become pertinent within the Chilean and world economies, Fundación Chile understands that its focus must continue to expand to include work beyond single sectors or businesses with narrowly focused impacts. Therefore, Fundación Chile will adapt a client-focused perspective in which it can simultaneously make use of the organization’s different functional capacities. Fundación Chile must also adjust its institutional framework to create consistent financing for projects where self-financing policies may be insufficient. Fundación Chile will strengthen its own financing base possibly through larger endowments, provision of more services, consulting, participation in companies, public financing and venture capital from the private sector.

#### LINKS

[www.fundacionchile.com/en/](http://www.fundacionchile.com/en/)

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## Private-Sector Driven, Whole Sector Value Chain Incubation

**Incubator Name:** Fundación Jalisco, Mexico

**Sector:** Agribusiness and Technology

**This Case Study Examines:** A business-driven adaptation of the Fundación Chile model for a entire value chain interventions.

**Start-up Date:** 2006

### BACKGROUND

Fundación Jalisco emerges at a point in Mexican economic history when diversification through innovation is needed to keep the country competitive in international export markets and help its rural citizens pursue higher standards of living. In this sense, Fundación Jalisco is a trail blazer in transforming Mexico's economic approach.

Business leader Francisco Conejo's initiative and vision prompted Jalisco Governor Francisco Ramirez Acuna to visit Chile in 2005 to determine if the Fundación Chile agribusiness incubation model could be a worthy investment for the Mexican state of Jalisco. The Agricultural Council in Jalisco and Fundación Chile developed an institutional model in the form of Fundación Jalisco, Innovation and Development. By 2006 a constitutional act was signed in support of Fundación Jalisco with the presence of former Mexican president Vicente Fox, Governor Ramirez Acuna, the National Secretary of SAGARPA, and the president of Fundación Chile Javier Duarte Garcia de Cortazar. In 2007 Fundación Jalisco began its formal activities with the formation of an eight member Advisory Board headed by Mr. Conejo himself.

Mr. Conejo is the President of the bank Conincidir Sociedad Financiera Popular, and during the last 20 years managed agricultural business development and worked to improve rural productivity. His valuable experience and business affiliations have facilitated partnerships and financial investments for Fundación Jalisco with the direct participation of VitalBerry, Fundación Chile, the Government of Jalisco, and the Foundation's business-minded Advisory Board.

At its initiation, Fundación Jalisco struggled to garner long-term investments in Mexican agribusinesses. With the high investment and slow returns innate to agriculture, and the presence of an immature venture capital industry in Mexico, Mr. Conejo had to develop the research and successful pilot projects to create a legitimate reputation for Fundación Jalisco. The Fundación's Advisory Board mitigated early failures by accurately assessing project feasibility and ensuring steady project development, which proved critical to the firm's current success. Additionally, Fundación Jalisco successfully established itself by adopting Fundación Chile's expertise regarding value chain development and the acquisition of financial and technical support from a variety of entities.

## STRATEGIC VISION, MISSION, AND TARGETS

### STRATEGIC VISION, MISSION, AND TARGETS

Fundación Jalisco is a private institution with a public interest dedicated to leadership in innovation and business development. It recognizes the fundamental role the rural sector in Jalisco's development and its importance to Mexico's national agricultural activities. Fundación Jalisco focuses on projects that promote the competitiveness of agricultural productive chains and is dedicated to assisting innovative businesses capable of adapting new technologies and knowledge

The Fundación's three strategic pillars are:

**Innovation** - the introduction of significantly better or new production processes, commercialization methods, organization methods, internal company practices, and workplace organization

**Inclusion** – the participation of society as a whole in the process of generation and equitable wealth ownership

**Sustainability** – guarantee the viability and permanence of businesses and their valuable networks

### FUNDACION JALISCO'S DISTINCTIVE FEATURES

- Primary goal centers on assistance to small producers in their transition to business entrepreneurs.
- Detailed recruitment and training processes along with unlimited technical assistance provided to producers accepted into the Berry Industry Development Program.
- Involved in all aspects of the value creation process in dedicating time, information, and resources to develop fruit producers.
- Hands-on approach and smaller scale operations that involves a narrow focus on specific industries, outsourcing consultancies, and managing rather than creating innovation.

### BRAND AND ITS MARKET POSITION

Fundación Jalisco's market position is secure and growing with increased berry production and rapidly expanding demand in the United States and United Kingdom. Jalisco's climate makes the firm's berry supply especially competitive with U.S. producers during the latter's winter months<sup>8</sup>. Recognizing the benefits of a diversified portfolio, Fundación Jalisco is currently expanding production to the olive oil and cheese industries which will strengthen its market stake and aid sustainability.

<sup>8</sup> Informador.Com.MX, "Jalisco busca posicionarse en el Mercado de arandano" May 14, 2008

Fundación Jalisco's reputation within Mexico is one of revenue-generating innovation never before seen in the country, and is respected for the manner in which it creates mutually beneficial associations among participating producers. By contracting with Fundación Jalisco, producers have access to barrier-free markets and valuable technical assistance which earns them higher salaries, an approach that overtime will revolutionize rural production in Mexico. Fundación Jalisco receives a great deal of positive attention from national media sources, in addition to its own publication "Innovar Jalisco" that advertises its new innovations and businesses. These media outlets disseminate evidence of Fundación Jalisco's successful work and will continue to have a positive effect on its market position. Additionally Fundación Jalisco's productive partnerships with quality firms such as Funacion Chile and VitalBerry have granted it access to the top echelon of agribusiness entities which will continue to enhance its production chains and reputation.

### APPROACH TO INCUBATION

Fundación Jalisco primarily acts as a coordinator of opportunity by facilitating strategic collaborations with public institutions, entrepreneurs, and society.

1. Link technical knowledge from businesses and world markets to the needs of the Jalisco agricultural sector
2. Generate the assistance of agricultural experts
3. Promote investment
4. Structure productive chains of high value that strengthens clustering
5. Impact regional development and raise the quality of life of the population

Initiated in 2008 through a public-private partnership, the Berry Industry Development Program strives to successfully include 800 producers yielding a total of 3500 hectares of berries, with the hopes of attracting investment and offering revenue-generating alternatives to involved producers. The commission adheres to a strict qualification rubric to effectively filter through the high supply of prospective producers. Farmers must have field experience, own quality land, and have economic solvency among other requirements to participate<sup>9</sup>.

Potential producers are visited by technical experts that produce a report and evaluation submitted for approval. Upon approval, producers are notified and invited to sign a commercialization contract. Producers then receive berry plants and technical assistance for establishing the garden.

### SERVICES PROVIDED

#### Value-added

- Access to the highest quality berry plant
- Technical assistance from specialists and orchard management skills

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<sup>9</sup> Fundacion Jalisco Interview Notes, February 9, 2011 pg. 2



- Access to Innovar Jalisco magazine that discusses innovations in agribusiness and its application to Jalisco businesses
  - o Information about future investment areas and successful production processes to alert financiers
  - o Educates customers on the product's high quality and market availability
- Programa de Formacion en Agronegocios, En Forma
  - o Delivered technical trainings and business skill development to rural sector entrepreneurs to 124 cities in Jalisco.
  - o Prompts the diversification of productive activities
  - o Disseminates information about the revenue-generating and sustainability components of agricultural production

#### Benefits from Value Chain Interventions

- Assured commercialization – guaranteed access to a market for their goods without having to incur advertising, sales promotion, or marketing costs.
- Permanent Training & Technical Advice – valuable knowledge of land preparation techniques unique to berries, garden design, and harvesting methods eliminates the need for costly trial and error methods, thus ensuring the success of the first harvest.
- Access to Genetically Superior Berry Plant – With access to the best berry plant, producers further reduce the chances of weak crop yields and low profits.
- Financial Management Support – Effectively managing revenues and production costs will ensure the business' long run sustainability.

#### INSTITUTIONAL SET-UP

Fundación Jalisco is a non-profit civil association created by business professionals with a development agenda. It focuses on creating profit-earning businesses and high-value production chains. Therefore, Fundación Jalisco's governance structure consists of business experts directly involved in its operational activities.

Fundación Jalisco contracts with external agents to provide its principal technical assistance service to producers. Contrastingly, Fundación Chile conducts in-house research and development in the creation and adaptation of technologies, and uses its own resources to support business development. Over time as Fundación Jalisco diversifies its agricultural businesses and expands operations, the role of the Advisory Board may become less directly associated with the firm's operations. The firm may also find it more cost effective to hire its own technical experts.

## BUSINESS MODEL

The high relative profitability of berry cultivation motivated Fundación Jalisco to undertake berry production as its primary project. Studies show that cultivating one hectare of berries will yield profits of \$102,295 which is 7.8 times greater than the \$13,074 profit associated with one hectare of sugar cane, and then 9.8 times greater than the \$10,383 profit of corn<sup>10</sup>.

Additionally, the rapid growth of the berry market triggered by growing U.S. demand, and the presence in Jalisco of climate conducive to berry cultivation, made for a promising berry enterprise both in the present and future. At the idea's inception, Fundación Jalisco also had many technical considerations that included fertilizer, adequate water Ph levels, the quality of soil, and the willingness of local farmers to cultivate a new plant and undertake hard field labor<sup>11</sup>.

The berry value chain incorporates the following steps:

1. Buy berry plants from the U.S.
2. Produce berry plants in a nursery for distribution to producers
3. Once selected to join the development program, the producers receive trainings and technical assistance
4. Producers receive and cultivate berry plants
5. Berry harvest is gathered and packaged
6. Commercialization
7. Product sold within domestic and international markets

Fundación Jalisco recognized that local farmers would not purchase berry plants without knowing their yield potential<sup>12</sup>. Thus, the firm solicited state government for funds to buy berry plants from Oregon, knowing that the government would support wealth generation if the berry production method proved legitimate. In 2005, Fundación Jalisco contracted with VitalBerry and Chilean consultants to develop a nursery with its own technology for the cultivation of government plants<sup>13</sup>.

The nursery contract was essential to bringing commercialization capabilities to Fundación Jalisco in the form of new associates with experience in berry cultivation, access to a markets, and technical assistance expertise<sup>14</sup>. Fundación Jalisco was able to select producers and provide them technical assistance through subcontracts and financial assistance from SEGARPA and the Jalisco Government.

<sup>10</sup> Fundacion Jalisco, "Programa de Desarrollo de la Industria de Berries en Jalisco" pg. 2

<sup>11</sup> Fundacion Jalisco Interview Notes, February 9, 2011 pg. 1

<sup>12</sup> Interview with President Francisco Conejo, February 10, 2011, pg. 1

<sup>13</sup> Fundacion Jalisco Interview Notes, February 9, 2011 pg. 1

<sup>14</sup> Fundacion Jalisco Interview Notes, February 9, 2011 pg. 6

Technical assistance incorporates land evaluation and preparation, planting, and harvesting methods. The results of each phase are recorded to create a database of project traceability. The technical assistants also use this information to produce a 'Technology Packet' that helps producers strategize for subsequent plantings and is given as a record of account to SEGARPA<sup>15</sup>.

While the Jalisco Government has been crucial in the development the Fundación 's initiatives, the relationship between these two entities at times is subject to the priorities of the current governor. Governor Francisco Ramirez 's international inclination with respect to technology and innovation provided a great impetus to Fundación Jalisco in successfully attaining its goals. Subsequent governors with less involvement in Fundación Jalisco may disrupt the continuity previously enjoyed between the two entities, which could affect the willingness of the Jalisco Government to fund new initiatives.

Currently, Fundación Jalisco implements Fundación Chile's portfolio diversification approach by extending explorative production efforts to the olive oil, dairy, and varied fruit industries. With funding from the Jalisco Government, Fundación Jalisco purchased olive plants from California and is currently cultivating an orchard under the ownership of a new associate. Fundación Jalisco will be able to purchase shares and thus receive royalties for each olive oil plant sold.

## OUTCOME AND CONCLUSIONS

Investments in berry production have enabled Fundación Jalisco to successfully engage the following:

**Vivero Usmajac** – Since July 2008, the nursery has cultivated berries designated for producers participating in the Berry Industry Development Program. Covering more than 600 hectares, the nursery has 1 million plants in development with the capacity to produce 3 million plants annually.

**"Innovar Jalisco"** – As editor, Fundación Jalisco has a marketing company that disseminates information regarding its innovations and businesses.

**Comercializadora de Moras de Jalisco** – Enables the commercialization of products derived from the Development Program for Berries in Jalisco.

**Olea Europea** - Garden designated for the experimentation of varieties for the elaboration of high quality extra virgin olive oil.

**Quesos Criollos** – An experimental goat farm that allows for the elaboration of gourmet cheese.

<sup>15</sup> Fundacion Jalisco Interview Notes, February 9, 2011 pg. 2

### CRITICAL SUCCESS FACTORS

**Local Government Support** – in the case of berries and olives, the government provided the initial funding needed to acquire these plants for distribution to producers.

**Technical Assistance** –enables Fundación Jalisco to clearly articulate, coordinate, and improve each service within the value chain unlike other firms. Technical assistance also allowed Fundación Jalisco to create necessary production instruments previously nonexistent, such as the berry nursery and cold storage. In subsidizing technical assistance, Fundación Jalisco has ensured a successful mechanism for ensuring crop yields, and thus profits.

**Availability** – Fundación Jalisco makes its services available to producers at all times thus promptly minimizing the effects of problems on the value chain.

**Early Profits** – with 205 producers growing 1.4 million berry plants on 278 hectares of land business is already booming, proving that the U.S. and U.K. markets are indeed profitable. Berry revenues have in turn allowed Fundación Jalisco to begin exploratory production in the olive oil and cheese industries.

### LESSONS LEARNED, IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

1. **A great idea may not generate profits in the market; there is a crucial difference between good ideas and good businesses.** Lacking the economic resources to develop its own R&D department, Fundación Jalisco strategically pursued market-based technologies and adapted them to its own needs. Agribusiness incubators developing or adapting technologies, should verify their market relevance to ensure revenues.
2. **A business' most important attribute is execution.** A successful agribusiness must create relationships with the best producers in markets corresponding to each phase of the value chain. Fundación Jalisco formed productive collaborations with Fundación Chile for technical assistance and business model design, and VitalBerry for expertise in nurseries and commercialization.
3. **Defining Businesses.** The size of an incubator's endowment can determine the approach with which it pursues clustering. With its short-term financing, Fundación Jalisco works to articulate the nature of individual farmer production and develop it into a profitable small business.

### GOALS MOVING FORWARD

Fundación Jalisco needs to attract short-term investments for its long-term agricultural projects in the form of a 5-10 year endowment, which would allow time for its crops to mature and be market ready. Thus far Fundación Jalisco has solicited investors from the nursery project for additional funds towards the firm's general operations.

## LINKS

[www.fundacionjalisco.com](http://www.fundacionjalisco.com)

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## Whole Sector Economies and Value Chain Creation

**Incubator Name:** Technoserve Mozambique

**Sector:** Agribusiness

**This Case Study Examines:** How an incubator can engage in whole value chain development and stimulate investment, job creation and sustainable local economic activity in rural areas.

**Start-up Date:** 1998

### BACKGROUND

Technoserve Mozambique (TnsMz) is based in Maputo, the country's capital. It serves the entire national agricultural economy from its headquarters office. Mozambique has been described as a country with agricultural potential as great as that of Chile, with which it is often compared. It is a large country, which includes within its boundaries multiple agro-ecological-climatological zones, abundant water supplies, rich soils and relatively low population density. Significantly as well, Mozambique is strategically located next door to South Africa, the largest market for food products in the continent. In spite of these advantages its agribusiness development has been extremely slow to date.

Technoserve Mozambique is a financially autonomous division of the Technoserve Group (TnsGp), which is a non-profit corporation specializing in agribusiness development worldwide. TnsGp has offices in several developing countries, including 10 in other Africa countries and 7 in Latin America. Significantly, TnsGp participates in the Food for Progress Program sponsored by the US government. To date, proceeds from the Food for Progress Program have been TnsMz's primary source of funding.

The innovative approaches and methods, which TnsMz has pioneered, have routinely become "best practice" templates for other Technoserve country operations and, indeed, best practice templates within Mozambique itself, where TnsMz's successes in the cashew, banana and poultry sectors are generally acknowledged to be notably successful.

For the past 13 years, TnsMz has operated from a headquarters office in Maputo. It has no other facilities within the country. Most of its activities take place in the districts of Mozambique where specific cropping and animal husbandry systems operate. It does a great deal of peer-to-peer transfer of appropriate technology (for example, best industrial plant layouts and design, best processing equipment selection and best cultivation practices) as part of the packages which it typically provides to enterprise pioneers within a specific agribusiness sector.

TnsMz operates at the level of whole agro-industrial sectors. Its programs are designed to stimulate investment, job creation and local economic activity within agribusiness sectors which are commodity oriented and which typically afford investors only thin margins. Typically, TnsMz provides incentives in the form of grants or matching grants to change behavior and to introduce new technologies within farm to market chains. Importantly, as well, TnsMz typically charges for its advisory services in order to assure that only serious and committed parties avail themselves of its support. Fees for services delivered, however, account for very little of the non-profits total costs.

TnsMz core activities are almost fully supported from donor grants. Note has already been made of its use of the monetization program for surplus food which the USDA avails to non-profits like Technoserve. However, several other donors have come forward to support TnsMz' activities. During its tenure in Mozambique, five donors have supported TnsMz's activities under 11 funded projects most of which entailed multi-year funding commitments.

Jake Walter started up TnsMz in 1998<sup>16</sup>. Initially it was funded with a four-year grant from USAID, which was designed to support the value chain development in three sectors: cashews, horticulture and oil seeds. Based on its initial in these three sectors, TnsMz was able to extend its activities vertically into other agribusiness sectors where it continued to test and refine its sector development methods. At the same time, TnsMz expanded its agribusiness activities horizontally into policy analysis and advocacy, private sector investment promotion and regulatory compliance reform and the development of new instruments for bottom of the pyramid investment for new agribusinesses ( e.g. franchises). Although, TnsMz does not undertake institutional capacity development per se ( e.g. development of industry specific trade associations), it does carry out this kind of work as part of larger sector development programs, typically in partnership with another specialized NGO.

Much of TnsMz success has come from its strong focus on value chain strengthening and on enterprise development activities among middle-of-the-chain integrators. Technoserve chooses each of the sectors with which it works carefully based on an a priori analysis of the growth and rural employment enhancement potential which each alternative offers. It tries not to work with more than 5 or 6 sectors at any given time. Within specific sectors, which it chooses to enter, TnsMz works with first movers and industry leaders to reengineer their business models and competitively upgrade their business processes. It then engages these sector leaders to show the way forward to other members of the sector through training, workshops and other forms of knowledge sharing. In several instances TnsMz has helped to develop new industry associations with and through which it works to disseminate competitiveness enhancing technology, business process and business model templates.

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<sup>16</sup> Jake Walter is the Technoserve/Mozambique Country Director. He has 22years of experience creating and managing agricultural businesses in Europe, Latin America, Africa, and Asia. Jake has held this position since 1997, when began operations in Mozambique. He has used his knowledge of business strategy, competitive positioning and market development to help entrepreneurs identify and take advantage of opportunities to build profitable, growth-oriented businesses that benefit small-scale producers and create economic growth in rural communities. Prior to Techno Serve, Jake was Vice President for International Marketing at ABS Global, Inc., where he led the company's transformation from a traditional, U.S.-based export business into the world's only multinational artificial insemination company, acquiring and establishing businesses and production facilities in Mexico, Denmark and Germany. Jake has MA and BA degrees in the History of Science and Technology from the University of California at Berkeley and Santa Cruz, respectively. He is fluent in English, Portuguese and Spanish.

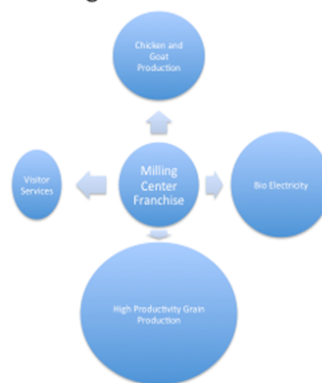


A significant part of Technoserve's success comes from the artful integration of two kinds of internal competencies: i) deep hands-on knowledge of specialized agricultural production processes and well tested agricultural market know how, and ii) strong analytic skills. Technoserve recruits seasoned experts in each of the sectors, which it enters. TnsMz complements these sector specialists with functional specialists in agronomy, plant science, quality control, temperature-controlled transport, and forestry, etc. are required. In addition, the non-profit recruits young temporary staff for short-term assignment from leading consulting firms (Mc Kinsey and Co. is TnsMz's primary source), advertising firms and investment banks.

In addition to its core non-profit incubation activities, TnsMz has recently started up two for-profit businesses, both of which it has constituted as wholly owned subsidiaries. The first of these subsidiaries is an agribusiness franchisor whose mission is to assist nano level agribusinesses to adopt well-tested business models and to develop as part of a mutually supportive business network

As the diagram below suggests, TnsMz envisions that milling franchises and other franchises to follow will serve not only to stimulate market activities in local farm communities around the maize chain but will also activate other collateral business activities as well. The franchise concept which TnsMz is preparing to test and refine is a holistic one which entails community development in several different market directions.

### Milling Center Franchises Drives Fundamental Changes in Local Economies



TnsMz's second for-profit undertaking is a professional services company, which will provide advisory services to macro enterprises. Its clients will include both domestic and foreign investors who are interested in purchasing land for agricultural use in Mozambique. The company will leverage its substantial expertise in multiple farming sectors to assist investors in complying fully with all of the socio-economic qualification requirements, which attach to rural land ownership in Mozambique, including most importantly local community approval.

TnsMz's investment advisory company will organize and manage the community consultation and community negotiating process so that the full intent of the original legislation is achieved and so that rural community interests are protected without slowing the process of potential investment projects and without creating excessive risks for potential investors. Technoserve will act as an honest broker between local communities and investors.

## Technoserve Investor Advisory Services



### STRATEGIC VISION, MISSION, AND TARGETS

#### Vision

Inclusive, sustainable, economic growth in rural Mozambique.

“Inclusive” means sharing economic gains among participants in entire farm to market chains.

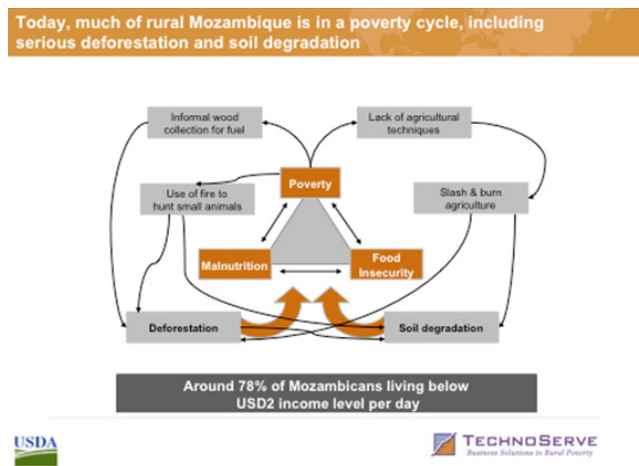
“Sustainable” refers to environmental, economic and, indeed, spiritual sustainability.

#### Mission

Facilitate private initiatives in Mozambique's agricultural sector, which are well planned, well targeted in order to leverage private investment in specific sectors where high job growth potential exists and well implemented.

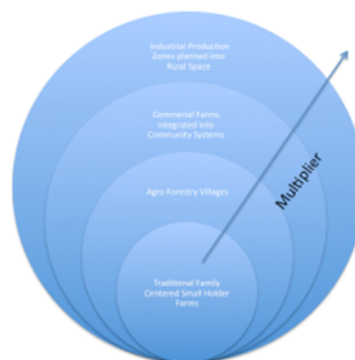
#### There is no cash economy in many rural parts of Mozambique

TnsMz has succeeded in developing new markets for rural labor, new markets for farm products, new markets for local inputs all as a result of the success of chain integrators who invest in value added processing and marketing of farm products. The multiplier effects initially realized within local economies by chain integrators, who are Technoserve clients, create wealth and jump start “inclusive growth.”



TnsMz has attempted to increase the multiplier effects of private investment in specific agribusiness sectors in various ways, including building institutions, which facilitate the socially beneficial leveraging of locally created. The incubators intent is to maximize the collateral impacts which private investment in new enterprises create with respect to local payrolls and local sales of farm inputs to these new enterprises, as well as the secondary creation of new services and new enterprise spinoffs.

## Institutional Options for Leveraging Local Agribusiness Multipliers



A significant portion of total benefits, which TnsMz attempts to realize within local economies results from retraining and re-skilling of farmers. Training farmers makes them ready to become integrated in more sophisticated value chains. It also results in productivity gains and in changes in product quality, in cultivation methods, in seeds selection and modes of land preparation, pest control and irrigation. Whenever possible TnsMz undertakes farmer-training programs under the auspices of private companies who purchase specific crops or who trade in specific regions.

TnsMz develops what it refers to as a “pipeline of companies” for each sector in which it plans a competitiveness upgrade. Companies selected for pipeline participation are industry leaders. The size of pipeline companies differs with the sector and with its stage of development. Pipeline companies in the cashew sector, for example, employ fewer than 100 workers and operate single factory/value adding facilities.

TnsMz’s ultimate mission is creating wealth for rural populations through the creation of new labor markets and new productive activities both on farm and off farm. The rural poor, making less than 1 dollar per day, are the non-profits ultimate constituents.

## Induced Industry Level Growth Dynamics



### TECHNOSERVE MOZAMBIQUE’S DISTINCTIVE FEATURES

#### Two key factors:

1. Leadership that is able to select expertly skilled individuals or in Technoserve’s language “to put the right people on the bus,”
2. Business systems which allow for the effective integration of tasks over expansive territory in ways which assure operational synchronization of interrelated activities, rapid response to new market developments, to competition and to new technology and sound financial controls.

#### Other distinctive approaches to agribusiness incubation are:

Operating at the sector level makes sense in a developing agricultural economy like Mozambique because most emerging agribusinesses in this economy produce commodities whose market acceptance depends primarily on two things: marginal price and product quality advantages. These are attributes, which entire agro-industrial systems affect jointly.

### **Deep Dive- Development of an industry strategic plan**

Identifies and characterizes all sector participants, it benchmarks the value chain against next best competitors, it assesses global market dynamics, it identifies sector strengths and weaknesses, and it lays out all of the sector strengthening steps required to move from the industry's baseline conditions to an envisioned future.

Estimates all of the resource requirements, including personnel with specialized skills required to realize the envisioned future.

As a result key opinion leaders participate in its development pipeline from day one.

Product quality, market acceptance and production process reengineering tests jointly selected leaders within the industry. The objective underlying these tests of business viability is to demonstrate feasibility with real investment and real process reform.

At the same time that it is working with industry leaders and new industry entrants, TnsMz advocates policy reforms, which make it possible for them to overcome regulatory, trade process and other policy constraints.

One case in point involved TnsMz efforts jointly with the Poultry Growers Association of Mozambique, which it helped to form, to force the national government to enforce food safety standards and thus prohibit the importation of frozen Brazilian broilers with expired sell by dates which Mozambican importers had been purchasing below cost from Dubai supermarket.

Facilitates the restructuring of individual sectors by encouraging the merger and acquisition of weaker companies by stronger ones particularly during periods of market weakness.

TnsMz's point of entry into any new sector is typically through already established small to medium sized companies or commercial farms.

Another innovative feature is TnsMz's empirical approach to structural refinement. Within each sector, TnsMz tests various business models through multiyear economic experiments in order to discern most appropriate technologies, relevant economies of scale and of specialization, for example, most productive seed varieties, most appropriate food processing technologies, most effective incentives within value chains best quality control systems and best modes and optimum lot sizes for shipping.

Once business model refinement is complete, paradigms typically emerge of best models for broad application. With that paradigm as its objective, TnsMz uses various mechanisms to disseminate best business model templates throughout rural space.

### **BRAND AND ITS MARKET POSITION**

TnsMz has not focused on actively managing its image, either through message management or advertising. What advertising it has invested in has been designed to benefit specific agribusiness sectors, e.g. the "Consume more Mozambican Chicken Program." TnsMz's approach to branding and market positioning is a word-of-mouth-approach like those adopted by professional accounting, law and financial advisory firms.

The incubator's position in the Mozambican market is based on the results it has been able to realize... on the undisputed fact that the agrindustrial sectors, which TnsMz has supported, have grown, their share of GDP increased and the number of jobs which they created have multiplied.

Competition among NGO'S for donor funding of agricultural development projects is intense in Mozambique. However, having its corporate base in the US and qualifying as it does for participation in the Food for Progress Program generally advantages it with respect to funding from USAID and USDA it two primary funding sources.

Competition for economic development funding among US based NGO's and consulting firms is particularly intense. Among these competitors, Technoserve is distinctive in several ways: i) its established position and reputation for delivering results, ii) its engagement of the most expert specialists in each sector in which it participates, iii) the rapport and trusting confidence which it has engendered with policy makers and government officials, and iv) its deep institutional linkages to specific emerging sectors, including cashews, bananas, poultry, lentils, bananas, and soy beans.

To date, TnsMz has been able to fend off competition from different types of organizations. In this environment TnsMz has distinguishes itself though its values, its pragmatism, its deep market knowledge and the set of linkages, which it is able to influences into multiple elements of the Mozambican economy. TnsMz has distinguished itself in Mozambique as a dependable provider of solutions to real growth challenges. Its proffered solutions are always at the same time pragmatic, affordable and sustainable.

One case in points involves a flood relief program, on which USAID asked various NGOs to bid. After an analysis of how indigenous foresters might move to the next level of development, Technoserve's proposal was to engage local communities of woodcutters to use labor-intensive methods to clear the affected areas. The proposed instrument to be applied was low cost loans. Rural families understand how to cut down old trees and plant new ones. With the TnsMz approach it was possible to develop a set of forestry skills, which could serve as a basis for a Mozambique forestry industry. TnsMz's proposal was one, which delivered sustainable rural development.

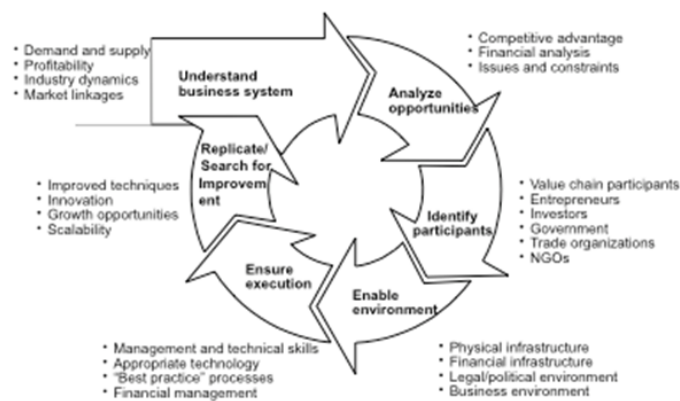
TnsMz is distinctive not only in is search for sustainable solutions but more generally for its pragmatic problem solving approach. It is pro-business, even pro-large business, when large business entrants comply fully with the regulations and laws of the country.

### APPROACH TO INCUBATION

Technoserve offers no standard remedies to competitiveness deficiency challenges. Rather the solutions, which it recommends, are inherently contextual. They are designed to fit with specific stages of industry development, various technology starting points, real competitive challenges and tangible emergent opportunities. It typically searches for examples of best global practice in various links of farm to market chains and endeavors to develop versions of these, which are appropriate for a Mozambican context. Over the entire term of its engagement with a specific agribusiness sector, Technoserve analyses market and production cost conditions; tests proposed solutions in demonstration projects and continuously improve process and infrastructure designs in each critical link of farm to market chains.

Technoserve is not a traditional incubator. It serves its clients where they do business in the rural areas where crops and animals are grown. TnsMz offers no centralized facilities for practicing and refining business skills. With that said, it does frequently create win-win partnerships with industry leaders using their sites to demonstrate and/or train new market entrants in best practices for processing, marketing, logistic management and quality control.

## FRAMEWORK FOR INDUSTRY DEVELOPMENT



## BUSINESS MODEL

TnsMz describes its own approach to agribusiness development in Mozambique as “Mission Driven, Donor Friendly.” What this means is that the nonprofit has chosen the difficult task of steering, on the one hand, between its own priorities for action and investment within specific agribusiness sectors and, on the other hand, the priorities embraced by donors and reflected in the terms of reference and defined in the work programs which they offer to organizations like TnsMz.

Approximately 90% of TnsMz’s revenues come directly from its own donor sources. The non-profits dependence on its parent corporation has been minimal in recent years, as has its need to solicit funding under stressed circumstances from donors to support its own operations.

TnsMz’s business model requires that the non profit’s management must “sell” its vision of a diversified private sector driven Mozambican agribusiness future through the full 360 degrees of engagement within the sector. The nonprofit must “sell” its vision to relatively large private sector investors whom it attempts to influence with respect to their own investments and value chain structures, to smaller holder farmers whom it attempts to reorganize and then include in new value chain structures and also to government policy makers whom it tries to influence in order to remove obstacles to investment and growth. Most importantly, it must “sell” its vision to the donors who support its efforts.

The table below represents TnsMz's current donor funding sources, together with a short hand description of specific sector level programs and the term of that support.

#### DONOR

DONOR	SECTOR	TOTAL PROGRAM BUDGET	START/END	NOTES
USDA	Forestry, feed grains, poultry, grain processing, tourism	\$16.5 million	October 2010 to September 2013	Increased price of wheat means that income likely to be closer to \$25 million allowing for a five-year program instead of a three-year program.
GATES	Soy	\$5.2 million	June 2010 to December 2013	
FORD FOUNDATION	Eco Tourism	\$300 thousand	2009-2010	
IRISH AID	Coconut, Horticulture, Cashew	\$450 thousand annually	Annually renewable	Inhambane province

The table below represents TnsMz's funding growth over the past three years in the face of heavy winds.

MOZAMBIQUE	2010		2011		2012
CURRENT PIPELINE (WEIGHTED)	\$ 7,200,503		\$ 8,229,611		\$ 7,795,833
WINS SECURED TO DATE	\$ 7,172,725		\$ 7,809,789		\$ 7,700,000
ADDITIONAL FUNDS TO BE SECURED TO MEET TARGET BUDGET	\$ 27,778		\$ 419,822		\$ 529,611
TARGET BUDGET	\$ 7,200,503	14%	\$ 8,229,611	0%	\$ 8,229,611

#### STAFFING

TnsMz employs 63 people. These are divided about 50/50 between support staff and professionals. TnsMz offers no orientation to its new recruits. Neither does it invest a great deal in re-skilling. At TnsMz everyone learns by doing and from each other. Established personnel learn from new employees who are typically experienced professionals who arrive with abundant experience and with skills sets different that those which already exist. New employees are expected to share what they know with other staff in the course of the intensely interactive team work in which TnsMz specializes.



The non-profit does not experience much staff turnover. However, many of its professionals do leave for what turn out typically to be short tenures, in order to start new businesses, to take up special assignments in government or within newly formed trade associations, only to return again to TnsMz. Recent examples include the Chief Veterinarian in the Ministry of Agriculture who worked with/for Technoserve as its poultry industry lead specialist while that industry was going through its recent renaissance. She subsequently moved back into the public sector where she still leads poultry industry development efforts, now from within government.

TnsMz maintains a revolving door policy, which encourages this kind of behavior. As a result its alumni association is extremely strong. It is not an overstatement to observe that TnsMz's alumni association provides it with superior access, knowledge and influence.

Another distinguishing feature of TnsMz is the organizational structure on which it relies and the way in which work is assigned within that structure. The non-profit organizes itself into teams each of which is responsible for the development of specific agribusiness sectors. Three sets of skills are typically included in each team ensemble: i) analytic skills in market research and finance; ii) strategic industry skills which include "know how" and "know who" derived from deep private subsector involvement; iii) specialized skills in specific areas which are determined to pose road blocks to further private investment or which relate to applying appropriate technologies within subsectors.

Another important feature of TnsMz's organization is the thin and porous interface, which separates team members inside TnsMz from industry leaders, industry associations and policy makers outside TnsMz. The non-profit's ability to attract top-notch talent and to function on the public-private sector frontier is due in part to the porous nature of these interfaces.

TnsMz is subject to two sets of governance: Governance, which applies as a result of the terms and conditions of contracts with donors into which it enters, and more generally the fulfillment of its corporate responsibilities. Thus, the general manager of TnsMz reports to a regional director who is based in Accra. Other reporting responsibilities affect cross cutting, intra corporate obligations such as regional market development and African branding and marketing to the global economy. Technoserve corporate has developed a pan-African cashew program funded by the Gates Foundation. The ranking program officer is based in West Africa. Similarly it has developed a regional fertilizer market development program based in Zimbabwe. TnsMz participates in both of these programs and in these contexts cross-border reporting relationships have been set up on an ad hoc basis. The ultimate reporting relationship of TnsMz, however, is to Technoserve's corporate board, which has a strong private sector orientation.

### NETWORK PARTNERS

For the most part TnsMz attempts to undertake the planning, organization and primary funding of sector level transformation itself. However, it attempts to engage outside partners in the actual implementation of these plans and programs. It is essential that TnsMz establish relationships early on with groups within each sector, which are best at affecting changes which need to take place, and at developing new competencies.

These inside principals have a strong incentive to get it right the first time and to learn from their own failure if it should occur. Even in more generic and non-sector specific areas of activity like association building, TnsMz prefers to work with and through partners who are more specialized and experienced in these activities. Other special symbiotic relationships, which TnsMz has developed, are with Photo Voices for the monitoring of farm level activities and for the embrace of new methods at the farm level and with Mc Kinsey and Company for the supply both of interns and of special studies, which included benchmarking, and sector level competitiveness analyses.

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### CURRENT PORTFOLIO STRATEGIES

At any given time Technoserve supports 30-40 incubatees in sector value chain management programs, which it has underway. This support entails testing, refinement and integration of new value chain configurations and of new technologies. Approximately 50% of these industry-leading incubatees fall out over a 5-8 year sector strengthening cycle. Most of this fall out, however, results from non-compliance with contract terms, rather than with business failure.

A second level of incubation typically exists as part of TnsMz's approach to sector reform. Each of value chain level incubatees noted above works with and through 50 to 100 separate farm level organizations and each of these corresponds to a second, nano level of incubatees.

Thus a value chain incubator will manage small scale matching grants or loan programs, which will at the same time, bind farm level producers to the chains and induce changes in behavior among farmer-suppliers, which increase the competitiveness of the entire chain. The commercial experiments which produce the best quality product or highest margins for the chain then become the best practice standard for the entire sector.

In this way, an entire agribusiness sector can be induced to move from a low level equilibrium to a higher-level equilibrium— from a competitively weak sector to a competitively strong sector.

Contracts between industry leading firms and TnsMz entail the creation of a public good. Leading firms provide this public good in return for subsidies and supports. Part of each leading firm responsibility under these agreements is to share information with other private firms who want to enter the sector and develop value chains of their own which incorporate best practice.

## OUTCOME AND CONCLUSIONS

### ACHIEVEMENTS

Part of what TnsMz has been able to achieve is the creation of metrics, which track the outcome and impacts, which are being realized within specific sectors over time.

Before TnsMz programs take effect there is no cash economy and/or income within most rural spaces where it operates; farmers barter their crops for other goods in local markets; no money transactions of any kind exist; no labor market operates and no sales are made to any buyers outside the immediate closed economic region.

Once cashew factories, for example, are organized to operate in a new area, sellers of raw nuts and workers in the factories both receive cash payments. At this point the entire local economy begins to lift off. The economic multiplier effect differs from sector to sector but once this cash economy break out is achieved the tangible results can be clearly identified: other micro enterprises develop, a labor markets takes root and people find other goods and services which they can sell for cash.

### CRITICAL SUCCESS FACTORS: SWOT ANALYSIS

See SWOT analysis table below

### LESSONS LEARNED, IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

The founder/leader of an agribusiness incubator must trust the organization to work once it has been designed, staffed and set in motion. At that point the founder/leader needs to commit his/her time working to priority issues, ones that require the full investment of the organization's authority.

- Picking good people or what TnsMz refers to as “putting the right people on the bus,” is particularly important. As noted above, Technoserve mixes local and expat experts into teams. It combines individuals with strong analytic skills on sector-focused teams together with others who have deep knowledge and strong contracts within specific agribusiness sectors.
- Once teams are selected the founder/leader of the incubator needs to trust the team to perform within a framework of clearly defined goals and organizational values. Thus, for example, each agribusiness sector team at TnsMz develops its own logical framework, which specifies inputs, outputs, outcomes, goals and objectives. This framework defines performance expectations unambiguously for each new sector development effort.
- One must study a sector with respect to its sources of competitive advantage before defining an development plan for the sector or indeed, before committing any significant level of resources. The admonition here is simply to understand the facts before committing resources.

SWOT ANALYSIS	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>Inspired and inspiring leadership. A founder leader who continues to raise the bar with respect to expectations.</li> <li>Organizational design, staff selection and business culture are all designed to emphasize program agility, flexibility, and opportunity responsiveness.</li> <li>A institutionalized “know how” bred from repeated success in finding appropriate solutions to competitiveness challenges at the sector level.....of translating challenges into solutions, which attract more private investment.</li> <li>A method for indentifying priority impediments for growth at the sector level, which moves from the market backwards along the value chain and from participants within the chain to technology, critical input and service providers on the periphery of the chain.</li> <li>Strong business linkages both within and outside Mozambique.</li> <li>Strong creditability with key government officials at the national, provincial and local levels. TnsMz invented and continues to refine the advocacy process called “value chain federalism.”</li> </ul>	<ul style="list-style-type: none"> <li>Continued operation over the long term depends on continued donor support. Dependence of USAID is particularly worrisome given the pressures on that agency’s budget.</li> <li>Constrained somewhat in program focus and selection by priorities of donor organizations. For example, not able to work at facilitating a great leap forward by leveraging cutting edge biotechnology.</li> <li>Not sufficiently tuned into the global picture. For example, not sufficiently focused on cutting edge technologies with agricultural relevance.</li> <li>Not sufficiently engaged with issues of capital structure, sources of financing for agribusiness growth.</li> <li>Limited internal ability to provide seed capital funding for incubatees.</li> </ul>
OPPORTUNITIES	RISKS
<ul style="list-style-type: none"> <li>Mozambique offers all of the soil, water and climatological advantages of Chile. Its agribusiness sector is where Chile’s was 40 years ago.</li> <li>Enormous and growing interest exists among major global agribusinesses in Mozambique. Finding ways to respond to this interest, which are socially beneficial would open up new business opportunities and would allow TnsMz to diversity its revenue dependence.</li> <li>Increasingly, the capture, transfer and full application of technology appropriate to rural space will entail cross border activities, participation in international networks and partnerships with foreign companies.</li> <li>TnsMz’s strong working relationship with an enlightened government is only likely to increase in the future. TnsMz continues to add to its credibility and to its policy influence.</li> </ul>	<ul style="list-style-type: none"> <li>The agribusiness ecosystem in Mozambique is changing more rapidly than in other SSA countries. Continuing to maintain currency is advice, strategic development direction and sector growth will become correspondingly more difficult and more complex.</li> <li>TnsMz needs to maintain as low a public profile as possible in order not to put at risk both its superior position both with respect to policy dialogue and strategic direction.</li> <li>Continuing to fund TnsMz’s growth will require increased financial commitments from donors, unless the incubator is able to change its business model and develops other sources of revenue.</li> </ul>

- Once TnsMz begins its work of sector strengthening, specialized needs typically emerge for specialized technical support, such as quality control management, food logistics, or best global practices in conservation forestry. At this point Technoserve attempts to organize sector teams, which include specialists in critical competitive factors in order to address specific sector dysfunctions.

### GOALS MOVING FORWARD

The future goals of TnsMz are to diversity its sources of income and to become more involved with directing and facilitating private sector investment in Mozambique's agricultural sector and less dependent on donors. To this end, TnsMz has launched two initiatives:

1. One involves the development of an agribusiness advisory service for foreign direct investors.
2. The second involves the serial launch of a set of agribusiness franchises each of which will operate with lookalike business models, common most appropriate technology and with farm to market chain integrating impacts.

TnsMz also launched a new kind of initiative that focuses less on developing a specific sector, and more on demonstrating the feasibility of organizing community based agro-forestry in a sustainable way.

The program involves testing new modes of mixed plantation forest harvesting and agricultural production in five areas of the country where agro-climatic conditions are suitable for supporting both. The program entails the substitution of ecologically sustainable tree harvesting methods for the slash-and-burn methods, which currently prevail.

### LINKS

[www.technoserve.org/work-impact/locations/mozambique](http://www.technoserve.org/work-impact/locations/mozambique).

### REFERENCES

#### Contact details

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## Value Chain Interventions using a Franchise Business Model by an NGO

**Incubator Name:** Timbali Technology Incubator-South Africa

**Sector:** Agribusiness

**This Case Study Examines:** How to integrate rural farmers into the domestic and foreign markets using value chain interventions in a franchise business model.

**Start-up Date:** 2003

### BACKGROUND

The word “Timbali” means “flowers” in the SiSwati language, and this has both a literal, horticultural product meaning as well as the action verb “to bloom”. The Timbali Technology Incubator was founded with the concept of harnessing both definitions.

The Timbali Technology Incubator was founded in 2003, in an effort to positively affect the rural farmers of the Mpumalanga region of South Africa. It was developed primarily by Co-founder and CEO Louise de Klerk, the visionary leader of Timbali since inception. The first entrepreneurs entered the incubation process in 2004, and by 2005, Timbali had grown to include 30 entrepreneur clients. By 2007, the incubation model was restructured to accommodate both on and off-site agribusiness incubation.

In 1990, there were almost 79,000 farmers actively operating in South Africa. Today, that number has decreased to around 33,000. The main reason for this decrease is the rise of fewer, larger, high-volume farming operations. From sales volume to bulk material pricing to access to credit, the smallholder farmers of Mpumalanga had little chance of competing successfully with this level of sophistication. In the Mpumalanga region of South Africa, 26.9% of the population is unemployed, with 33.9% of those being women. In a culture where agribusiness is primarily dominated by women, and relatively simple inputs and training are needed to promote sustainable success, the impact of Timbali’s activities of agribusiness incubation are obvious, critical and undeniable.

The core values advertised at Timbali Technology Incubator shows how programmatically serious they are about agribusiness incubation. These values apply to every executive board member, staff employee, incubating client and pre-incubation hopeful. They are engrained in the very essence of the Incubator. Those core values are:

- a. Being part of something special
- b. Hard work with a sense of pride, self-reliance and ownership
- c. Being a pioneer and not following others
- d. Science-based innovation
- e. Honesty and integrity
- f. Excellence in reputation

Timbali uses a series of key performance indicators (KPI) to measure the success or failure of their objectives. With an overall goal of business and enterprise development, Timbali's objectives are the promotion of the agricultural sector's macro-economic goals, promoting network linkages, ensuring effective and efficient management of investments, effective human resource management and effective marketing and communication. These measurable indicators include calculating the number of agribusinesses supported, the number of new (pre-incubation) projects initiated, the total number of clients supported, how many black-owned agribusinesses supported, how many women-owned agribusinesses supported, how many jobs created, how much growth in each sector, pipeline development, etc.

## STRATEGIC VISION, MISSION AND TARGETS

### STRATEGIC VISION, MISSION, AND TARGETS

#### Vision

To be leaders in creating wealth for all in agriculture and related industries

#### Mission

To establish and support an enabling environment to promote predominately broad-based Black Economic Empowerment (BEE) agribusiness and related enterprises

Timbali focuses its efforts on the least represented population groups in the Mpumalanga region, namely black and women clients. Currently, over 97% of Timbali clients are black and 97% of those are women. Without the option of successful, agribusiness opportunities, these groups have nothing. The most obvious beneficiaries of the Timbali incubator model are the clients themselves. Other demographics that benefit from Timbali's agribusiness incubator model include agricultural material suppliers, financial institutions, off-site growers, packaging material suppliers and transportation companies.

As understanding their client-base is crucial, the following needs have been defined and guided the Timbali staff in the development of their program: technology transfer, access to production loan financing, basic business skills, market access (competing with the quality produce of large commercial farmers), logistical coordination, standardized and coordinated production processes, financial training, administrative and bookkeeping support, training and mentorship, illiteracy and finally, market-driven production.

### TIMBALI'S DISTINCTIVE FEATURES

- The most distinctive feature of Timbali is their ability to create sustainable relationships on behalf of their clients.
- The Timbali incubator model at Timbali is largely based on the franchise model – allowing clients to easily and immediately start supplying a customer (Timbali-owned commercial arm). In one sense, this is a tremendous benefit to the individual client, who can begin generating revenue almost immediately. Creating that opportunity, and providing clients with an immediate and recognizable commercial outlet is truly significant.



- Finally, Timbali boasts both on-site and off-site incubation models, which is a rarity in the incubation world, by promoting a cluster-driven approach to incubation.

### BRAND AND ITS MARKET POSITION

The name “Timbali” is almost synonymous with agribusiness incubation in the region they operate in. Timbali has no competition in this area, and dominates the incubator space.

Timbali is also the brand owner for several commercial brands, only one of which is currently active. “Amablom”, meaning “my flowers” in the local language, is the commercial face of Timbali’s efforts, and is used in marketing initiatives locally, regionally, and for limited exports to Europe. In discussing this brand with Amablom customers, they have a solid reputation for quality, reliability and competitiveness.

The other brands owned by Timbali are “Amafruit”, “Amaveg” and “Amabrands”, all planned for future use as Timbali pushes forward into more advanced crop diversification and value-added food processing. The latter, “Amabrands”, is intended to be the umbrella brand of the other three. “Amafruit” will focus on fresh fruit produce, as well as value-added juice, jam and dried fruit production. “Amaveg” will focus on fresh vegetables, as well as value-added, shelf stable vegetables and other by-products. All brands are registered and

### APPROACH TO INCUBATION

Recognizing the need for a solid incubation program, Timbali introduced their on-site and off-site incubation programs in 2007. Their goal was to offer a full, mentor-based, franchise incubation model to accommodate both on and off-site clients.

Potential clients are asked to complete a Personal Strengths and Weaknesses Worksheet, evaluating their experiences and abilities in a number of critical areas, including sales, marketing, financial planning and customer service. They evaluate themselves on a scale from one to five (five, being the highest).

For entry into the Timbali Technology Incubator program, the following entry criteria must be met:

- Access to own land
- Ability to service infrastructure costs
- Full-time involvement and commitment to business
- Product and market accessibility
- Sound track record and growth potential of the client and enterprise
- Ability to pay for services in future through levies
- Entrepreneurial inclination

Once accepted into the one-year, pre-incubation program, clients are walked through a series of assessments, including needs analysis, land analysis (off-site, on their land), water and irrigation. They also receive basic training in production. Finally, they are assisted in applying for their initial financial loan through the Mpumalanga Economic Growth Agency (MEGA) for plants/seedlings, land improvement, etc. The value of this initial loan varies greatly, based on the individual's needs, but averages around R50,000. Clients in the pre-incubation program meet with Timbali technical leadership and mentors once per month, and are evaluated on their technical expertise, as well as their professionalism and commitment to a full-time incubation program and entrepreneurship. Advancement to the full incubation program is based on two factors: their interest and readiness for the intensive program; and their approved funding through the MEGA financial scheme.

The funding received from MEGA is transferred into Timbali's trust account on behalf of the client, and Timbali manages the funds on their behalf. For this service, as well as contributions to rent, utilities, etc, Timbali clients pay a monthly levy of 12% of the client's sales to Timbali. Within the first year of incubation, clients typically generate between R8,000 and R60,000 per month.

Following graduation from pre-incubation into the full incubation program, clients are thrust into a full-time, three year intensive program. The acceptance rate from pre-incubation to incubation is over 98%, which attributes well to Timbali's extensive screening process. Once a full-time client of the incubation program, clients interact with Timbali staff on a daily basis, and receive a monthly stipend of R2,000 per month. They receive intensive training which includes mentoring, production planning, business planning, area-specific planning, processes, bulk purchasing, spraying, fertilizer selection and uses, financial analysis and branding. They are either assigned to an area on-site in Timbali to work or, for off-site clients, are strictly assisted in planning their own farming site. During the full incubation program, clients provide some of their product to the Timbali brand, Amablom, and also pursue direct customer relationships with private business entities – a service also enabled by Timbali's sales and marketing staff.

Graduation is a process in which all members of the incubator, clients and staff, are including in. Potential graduates must exhibit top-notch technical skills, exceptional business acumen, a strong desire to graduate and a solid business plan for post-graduation activities.

Timbali has also created a Science Research Park, giving smallholder farmers the opportunity to expand their individual businesses within the confines of the Timbali facility, where they have the benefit of having access to clusters and technology. There are several practices being researched at the Science Park of Timbali, ensuring that best practices prevail in fertilizer programs, updated IT systems, spraying programs, techniques for pre/post-handling, product selection and testing cultivars.

### INSTITUTIONAL SET-UP

Timbali Technology Incubator was established as a Section 21 company (not-for-profit) in South Africa, and remains in this status today. It is run by CEO and co-founder Louise de Klerk, who has been the visionary of Timbali since before its inception.

Timbali is overseen by a board of directors made up primarily of representatives from contributing organizations. Today, the Timbali board of directors consists of:

1. Mr. Bheki Mamphaga (MEGA)
2. Ms. Anita Severn-Ellis (Agricultural Development Advisory Group)
3. Mr. Peter Hughes (Capespan)
4. Mr. Andre Scholtz (Nominated industry specialist)
5. Mr. Tervern Jaftha (SEDA)

### BUSINESS MODEL

Timbali has been fully funded to date by the South African Department of Trade and Industry's Small Enterprise Development Agency (SEDA). Two grants, totaling R20,000,000 have been dispersed since Timbali's inception. Additional direct support comes from the Agricultural Research Council, who donated the land used for Timbali's main office and on-site incubation program, and MEGA.

Timbali has recently been approved to receive an additional R20,000,000 in funding from SEDA to support their latest initiative of increasing off-site incubation focusing on other key, agricultural activities and product diversification. The certainty of continued funding remains a high concern, as sporadic payments and fluctuating government budgets make financial planning an uncertain challenge.

On average, Timbali spends approximately R80,000 on each client for four years of the incubation process. While the price of cut flowers (the industry most Timbali clients participate in) fluctuates, the typical Timbali graduate produces approximately 8,000 stems per month. At an average price of R2 per stem, it can be deduced that the average Timbali client generates R16,000 of income per month, thus recouping the Timbali investment of R80,000 in less than one year.

### STAFFING

At present, the Timbali Technology incubator employs nine full-time staff members. The Timbali staffing model can be broken down into three categories: operations, technical and sales.

Timbali has an extensive network of public and private-sector partnerships servicing a wide array of internal needs to accomplish their mission.

As Senior Technical Officer, Mr. Lombaard points out, “without those partnerships and that network, we would not be able to meet the needs of our clients”.

One of the most critical and fundamentally useful relationships Timbali has developed is the MEGA (Mpumalanga Economic Growth Agency). Since inception, MEGA has been providing Timbali clients, from pre-incubation stage through graduates, with micro-loans to develop and expand their business models. This allows clients to not only receive much needed financial assistance, but also to establish an invaluable credit history, helping them both personally and professionally.

## OUTCOME AND CONCLUSIONS

Some key accomplishments include:

**Product Diversification:** More than 69% of the Timbali clients currently incubated produce alternative crops. These crops include foliage, citrus, pomegranates, a variety of vegetables, peppers, tomatoes and grapes.

**Off-site Incubation:** Off-site incubation clients now represent over 72% of Timbali’s total number of supported clients, and serves as the only method Timbali has of expanding their impact, as on-site space is limited and at capacity.

**Business Systems Development and Technology Transfer:** The program comprises of an intensive interaction schedule aimed at addressing specific business needs as identified per client according to specific guidelines through workshops, one-on-one and group sessions, and clustering activities with Timbali personnel and field specialists.

**Strategic Alliance Development and Incubator Sustainability:** This plays an important role in business development for Timbali. One such alliance is the Amafruit initiative, which was developed in collaboration with a ground-breaking, multinational consortium.

## CRITICAL SUCCESS FACTORS

- Development as a substantial business model operating in a region where such services are so desperately needed.
- Implementation of the clustering advantage. Farmer clients have access to the extended cluster advantage through sound management, communication, administration (i.e. bulk buying, shared services and market access) and the business development process (weekly operations meetings and internal audits).
- Development of the cluster operations manual. The skills development and training that takes place is recorded and documented as it happens.
- Internal auditing function ensures fair, accountable and transparent bookkeeping. This allows the development of habitually doing quantification and making data-driven decisions within the cluster to address conflict management.

### LESSONS LEARNED, IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

1. Access to production loans is one of the most critical elements of the Timbali incubator model
2. The franchise model seriously hinders one of business incubation's most basic principles, being the concept of innovation. While these rigid processes should be applauded, and implemented in a best-practices incubation model, the franchise model should act as one element of an agribusiness incubator's operation, rather than its entirety. Entrepreneurial innovation and creativity must be cultivated in the agribusiness incubator model, led by experienced incubator managers who know how to channel that creativity into competitive, marketable agribusiness concepts.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Strong network to promote sustainable growth for clients	Franchise model limits entrepreneur innovation	Off-site business incubation to expand client list	Constant competition for government funding from one source
Franchise model guarantees income for clients focused on cut-flowerS	No financial investment from clients raises concerns over seriousness of applicants	Expansion of incubator-owned brand's direct accounts in local and international markets	Unable to control growth and effectiveness of off-site incubation initiatives
	Board of directors lacks industry experience to develop network and funding options	Duplicate franchise model for off-site incubation focused on crop diversification	
		Promote "green" growing practices	

### GOALS MOVING FORWARD

Timbali continues to expand and develop in an effort to meet their hardwired goals and mission. They feel that their incubation model has been successfully tested and proven, and are now ready to unveil that proven concept into other regions and other product initiatives. To do this, Timbali is looking to develop a portfolio of "Timbali Agro-Parks™" that accommodate undergraduate, as well as graduate, incubatees. They are anxiously and actively working on expanding their off-site incubation program to include a host of other agricultural products. And the staff at Timbali are working closely with South Africa's Department of Trade and Industry's SEDA program to explore options of expanding this incubator concept into other regions of South Africa. Currently, they are approved to begin operations in the Limpopo region.

## LINKS

[www.timalicrafts.org](http://www.timalicrafts.org)

## REFERENCES

### Contact details

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## Incubator for Agribusiness and Agroindustry at the Bogor Agricultural University (IAA-IPB) – Indonesia

**Incubator Name:**

Incubator for Agribusiness and Agroindustry at the Bogor Agricultural University (IAA-IPB)

**Sector:** Agribusiness

**This Case Study Examines:**

How a university affiliated incubator evolved to achieve a high success rate—helping to startup an accumulated 77 new businesses, of which 27 are still under incubation and 38 have graduated.

**Start-up Date:** 1995

### SUMMARY

Since its inception in 1995, the Incubator for Agribusiness and Agroindustry at the Bogor Agricultural University (IAA-IPB) has assisted a number of small and medium enterprise (SME) startups to grow and mature into sustainable enterprises. The incubator is part of the Bogor Agricultural University, located in West Java, Indonesia.

The incubator's small and dedicated staff has assisted over 80 enterprises, of which 30 have already graduated. The incubator initial focus was on agribusiness and agroindustry only but recently expand its services to include handicrafts, IT, textile, and leather while utilizing the innovation of green technology to the greatest possible extent. This shift of focus is the result of a request by the Bogor Municipal Government and the perception that no other institution in Bogor provides similar incubation services. More than 70% of the incubatees will however remain from the agribusiness/agroindustry sector.

The services provided by the incubator include access to office space (for the resident incubatees), and infrastructure (including meeting and training rooms, processing equipment and plants, labs), research and technology services, advisory and business development services, training, networking with business community and financial institutions, facilitated access to promotional programs such as credit programs at subsidized interest rate.

Services are provided on a one to one basis for the entire period from acceptance into the incubator program until graduation, a period taking about 3 to 4 years. After graduation, the incubator management keeps relation with many of the graduates and keeps on providing assistance on a mutually beneficial basis. The most successful graduates are introduced to new incubatees and provide a role model; successful graduates by enhancing the image of the incubator also help the incubator promote its activities.

The incubator management has been very careful over the years to ensure self-sufficiency and the capacity of continuing operations. Starting with modest grants from the Ministry of Cooperatives and SME Development (MCSME) and the Ministry of National Education (MNE), the incubator has been able to support its own staff and activities. In particular, it has been able to facilitate access to credit for most of its incubatees, and provided training and advisory services through its own staff and the faculty of the university. The incubator has been successful in ensuring a large percentage of its incubatees to perform satisfactorily in credit programs sponsored by the Government. Compared to most other incubators in Indonesia, IAA-IPB can boast the performance in terms of incubatees' participation in credit program and sustainability of its own operations.

Through association with financial institutions, national and international incubators, universities in Indonesia and overseas, chambers of commerce, banks, local government, and national programs to develop SME and innovation IAA-IPB has been able to gain visibility and support for its activities. The IAA-IPB manager was nominated as a reviewer coordinator to evaluate applications of other incubators' establishment to access the MNE funding for SME startups.

Management of the incubator has been collegial, flexible, and independent. For most of its history (from 1995 to 2008), its leadership has been given by a dedicated and reputed faculty who was also the founder of the incubator and has retired from the position of CEO in 2008. Fortunately, he has continued to provide advisory services and guidance to the present management of the of the incubator as Senior Advisor.

## BACKGROUND

Bogor Agricultural University (IPB)<sup>17</sup> has been participating in several national development programs to increase farmers' income, and to develop farmer cooperatives and small and medium enterprises (SMEs) since 1963. Their programs in community services cover training, technology transfer, and consultancy in management in cooperation with various government ministries and agencies<sup>18</sup>, private sector, and international institutions.

IPB conducted training for SMEs and individual entrepreneurs but their success in training growing and self sufficient SMEs had been very limited until 1994 when the United Nations Development Programme (UNDP) introduced to Indonesia the concept of incubating startup SMEs. At this time IBP joined four other institutions in a pilot program to establish business and technology incubators.

IPB incubator was first named Incubator for Agribusiness and Agroindustry (IAA-IPB) and later became one of the centers under the Institute for Research and Development (R&D) at IPB.

<sup>17</sup> General information on the incubator could be obtained on the English version of the website at <http://www.inkubatoripb.com/index-e.php?nama=Home> (English)

<sup>18</sup> Such as the Ministry of National Education (MOE), Ministry of Agriculture (MOA), Ministry of Cooperative and Small Medium Enterprises Development (MCSME), Ministry of Industry and Trade (MOI), Ministry of Labor (MOL), Ministry of Health (MOH), National Logistic Agency (BULOG) and National Coordination Agency for Family Planning.



Eventually, the Bogor Municipal Government (BMG) pushed for expanding the focus of the incubator beyond agribusiness and to include other types of SMEs such as those involved in handicraft, leather, and IT and promoted the additional idea of developing SMEs using innovations in “green energy” technology. The incubator facility at Darmaga currently has a new building with a pilot plant and space for 14 resident incubatees (tenants). New equipment to be installed in the pilot plant has already been procured with funding by the central government. Facilities include offices, with incubatees space, and sharing of other IPB facilities such as a food processing plant, workshops, and laboratories.

MCSME continued to support the incubators development in Indonesia by funding seed money for a three year period to each incubator (1994-1996). About 15 incubators were funded during this period. The Ministry of National Education (MNE) eventually launched a program to start up incubators in the universities all over Indonesia following the MCSME model of providing only small seed money for a period of three year per incubator. At this time IPB was nominated reviewer coordinator and was assisted by UNS and ITS incubators to evaluate proposals from new incubators and monitor program implementation.

#### STRATEGIC VISION, MISSION, AND TARGETS

The **vision** of the incubator is: Creating strong, independent, and growing SMEs. This vision has remained the same since the beginning of the incubator in 1995.

The **mission statement** of the incubator is: providing incubation services to help the growth of startup small scale enterprises in agribusiness and agroindustry into strong and independent enterprises ready to scale up to medium scale.

Recently the strategic focus has slightly changed from handling only agribusiness and agroindustry SMEs, to include handicraft, leather, and IT SMEs. This was in response to the interest of Bogor Municipality. The Municipality indicated that not only SMEs in the agroindustry/agribusiness sector but also SMEs in other sectors need incubating services, currently not provided by any other organization in the area.

The **strategic mission** of the incubator in the next 5 years is to have a strong management team, to use new facilities (building and equipment) effectively, to improve IT facilities to support incubatees, to be able to provide better remuneration to incubator staff and to help implementing the forthcoming president’s regulation on incubator development.

The vision for the next 10 years is that the incubator could proudly stand up with other international incubators.

#### TIMELINE OF EVENTS

- 1963 Bogor Agricultural University (IPB)<sup>19</sup> began participating in national development programs to increase farmers’ income, develop farmer cooperatives and SMEs

<sup>19</sup> General information on the incubator could be obtained on the English version of the website at <http://www.inkubatoripb.com/index-e.php?nama=Home> (English)

- 1997 – 1999 : The Ministry of National Education (MNE) launched a program to start up incubators in the universities all over Indonesia following the MCSME model of providing only small seed money for a period of three year per incubator
- 2005 The incubator became a division under the Entrepreneurship Research and Development Center (ERDC).
- 2008 Bogor Municipal Government (BMG) pushed include other types of SMEs such as those involved in handicraft, leather, and IT and expand focus on agribusiness is to develop SMEs using innovations in “green energy” technology.

## OUTCOME AND CONCLUSIONS

### INCUBATOR'S DISTINCTIVE FEATURES

The four distinguishing features of the Incubator are:

- Focus in agribusiness and agroindustry<sup>20</sup>
- Good networking with central government including active involvement of its staff and management in policy formulation related to national incubator development
- Making investment in successful graduates so as to obtain income from profit sharing
- Developing a post graduate program that can continue on assisting successful graduates

The incubators four primary strengths include:

- Self sufficiency to allow surviving with a minimum operating budget
- Access to pilot plant, labs, and workshops of the university to support technology services for the incubatees
- Role model for other emerging incubators
- Dedicated management team

Its primary weaknesses include:

- Limited space for incubatees
- Manager is part timer since he has to be a faculty staff
- Limited support from regional government
- Limited financial resources for incubator operations

<sup>20</sup> Also initiate green technology program for incubatees.

The lessons that can be taken away from the way in which the incubator has built up its strengths or compensated for its weaknesses since its founding and which might have value to other emerging incubators include:

- Incubator must have a dedicated, full time, and capable management team
- Incubator should develop good networking with stakeholders such as policy makers, financial institutions, and markets
- The management must be confident in the ability to deliver successful incubatees

#### APPROACH TO SERVICE

The core services provided by the incubator to the incubatees include:

1. Office space and utilities for resident incubatees, at a very moderate rental cost.
2. Other office facilities, such as meeting and training rooms at no charge.
3. Free consultation for technology development, management improvement, and marketing plan.
4. Free training, business meetings, and workshops.
5. Access to processing plant and labs, with moderate charge on service basis<sup>21</sup>.
6. Free consultation for writing business plans required in credit application.
7. Facilitation in credit application. In particular, the incubator helps incubatees in looking for specific credit schemes with low interest from government programs. Size of this finance varies according to the type of business, but most incubatees have been able to get loans of at least Rp 100 million (about US\$11,000)

In addition to the core services, the incubator provides other services such as facilitation of attendance to international internships and exhibitions. Services have been provided according to the changing needs of each incubatee.

The approach of the incubator to service provision has been inspired by the idea that service charges should be applied with caution, particularly in the initial stages of a highly risk sector such as agribusiness. The incubator agrees about the need of standard charges for space and utilities, but charges for consulting services should either be very low or free in the view of the incubator management. Equipment and lab analysis charges should be on a service basis. A la carte basis is more appropriate for equipment and lab analysis since these services are not used regularly. Events such as training and business meeting are appropriate to be charged on a service basis. Regular services should be charged as part of a standard package.

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<sup>21</sup> The service fees go to the plant and labs not to the incubator.

## OUTCOMES AND IMPACTS ACHIEVED

The incubator measures the result of its own work with one simple metric: increase of incubatees' sales volume.

Creation of jobs is not considered a reliable parameter by the incubator management since it varies a lot with the type of business. For example, handicraft and shoes jobs will increase with sale volume; however jobs in essential oil and fresh vegetable might not increase with sales.

The incubator has helped to startup an accumulated number of 77 new businesses, of which 27 are still under incubation and 38 have graduated, and 12 withdrawn. Over time the following table indicates the number of resident incubatees, non-resident, graduates, and withdrawn.

	No. of Incubatees - Resident	No. of Incubatees - Non-Resident	Total No. of Incubatees	New Incubatees	Incubatee from previous years	Graduates	Withdraw from incubators
1995-2000	5	15	20	20	-	10	2
2000-2005	7	20	27	19	8	13	5
2005-2010	5	22	27	18	9	15	3
2010-2011	2	25	27	18	9	-	2

**Table 1. Incubator's resident incubatees, non-resident incubatees, graduates, and withdrawn between 1995 and 2011**

For a sample of 29 enterprises for which it was possible to collect information, the performance in terms of sales is illustrated in the following table. Agroindustry and agribusiness enterprises perform quite well with an average sale growth of over 20% and compare favorably with the average growth of 18% over different sectors.

No. of Companies	Sector	2008 Sales (Rt. Million)	2009 Sales (Rs. Million)	2010 Sales (Rs. Million)	Average Growth 2008-2010 (%)
8	Agribusiness	2,265	2,705	3,185	20%
11	Agroindustry	18,145	21,805	26,315	23%
5	Handicraft	3,750	4,290	5,740	27%
3	Leather and Textile Industry	2,450	2,860	3,600	23%
2	IT	14,180	15,200	16,780	9%
29	TOTAL	40,790	46,860	55,620	18%

**Table 2. Total Sales of Sample of Incubatees between 2008 and 2009 (Rs. Million)**

Note: The details of each firm in the sample are available in Appendix 6 of IAA-IPB Case Study.

In terms of average size, agribusiness enterprises are relatively small with sales less than \$100,0000 per year and IT and agroindustry are larger size.

Sector	Average 2008 Sales (US\$)	Average 2009 Sales (US\$)	Average 2010 Sales (US\$)	Average Growth 2008-2010 (%)
AGRIBUSINESS	31,458	37,569	44,236	20%
AGROINDUSTRY	183,283	220,253	265,808	23%
HANDICRAFT	83,333	95,333	127,556	27%
LEATHER & TEXTILE INDUSTRY	90,741	105,926	133,333	23%
IT	787,778	844,444	932,222	9%
<b>TOTAL</b>	<b>1,176,593</b>	<b>1,303,526</b>	<b>1,503,155</b>	<b>14%</b>

**Table 3. Average Sales of Sample of Incubatees between 2008 and 2009 (US\$)**

The effect on farmers' income can be measured in some cases. One hypothesis is that by increasing the incubatees sale volume, the income of farmers also increases. For example, the vetiver farmers income increased from Rp 2500/kg to Rp 3000/kg over the past 3 years. The fresh vegetable farmers have learned the packaging so not all the packaging is done in the cooperative packaging house. Part of it is done by the farmers, thus they gain higher income. In the case of handicrafts using a fiber called mendong, farmers realize an income several times higher than the alternative paddy production.

### CRITICAL SUCCESS FACTORS

Four key critical factors of success could be drawn from the experience of the past 15 years of IAA-IPB's experience. First, utmost importance needs to be given to the incubatees, both during the selection process and during the incubation period in order to ensure that they grow and are successful. Their success is the success of the incubator itself. One to one interaction with the incubatees is necessary to understand their problems and special needs, and help them find a solution.

Second, ensure that the incubator has the resources necessary to carry out activities and support its own management and support staff over the long period. Over-investment in activities and staff, particularly at the beginning of the incubator program is not likely to be sustainable. The incubator has to prove itself with whatever limited resources it could master to obtain over a medium term period (at least 3 years).

Third, if additional resources are needed, then strategic partnerships and networking need to be established. In the case of IAA-IPB, access to infrastructure, facilities, and technical services was obtained through linkages with the university; access to credit for the incubatees through participation in nation-wide programs to support growth of SME; exposure to international experiences through training and participation in conferences sponsored by development partners and international networks; support from local government through collaborative linkages and networking with the municipality government; support from private sector through linkages with Chamber of Commerce and financial institutions.

Fourth, maintain relations with successful graduates. They will continue to need assistance from the incubator, and in turn they will be able to assist the incubator by providing a role model to new incubatees, and represent a source of income for the incubator itself through profit sharing or equity investment.

### LESSONS LEARNED AND IMPLICATIONS FOR AGRIBUSINESS INCUBATORS

- The major lesson learned from the experience of IAA-IPB is to put the incubatees' success at the center stage. All the effort of the management and staff of the incubator is warranted and justified if the startup enterprises become sustainable businesses that could mature from micro/small size to medium and even large size.
- Even though there will be failures among the startup and some graduates will not be able to move much beyond the small size, it would be enough for the success of the incubator to have a small number of highly successful startup becoming medium enterprises.

- In the case of agribusiness sector, the IAA-IPB has filled a gap that current programs of the government or academia were not fulfilling: the incubation stage support to firms that more than other sectors are subject to a number of risks arising not only from the market and finance, but also from climate and nature.
- The final lesson is that the incubator should not stop its support of incubatees immediately after graduation. Post-graduation activities are important. A process of selection of successful graduates should be established and post-graduation incubation could also continue. That will have benefits not only for the graduates, but also for the incubator in terms of visibility and profitability.

## REFERENCES

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## Marketing Case Study: Kenyan Ketchup #1

**Sector:** Agribusiness

**This Case Study Examines:**

How an incubator can work with an incubatee to develop a successful product and marketing strategy to penetrate the US market.

### SUMMARY

This case follows the process by which an incubator supported a Kenyan businessman to transform a family recipe for ketchup into a branded product, “Choma BBQ Sauce,” which can now be purchased in thousands of high-end supermarkets across the United States.

### BACKGROUND

In 2009, an energetic and entrepreneurial Kenyan businessman launched a new company in 1999 called “Ketchup Co.” His ambition was to transform a ketchup recipe that had been handed down to him from within his wife’s family into a the company that would be leading supplier of ketchup in East Africa. By 2009 he had succeeded in his ambition. Through this own refinement and testing efforts, he improved on the original recipe and sold his brand as a high quality product to two major supermarket chains, Nakumatt and Uchumi, which split the Kenyan market. Its quality was consistent, its packaging attractive and its price affordable for lower middle-income buyers. The company achieved a forty percent market and continued to grow but only slowly.

As he looked forward to new challenges, the ketchup entrepreneur decided that he wanted to enter the US specialty food market. Exporting his ketchup to the US seemed like a natural next step for the development of his company. After all, he had read in one of the trade journals that it was a ninety billion dollar per year market, and he had witnessed the seemingly limitless appetite that American tourists have for good ketchup. Moreover, he could qualify for tariff concessions under the African Growth and Opportunity Act, which would give him an edge over other third world competitors.

The enthusiastic entrepreneur shipped a dozen samples to the United States and waited patiently for orders to start pouring in. One month later, however, nothing had happened. Six months later, still no orders! After nearly a year of waiting, he called an expert who knew the US market and asked for her advice. The expert tasted the entrepreneur’s product, examined its ingredients, studied its packaging, and determined that his ketchup needed to be upgraded before it could not compete in the US market.

She also determined that Ketchup Co's ketchup failed to comply with US food safety standards. Labels did not represent a nutritional analysis and no food assay had been completed. This prevented the product label from representing the nutritional content of the ketchup according to US FDA standards. The product contained an ingredient that was illegal in the US market and a shelf life that was too short to comply with the long order fulfillment and inventory turnover cycles typical of US food chains. Furthermore, Ketchup Co's had not competitively priced its product. In Kenya, the superior quality of his product allowed him to secure a gross margin of approximately thirty percent. In the US market, his gross margins were reduced to ten percent when accounting transport, handling and costs of wholesale intermediation.

In the local supermarket environment of Kenya, the entrepreneur's product had been a brand leader but in competition with well-established, global companies like H.J. Heinz, the task of securing shelf space was more difficult. Simply put, he was unable to export to the US market without making some basic changes to his pre-market qualification process, product formulation, packaging and quality control.

#### KEY CHALLENGES

The entrepreneur applied to work with a local incubator that possessed the networking and marketing expertise to meet these challenges. The incubator and the entrepreneur worked together to reengineer the existing business model so that his ambition of penetrating the US market might be realized. They quickly identified two important hurdles that needed to be overcome: Americans were very unlikely to purchase his ketchup at a price three times higher than the brand leader and the taste and texture of his product also did not match the typical parameters associated with most ketchups sold in the US. At the same time, the product that he had offered in the Kenyan market offered a competitive advantage in U.S. markets because of its distinctive and attractive taste that nicely complimented the taste of barbequed meat.

The costs of adapting his production processes and his production equipment to US standards were high. He estimated these conversion costs to exceed KS 3 million over two years. Before committing to this risky investment, the Ketchup enterprise put together a checklist of critical questions, which he wanted to the incubator staff to answer.

1. Did any other product categories of market segments exist in the US, which might be less risky and more profitable for him to enter than the mainstream ketchup market?
2. What were the opportunities and risks associated with these non-ketchup markets?
3. How could these risks be further reduced through channel partnerships or other forms of risk sharing in a market, which he did not know?
4. What was likely to be the collateral impact on this already achieved market success in Kenya if he were to product non-ketchup products for the US?

## OUTCOMES AND CONCLUSIONS

The Ketchup entrepreneur solicited the advice of his business incubator and together they decided to produce a BBQ sauce derived from his traditional ketchup brand. They coordinated with Cornell University in their initial test marketing and found that US consumers believed the new product had attractive and flavorful taste. Its African source promised to be an advantage in this product category rather than the disadvantage it was perceived to be in the ketchup market and the cultural resonant of its brand characteristics and packaging also found high levels of acceptance among US consumers. With the help of his incubator mentor, the entrepreneur decided to brand this new concept: “Choma”, the Swahili word for “grilled.” Choma is a popular East African dish consisting of grilled meat.

Importantly, the price point and value-to-price both tested positively and new BBQ sauce used the same manufacturing processes and similar ingredients to the locally consumed ketchup. They were now on their way to having a marketable and unique product that would find a home in America.

The incubator and the entrepreneur continued to refine his product following additional product tests and were ultimately able to create an all-natural barbecue sauce with delicious taste and consumer appeal. After refining the taste of the BBQ sauce, they took the product into the laboratory for an accelerated shelf life study and a rigorous battery of nutritional analysis, including: analysis of protein, moisture, ash, saturated fat, Vitamin A, calories, salmonella, etc. These tests confirmed that the product was legally compliant to enter the US food market based on US FDA food safety standards.

Registering with the US Food and Drug Administration turned out to be a relatively easy process; one that took approximately ten minutes via the Internet. The manufacturer had seen the advertisements of local companies who offered to handle this process, at a cost of over \$1,000 but the expert he was working with knew that this was a free and relatively painless process. He obtained his FDA registration number within one week.

The next step was to determine the price – a tricky endeavor when entering a new market because prices are difficult to raise once announced and reflect the relative competitiveness of a product. Through careful research, the entrepreneur and his incubator mentor determined that they needed a retail price point of approximately \$2.50 to be competitive in the barbecue sauce category. Calculating production, freight, customs clearance, an importer, a distributor and finally the retailer’s margin, the manufacturer was delighted to learn that his new products were able to sell for a retail price of \$2.19, with approximately 20% extra margin built in for semi-annual promotions.

By this time, the entrepreneur was well versed with the common specialty food phrase: “packaging, pricing and promotions...what else is there”? He knew this phrase well, and had practiced it every day during the development cycle.

As he reflected on the path that he had followed, the manufacturer turned back to a checklist of critical actions that his incubator mentor had given him. He checked off the development of a competitive product, pricing the product competitively while allowing enough room for promotions, registering his facility and securing a bio-terrorism numbers from the US FDA, all of the nutritional analyses required for his products.

He now had to turn his attention to the third “P” (having already addressed Pricing and Promotions)... and that would be “Packaging.” At this stage, the incubator and the entrepreneur joined a Kenyan-based graphic design team to formulate branding concepts. The packaging had to be legally compliant, indicating its country of origin, weight in ounces and grams, 12-digit bar code, and nutritional panel. It also had to be packaged securely and eye catching. The challenge was to highlight the uniqueness of the product while at the same time making the end customer feel secure about their purchase. The team eventually agreed on a concept of “wild grilling.”

As a final step, they had to make decisions about the pack-out because stores favor products that are packed in smaller cases. The manufacturer knew that US supermarkets will often discard any product that does not fit into a single row on the shelf so he agreed on producing these products in a twelve-pack. At last, all the pieces of the puzzle seemed to be in place.

The manufacturer and the expert finally agreed that they had created a marketable product line and proceeded with presentations to US-based importers, distributors and retailers. In doing so, they at last finalized their supply chain and launched their product into the US specialty food market after three months of work.

#### Afterword:

Today, you can find Choma BBQ Sauce in thousands of high-end supermarkets across the United States. Thanks to the dream of one brave entrepreneur and one technical expert, the dream of a traditional Kenyan product in the US market became a reality. This is a true story, and one that can be duplicated time and time again with proper agribusiness incubation.



## Marketing Case Study: Camelthorne Breweries Company (Namibia)

**Sector:** Agribusiness

**This Case Study Examines:** Development of a niche marketing strategy by a entrepreneurial company.

### SUMMARY

Camelthorne Breweries Company is a good example of an entrepreneurial agribusiness that is able through its own efforts to induce demand for new agricultural products, in this case: hops, barley and rye as well as the value added process of “malting.”

### BACKGROUND

Like most start up enterprises, Camelthorne Breweries Company (CBC) began its life as a dream of its founder, who in this case an inspired marketer and salesman as well as a proficient chemical engineer. His prior experience included the design and construction of micro brewing equipment for capital equipment manufacturing companies in California and Hungary. With some help from friends and business partners, the founder articulated his dream in a detailed 50-page business plan. CBC’s business plan took six months to complete and was completed for a presentation to outside investors just as the company’s brewing equipment began to arrive.

The business plan included the following key elements:

1. The new company’s strategic value premise,
2. The background and experience of its core management team,
3. The company’s assessment of and proposed response to its competition in Namibia and rest of the Southern African market,
4. Its plans for developing new distribution channels,
5. Its production cost and distribution cost structures,
6. Plans for acquiring, financing and installing capital equipment,
7. Terms offer to investors, and
8. An explicit assessments of several specific risks based on break even analysis and estimated returns to investors .

The startup’s business plan called for a capital outlay of 11.2 Million worth for equipment and two million for transportation, build out and installation. Operating cash flow was estimated to be two million based on the expectation that 2500 hl (250 000 liters) of beer would be sold in the first year. On the basis of its business plan and through a tremendous sales effort, the company was able to raise \$15.8 Million from angel investors, relatives and close business relations in order to start the company.

Through a capital loan, the Development Bank of Namibia provided 70% of the company's initial capital in 2008. The Bank required that the founder collateralize his debt against all of his personal assets but granted only a minimal overdraft facility against the surrender of debtors of the company.

### KEY CHALLENGES

Camelthorne's primary competitor is Namibia Breweries Limited (NBL), the third largest brewery in Sub Saharan Africa, a company that enjoyed an eighty percent market share in Namibia. Camelthorne's management approached and briefed NBL's management concerning its plans to construct a new brewery in order to garner the established companies support for its project. Given NBL's strong economic leverage and political influence in Namibia, its subsidiary, Windhoek Brewery, could easily have undercut the new brewery. Initially, Windhoek was mollified by the start-ups launch because it enjoyed an 80% plus market share in Namibia.

When CBC started its operation, no "craft beer" was available in Namibia. Except among a few expats and international organizations, little experience existed with craft beer. Expats, however, were quite enthusiastic when the Camelthorne project was announced. The press was even more enthusiastic. It took the view that Namibians were witnessing a battle between David and Goliath with the new upstart brewery playing the role of David. From the first day, CBC embraced idea of adding new naturally brewed products to a landscape, which had been dominated by industrial processing. Its value proposition was the offer of diversity of natural and unfiltered brewing styles as well as tastes and brewing processes that posed an alternative to the "one taste suites all" beer market in Namibia.

CBC did not consider the SA market viable for export initially until it successfully developed the local market. The company anticipated that initially its growth would be constrained by supply rather than demand constrained. With that said, the company's management declared from the start that they "wanted consumers of high quality beer wherever they were located." They believed as messianic entrepreneurs always do that they would find a way to satisfy whatever demand might emerge for Camelthorne's superior products.

However, demand in Namibia proved to be is far less than anticipated while the product proved to be a welcome supplement in South Africa. Moreover, supply came on faster than anticipated, inventories swelled and the small company had difficulty storing its natural product. As a result, the beer continued to ferment in its bottle and consequently required refrigeration. Even through transporting beer to South Africa proved more costly than CBC anticipated, growth in SA demand month for month proved to be a life saver simply because it absorbed the company's inventory.

Over the past two years CBC has been building up a distribution system one account at a time. Its product is now available in 65 – 70% of legal taverns and beer garden outlets in urban areas and the company has a good representation on lodges and guest farms. The company owns one truck of its own and uses "town hoppers" to move stock. Interlink trucks transporting goods between Windhoek and Cape Town & Johannesburg, SA transport its beer to these markets.

The company's primary mission remains the development of the Namibian market. Initial targets could not be reached in the first year when a decision was made to leverage the opportunity presented by the World Soccer Cup in South Africa and introduce the beer to the SA market. Requests from South Africa have increased week by week from people who were exposed to Camelthorne beer in Namibia and are curious to know if CBC beer is available in SA. Still sales during the WC were lower than expected.

### OUTCOME AND CONCLUSIONS

The breakthrough came when CBC participated at an organic food, wine and lifestyle trade fair in Johannesburg and a craft beer festival in Cape Town in November 2010 (15 months after starting to sell beers to consumers). At this event, CBC was recognized for the first time as a brewer of quality beers. This participation led, in-turn, to a series of invitations to weekly fresh produce and organic whole food fairs at "The OLD Biscuit Mill" in Woodstock Cape Town. This turned out to be a perfect platform for word of mouth marketing. Indeed, word-of-mouth marketing is the only affordable vehicle that the company has for selling its craft beer. Within six months of participating in the whole food fair, CBC was selling twenty percent of its capacity in Cape Town and, in addition, it was asked to stock its product at liquor outlets in the Western Cape. This jump in demand promises to increase its production requirements by about thirty to forty percent above its current production capacity. However, a comparable increase has not taken place in the company's bottom line, which continues to show losses.

CBC is a good example of an entrepreneurial agribusiness that is able through its own efforts to induce demand for new agricultural products, in this case: hops, barley and rye as well as the value added process of "malting." Unfortunately, as the discussion, which follows demonstrates companies like CBC, which have the capacity to "pull" new demand for agricultural products though new channels are not being assisted in Namibia.

CBC's founder would like to launch a network of franchised micro-breweries in SSA where none exist. Although beer consumption in SSA is increasing at more than ten percent per year, most of the benefit of this growth is being captured by three large multinational corporations. The founder of SSA envisions a business start up project which would entail the development and launch of a several dozen small craft breweries which would share technology, marketing efforts and start up equity. He is seeking technical assistance and business service support from one or more development organizations.





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