

PROJECT MANAGEMENT

Human Capital, Entrepreneurship and Innovation Reflection

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Introduction

Business and economic development require a continuous entrepreneurial reflection based on a strategic planning of which the objectives are clearly determined and attainable. Our purpose is to provide the relevant tools and knowledge to the entrepreneur and to the decision makers of institutions and governments in order to achieve their business, economic and social objectives.

In the first part we will present and discuss the concept of Human Capital. How to generate ambition, cooperation and leadership, opportunity oriented, and achieve sustainable objectives in SMEs, cooperatives or partnership. We will illustrate this chapter by using case studies from the literature and from personal experience in Israel and developing countries.

In the second part we will present the different stages of the economic analysis, from vision and mission to marketing strategy, project management and business plan. In this context we will discuss the ways how to develop sustainable competitive advantage based on Value Chain activities and on innovation strategy.

In the third part we will discuss positive and problematic impact of Fair Trade on the economy of developing countries.

In the fourth part we will extend our analysis to the macro economic level and will propose to decision makers at the governmental and institutional level, development models at the sector and regional level, based on international experience.

PART I

HUMAN CAPITAL

1. Introduction: From subsistence to Business

The majority of small businesses in the developing countries have been created by people that cannot find jobs otherwise (Van Dijk and Alberts, 1994). They are poverty and subsistence driven and mainly want to earn just enough to live (Frese and De Kruif, 2000:20) (Olomi, 2001; Rutashobya, 1995;). The greater the poverty, the more necessity business there is. (Reynolds et al., 2001) (Rosam 2009).

This is confirmed by Mitchel's research (2001) on entrepreneurship in South Africa. 38.7% open a business for survival purposes and 20.2% because they were unemployed and they did not find any job.

Nearly all of poorest interviewed by Olomi (2001) in his research appeared “trapped” by their incapacity to find the time to earn sufficient surplus to invest in a new business. Evolution from economic necessity appears to be rare (Olomi 2001). It is still unknown when and how entrepreneurs decide to grow and what triggers the desire to grow (Dunkelberg and Cooper (1982), Kolvereid (1992), Kolvereid and Bullvag (1996) and Kurantko et al (1997)

A small percentage of SME's are initiated by business entrepreneurs. A part of it, are employed by the public and governmental sector. They play an active entrepreneurial role because they are educated and their salary insures them the subsistence level and even more because they are able to create new businesses such as food or clothes shops in cities , farms in the countryside run by hired employees or structure providing services such as hotels, or taxis.

The initiative of the mayor of Songon a suburb of Abidjan, in Cote d'Ivoire illustrates how the subsistence reflection breaks business entrepreneurship and development.

Few years ago the mayor of Songon, suburb decided to create jobs for unemployed young people and he thought that the lagoons in his region was an opportunity for fish business. He succeeded to collect funds in order to invest in a catching fish project. He purchased pirogues, nets and other relevant equipment. They started to catch fishes and sold it in the market. But they stopped to catch fishes when they had enough money in order to subsist. Necessity entrepreneurship cannot generate development. How to write a good end to this story is the challenge of this book.

The issue discussed in the coming chapter is how to achieve motivation for growth which characterizes business entrepreneurship (Schumpeter 1934; Davidsson, 1989,1991; Bijaoui, 2012)

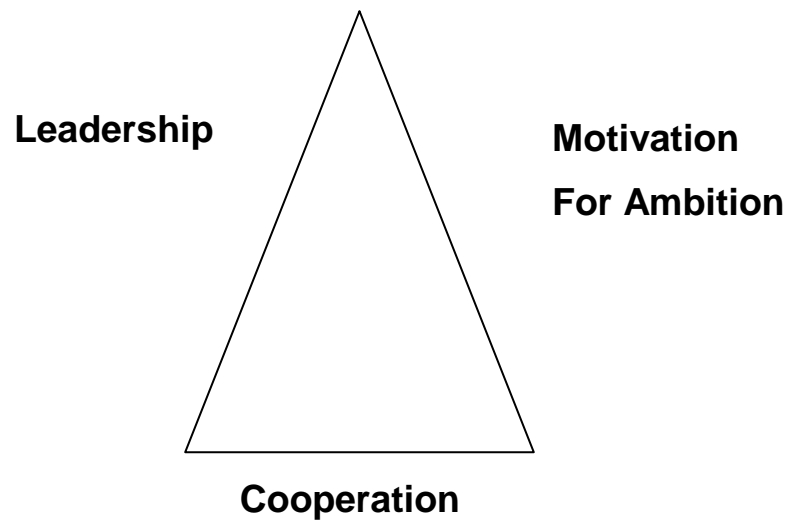
2. Main generators of business entrepreneurship.

The main generators of entrepreneurship are personal ambition, will to cooperate and capability to lead.

2.1 Motivation for Ambition

Without motivation for ambition to achieve personal and social objectives, there is no interest to earn more than what is required in order to subsist. This is a fundamental issue, which block any initiative of development.

Exhibit 1 Entrepreneurial Drivers



Atkinson defines motivation as “the contemporary (immediate) influence on direction, vigor, and persistence of action” (1964), while Vroom defines it as “a process governing choice made by persons . . . among alternative forms of voluntary activity” (1964). Campbell and Pritchard suggest that motivation has to do with a set of independent dependent variable relationships that explain the direction, amplitude, and persistence of an individual’s behavior, holding constant the effects of aptitude, skill, and understanding of the task, and the constraints operating in the environment (1976: 63–130). The three common denominators of those definitions are according to Steer (2004) " factors that energize, channel goals oriented , and sustain human behavior over time.

2.1.1 Factors that Energize

Motivation for ambition can be the result of energetic forces within individuals driving him to be ambitious.

Behavioral scientists started to develop models on instinct theories in order determine the factors that energize.

McDougall speaks about an inherited or innate psychological predisposition which determined its possessor to perceive, or pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner.

Timmons (1999, 2004) and Bijaoui, 2012 in their entrepreneurial reflection emphasize the necessity of creativity and curiosity opportunity oriented.

Curiosity starts with the interest of asking questions and seeking for answers.

Creativity transforms those answers into added value for a current or new business. This added value is planned to achieve objectives defined by the entrepreneur as "success". The definition of success differs according to the interest of the entrepreneur, but it has to be defined in advance in order to act according to it.

2.1.2 "Channel" - Goal orientation

Motivation for ambition is driven by the willingness to achieve goals.

Models based on drive or reinforcement led by drive theorists such as Thorndike, Woodworth, and Hull (1980), introduced the concept of learning in motivated behavior as a factor that energizes.

Reinforcement models continue to thrive today as explanatory vehicles for understanding work motivation and job performance, as well as in the workplace in various performance management programs (Komaki, 2003).

Content theories identify factors associated with motivation. Maslow (1954) proposed a steady progression over time up a hypothetical hierarchy as individuals grow and mature from physical needs to safety and security needs, and social and self-esteem needs to finally self-actualization. McClelland (1961, 1977) ignored the concept of a hierarchy and focused on the motivational potency of distinct levels of self and social actualization as a factor to energize. McClelland calls the first level of business entrepreneurship self-actualization objective "need for achievement" (n₁). This level requires personal responsibility, calculated risks, performance feedback and task accomplishment.

The entrepreneur determines his personal economic and professional objectives and the conditions required in order to achieve it: tasks to accomplish, monitoring of the required performance under conditions of calculated risks,

A gynecologist who opens a clinic is interested by benefits but also by improving health conditions in his own country also.

The second level is the self and social actualization objective defined as "need for affiliation" (n₂). The entrepreneur seeks for the "approval" of the business and social community. He acts in conformity with "wishes and norms" and he is interested by the "feeling of others" (n₃).

At the third level of self and social actualization objective the entrepreneurs seeks for "power" need. He leads follower relation, exercise control, take a leadership attitude.

2.1.3 Sustain Human Behavior

Motivation may be sustained by an Intrinsic or Extrinsic system orientation (Newstrom and Davis 1993). Intrinsic motivation is focused on the direct relationship between the individual and the task to achieve. Extrinsic motivation is related to the work environment external to the task.

Herzberg's (1966) motivation-hygiene theory, is a way to sustain human behavior based on intrinsic and extrinsic motivation. Herzberg argues that work motivation is influenced by the extent to which a job is challenging and provides opportunities for recognition and reinforcement. Herzberg saw the context surrounding a job (*hygiene* factors) as being far more temporal in terms of leading to satisfaction and future motivation. Job enrichment is for him as a key factor in work motivation.

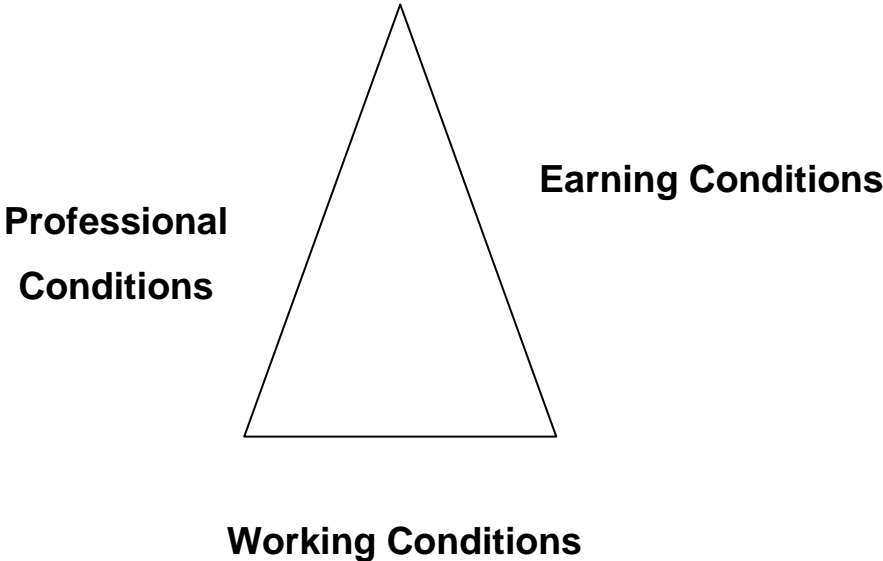
Goal-setting theory is an intrinsic way to sustain human behavior by specifying targets for behavior, enhanced task performance (Locke, 1968, 1996; Steers & Porter, 1974). Crown and Rosse (1995) examined the role of group goals, in addition to individual goals, on performance. Applications of goal-setting theory in the form of individual and team management-by-objectives programs are now used widely throughout industry (Ambrose & Kulik, 1999).

2.1.4 Means sustaining motivation

- Financial Intrinsic means

A salary is perceived as the reward for a work during a determined period. Beyond it, if there is not any incentive people will not do any extra work, propose more efficient processes or possibilities for better business results.

Exhibit 2 Motivation Means



Financial reward for more efficient work, solutions for better efficiency, will motivate people to be more ambitious and open minded to cooperation and leadership. Upgrade of price due to higher quality of cocoa, is a financial intrinsic incentive provided by Kavokiva cooperative (Insight 2) to its members. Loans provided to entrepreneurs by governmental, public or international organizations, in order to support their business activities is also an intrinsic mean motivating entrepreneurs to take risk and develop their own business. Kavokiva cooperative receives, for example, loans for its members from Fair Trade international organizations in order to prepare the season.

- *Professional Intrinsic means*

Professional conditions can motivate both simple workers and specialists. Workers picking fruits and vegetables will do it in a professional and more efficient way, if they acquire some knowledge about it. A fruit or a vegetable continue to live after picking it. Picking conditions must keep the vegetable "sleeping", not any contact with source of energy as sun. For example, longer an avocado is linked to the branch higher will be the percentage of fat and shorter will be its shelf life. Deeper is the knowledge provided to the worker and more efficient will be his work.

A specialist is even easier to motivate by professional conditions such as training, purchasing of professional equipment or transfer of new knowledge.

The owner of a cattle for meat in North Cameroon, had to confront a continuous decrease of the number of heads during the last years. The cattle passed from 18000 to 6000. The cross analysis of different experts we sent, reach to the conclusion that the reason of the strong decrease of the number of heads was due to bad feeding, dispersed coupling all along the year and especially in period of low feeding capabilities, weakness of the local breed and weak health conditions. We proposed to train the staff and transferred knowledge about the required content of feeding, the relevant cross breeding process and the required health conditions. About the improvement of feeding we proposed the use of the moringa leaves (see moringa case) green all along the year and containing the relevant, vitamins and proteins. About the health conditions we proposed a system killing larvae of mosquitoes.

The local staff is now self confident and improved their work efficiency and the business results of the ranch.

- *Work conditions extrinsic mean*

Better work conditions improve work efficiency. Safe working place, meals at work, protection against rain, or chemicals constitute are the primary level of work conditions. The more advanced level is related to free medical insurance or loans for children education as provided by Kavokiva cooperative.

Herewith are summarized in a table/questionnaire (Exhibit 3) the different sources of motivation. (Mitchell. 2001)

Insight 1: KAVOKIVA Cooperative in Ivory Coast

The cooperative Agricole Kavokiva de Daloa (CAKD) was founded in 1999 in the department of Daloa, the heart of the cocoa growing region of Cote d'Ivoire. Since then, Kavokiva has grown from 600 members to over 3800 members, 15% of whom are of indigenous descent. Within four years of operating, the government and other entities have already recognized Kavokiva as one of the best cooperatives in the country, due to their high quality cocoa and well-organized cooperative structure. The organization is geographically divided into 30 sections with 8 total cocoa warehouses. Export takes place from the Abidjan warehouse.

Fair Trade Certified with Fair Trade Labeling Organizations International (FLO) in 2004. While Kavokiva currently sells only a small percentage under Fair Trade term, current and future proceeds from the Fair Trade price will be directed to:

- Health care programs. The association will establish programs to improve health care and nutrition.

- Gender equality. The association will improve and extend capacity-building programs for women and children of the community.

- Micro-credit. The cooperative will augment savings accounts for its farmers.

- Education. Kavokiva distributes scholarships to members so that their children may attend school.

- Environmental conservation. The cooperative will promote conservation through community education and power-saving technology.

Insight 2: Motivation Sources

Motivation Scale

		No Importance	Little Importance	Moderate Importance	Very Important	Utmost Importance
1.	Develop idea for product/business	1	2	3	4	5
2.	Needed more money to survive	1	2	3	4	5
3.	Frustrated in previous job	1	2	3	4	5
4.	Achieve position in society	1	2	3	4	5
5.	Have more influence in community	1	2	3	4	5
6.	Be respected by friends	1	2	3	4	5
7.	Achieve something and get recognition	1	2	3	4	5
8.	Control of my own time	1	2	3	4	5
9.	Welfare of relatives	1	2	3	4	5
10.	Welfare of ethnic group	1	2	3	4	5
11.	Welfare of community I live in	1	2	3	4	5
12.	Give self and family security	1	2	3	4	5
13.	Not to work for an unreasonable boss	1	2	3	4	5
14.	Increase status of family	1	2	3	4	5
15.	Desire to have high earnings	1	2	3	4	5
16.	To be innovative and in forefront of new technology	1	2	3	4	5
17.	To keep learning	1	2	3	4	5
18.	Access to indirect benefits	1	2	3	4	5
19.	Have greater flexibility for private life	1	2	3	4	5
20.	Direct contribution to success of company	1	2	3	4	5
21.	Freedom to adapt my own approach to work	1	2	3	4	5

2.2 Cooperation and the Entrepreneurial Team

Timmons (1999) defines two criteria required in order to select the relevant entrepreneurial team. The first one refers to creativity skills. The second one refers to the role: Manager, Entrepreneur, Promoter and Inventor. (Exhibit 3)

2.2.1 Creativity versus management skills

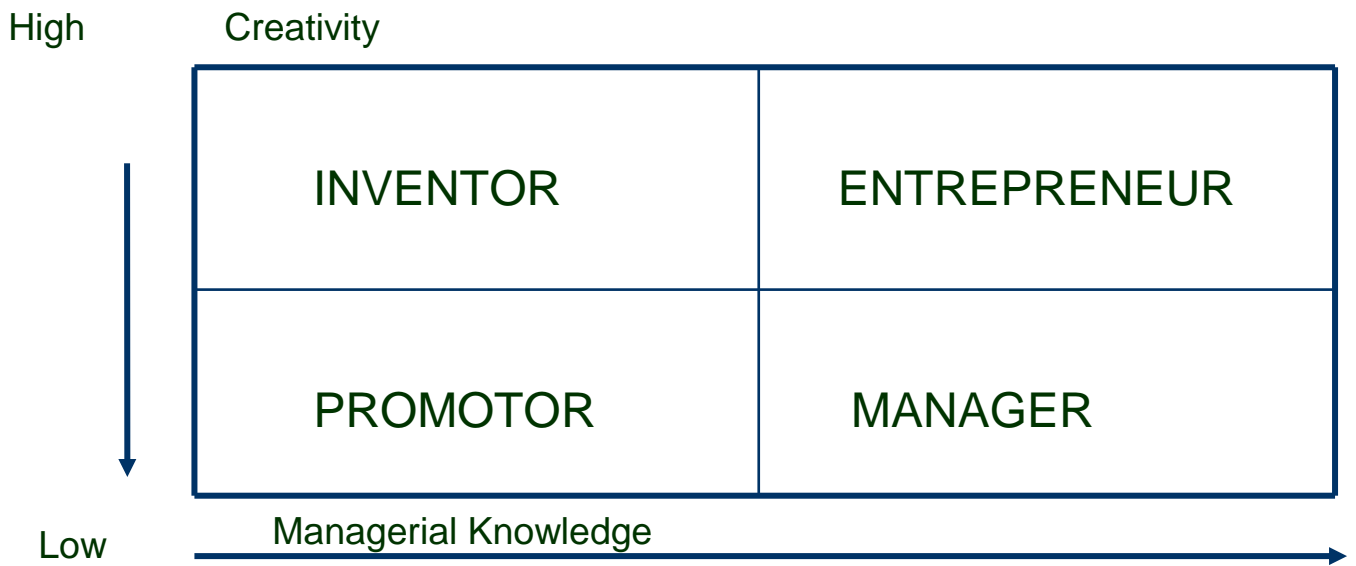
Creativity requires curiosity, continuous up dated knowledge and something more: the capability to identify and develop new ideas or more specifically the right idea at the right time. The microwave oven invented by Raytheon was a creative idea but he was developed in 1950, not at the wrong time, when still a small percentage of women used to work.

At the opposite I Pod as a mobile music entertainment device, was a creative idea developed at the right time, when young and less young customers are open to mobile entertainment applications downloaded from internet such as games, video, TV show or songs.

For the young entrepreneurs in the Songon fish project, creativity could be to provide fresh fish, at any time of the day, any period of the year by creating fish ponds in addition to the lagoons. The other possibility could be to provide directly to restaurants or supermarkets a wider range of fish and sea food as required by the customers by achieving agreements with other fishers. .

Managerial skills refer to the capability to run a business efficiently by taking the right decision at the right time, by selecting the right people for the right job and by leading and monitoring the different activities in order to achieve the planned objectives with the planned budget at the planned time.

Exhibit 3: The Entrepreneurial Team



1

2.2.2 Sharing roles

The Manager insures stability and continuous growth according to planned objectives, budget, timing and performance of each activity. The manager requires high level of management skills, but low level of creativity', because creative people think outside the box and so they don't accept, budget or time conditions. They change their mind any time they think creativity. They will be more outside the firm, meeting customers or specialists in order to propose new ideas. It is the opposite of stability

The Entrepreneur has to be very creative because his role is to seek and find in the market the best relevant opportunities. He has to have also high management skills, because he works in close cooperation with the manager who decides which opportunity to select in order to achieve the business objectives. He is most of the time outside of the firm and so cannot be a manager.

The Inventor is in charge of the technical and technological knowledge and is able to use it in order to improve current products and processes and to develop new one. A department inside the enterprise or q research centers or an extension service or even a representation of an international company specialized in the relevant domains, could play the role of inventor. Without the Inventor's activity there is no future to the firm.

The Promoter understands the psychology of the customer and has the relevant networking relations in order to push the products into the market. It can be a department in the firm. It can be also a trading companies specialized in the domain, which could be involved in the promoting process.

2.2.3 The entrepreneurial team in Songon fish project.

Each young entrepreneur in the fish project tried to play all the roles of the entrepreneurial team and were not able to do it. The better way to run the business was to share the activities according to the capability of each one to play each the different roles in the entrepreneurial team.

Who has or is able to acquire the relevant knowledge in order to manage the team? Who has the entrepreneur way of thinking and know how to improve the marketing process, from the selection of the potential customers to the products strategy the promotion and the distribution? Who is able to play the role of inventor, by improving technically the pirogues and the nets and may be also the transportation process insuring fish freshness until the market location. Who had more capabilities to be the promoter and convince the customer?

2.3 Leadership

2.3.1 Evolution of Leadership theory (Exhibit 4)

The first phase is defined as "Leadership by Tradition". The leader is by tradition the father in the family, the chief in the village or the king in a country (Brymer and Gray, 2006), (Straub, 1980).

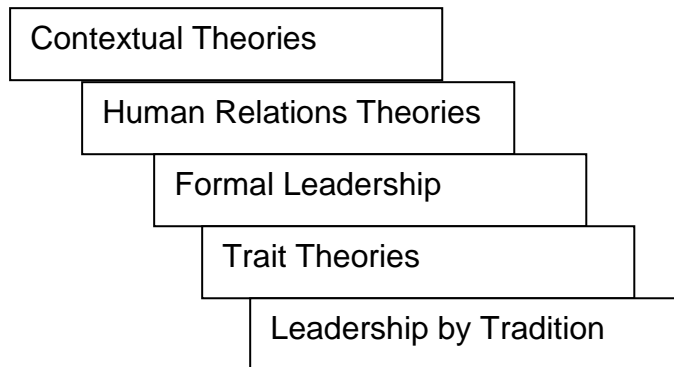
The second phase is defined as "Trait theories of Leadership". This leadership theory emphasizes the personality of the leaders. Leaders are those who are endowed with specific personality traits and or who accomplished actions approved and admired by followers. In politics Mao, Castro, Churchill or De Gaulle. In business, it can be Bill Gates or Ford .

The third phase is "Formal Leadership Function". Leadership reflects formal positions and the power to direct. The leader is elected or chosen in order to lead a party or a company.

Phase four is "Human Relation Theories". Leadership is focused on relationships and accepted that those being lead also had agency.

The fifth phase is "Contextual Theories of Leadership", Is considered as leaders those who are able to recognise environmental clues and adapt their behaviours to the context or situation. Illustrations of fifth stage are path-goal theory (Szilagyi & Sims, 1974), Fielder's contingency theory (Fiedler, 1967) and situational theory (Hersey & Blanchard, 1982).

Exhibit 4: Evolution of Leadership Theory



Source Straub 1980

Exhibit 5: What the Leader Does in Situational Leadership

Low	Style 3 SUPPORTING	Style 2 COACHING
Supporting Behaviour	Style 4 DELEGATING	Style 1 DIRECTING
High	Low	High
	Directive Behaviour	

Source: Blanchard and Hersey (1982)

2.3.2 Leadership style

Blanchard and Hersey (1982) discerned in their research between Directive Behaviour and Supportive Behaviour. leader's attitudes. Directive behaviour is defined as one-way communication, from the leader to the follower with close supervision.

Supportive behaviour is defined as two-ways communication. The leader listens, provides support and encourages, facilitates interaction, and involves the follower in decision-making

Four distinct leadership styles are identified (Exhibit 5)

- *Style 1: High Directive/Low Supportive* – Autocratic "Directing" leader leads the decision making process and tell to people what to do. They select good executants able to transfer and implement decisions.

- *Style 2: High Directive/High Supportive* – Democratic "Coaching" leader transfers experience and knowledge to subordinates in order to improve their capabilities and open a two ways communication by hearing ideas and suggestions. But, the leaders finally decides and subordinates execute.

- *Style 3: Low Directive/High Supportive* – Democratic "Supporting" leader share the decision making process with others and provide knowledge to subordinates in order to delegate power.

- *Style 4: Low Directive/Low Supportive* – Laissez faire "Delegating" leader transfers decision making process and control. He acts as a visionary and defines rules and long term objectives. The followers implement his philosophy and act as leaders or future leaders.

Leadership philosophy proposes an understanding of the essence of effective leadership based on transactional or transformational paradigm (Barling, Weber, & Kelloway, 1996; Bycio, Hackett, & Allen, 1995; Sosik, Avolio, & Kahai, 1997), Bass (1985),

Transactional leadership paradigm is based on the conservative leader-follower relationships (Hsu, Bell, & Cheng, 2002) and on a "bargaining" relation between followers and leaders (Howell & Avolio, 1993). Transactional leadership differentiates between two basic attitudes:

- *Contingent reward leadership*: an active and positive exchange between the leader and followers (Bycio *et al.*, 1995). Followers are monitored and controlled and receive in case of success recognition.
- *Management-by exception*: the leader monitors followers' attitude and - intervene when it is necessary.

Transformational leadership provides vision (Howell and Avolio, 1993) and stimulates followers to improve their capabilities and achieve personal and development objectives. (Barling *et al.*, 1996). Both developmental and Individual orientation, in two way communication constitute the generator of transformational leadership Hsu *et al.* (2001)

Leadership behaviour should change from transformational to transactional according to the business conditions and objectives. Transformational behaviour is required in order to determine, vision objective, rules long term planning. Transactional behaviour is required during the period of the implementation of the mission and its objectives. The role of the transformational leader is to develop positive self-talk to keep confidence high. He uses positive visual imagery to help people successfully deal with adversity and speaks in a way that moves others to follow and perform well. He inspires others to higher levels of performance, and establishes trust and foster creativity in those you lead. In Insight 3 a document allowing to evaluate the capability to be a leader.

Insight 3; Leadership Capability

1. The presiding officer has just sent a communication saying that she is sick and cannot make it to the meeting of one of the committees of your cooperative. As the one who arrived the earliest, you have been requested to take over and facilitate this meeting. What are you going to do?
2. I have great difficulty turning down requests for favors (Please tick the box which best describes your assessment of your self in regard this statement).
3. I feel uneasy to disagree with people in authority. (Please tick the box which best describes your assessment of your self in regard this statement).
4. When your cooperative is faced with a problem, what do you usually do? (Please tick appropriate box.)
5. A member of the cooperative complains that one of the staff has been very rude on the telephone. If you were the manager, what are you going to do?
6. You were invited by the head of your village to share in a village assembly, where top politicians, and foreign visitors are expected to attend, your learning from this training. What are you going to do?
7. The manager presents to the Cooperative Board, of which you are a member, updates on problems faced by the cooperative on financial management, budgeting and marketing. What are you going to do?
8. Imagine yourself attending a meeting of the Board of your cooperative. Another member of the Board, looking tense and angry, immediately reprimands you for something ,he said, you forgot to do but in fact was not clear to you. What are you going to do?

2.3.4 Leadership in Songon fish project and Kavokiva case

In Songon fish project not any leader was in charge of bringing the project to achieve its objectives.

Transactional leadership is closer to the way how to run business in Ivory Coast. But transformational leadership is a better way in order to develop "team way" of promoting business (Bijaoui and Regev, 2015).

Kavokiva president is an autocratic leader using transactional philosophy. In such a leadership future generation of leaders cannot grow.

The members of the cooperative are disconnected from the top leaders and are not really involved in the decision making process. The delegates, elected in order to develop a two ways communication between the members and the leadership don't not have any active role in management or future planning.

3. Human Capital and Cooperative

The cooperative structure provides the possibility to a group of individuals to improve added value, compared to separated activity, in business, consumer, financial or any social activity (see type of cooperative).

.Cooperatives started in Anglophone Africa as a protest against the disadvantageous terms of trade imposed on the peasants by the said middlemen (*Develtere et al, 2008*). For example, in Uganda, as early as 1913, some farmers decided to market their crops cooperatively and were later followed by other associations of growers. In 1920, five groups of farmers formed the "Buganda Growers Association" that later became "The Uganda Growers Cooperative Society". Its main aim was to market cotton and to present members' views to the government. Similarly, the Kilimanjaro Native Farmers Association in Tanganyika (Tanzania) was formed in 1925 as the first ever indigenous association of African coffee farmers.

They were struggling against the monopoly over the crop by European settlers.

The basic idea of the scheme was, as Münkner (1989: 103) observed, “to create autonomous, self-reliant cooperatives in the long run, but to generate the lacking initiative and technical know-how of the local population by the services of officials of a specialized government agency (Cooperative Department), headed by the Registrar”.

From semi-public cooperatives to mutual societies in the French colonies
A law of 1893 set the framework for the “Sociétés Indigènes de Prévoyance, de Secours et de Prêts Mutuels (SIP)”. France opted for direct intervention in the organization and administration of local structures in Africa.

Native provident societies had a variety of tasks, notably to keep a stock of selected goods; to supply farm implements; to process agricultural produce; to serve as insurance against disaster and accidents; to grant loans; and to improve production methods.

The dual cooperative road in Belgian Central Africa semi-public enterprises called cooperatives in the colonies, which were to generate income for the established tribal administrative structures and produce additional benefits for the local population.

In Burkina Faso, access to cultivable state land was reserved for those who accepted membership of a cooperative. In Tanzania after a special Presidential Commission of Inquiry (1966), sixteen cooperative unions and hundreds of societies were taken over by the State African cooperatives
Support for the cooperative sector in Africa is still mostly channeled through government departments e.g.in Kenya (Insight 4; through apex bodies or secondary cooperatives (e.g. in Ghana, South Africa and Rwanda); or to support agencies such as cooperative colleges.

Insight 4: Cooperative Movement in Kenya

Two significant cooperative agencies from the developed countries started their activities in Kenya. First is the Swedish Cooperative Centre (SCC). It funds programmes for capacity building and institutional development of cooperatives. Such funds are directly channeled to the cooperative movement rather than through the government as was the case under the Kenya Nordic Cooperative Development Programme (KNCDP) that has been phased out. Canadian Cooperative Association (CCA). Like SCC, it focuses on capacity building and organizational development.

The European Investment Bank. It recently donated two million Euros to the Cooperative Bank of Kenya for lending on to rural SACCOs.

The second institution is the World Bank. It funds cooperative activities through government ministries responsible for agricultural development. For instance, it has funded the Smallholder Coffee Improvement Project (SCIP) through the Ministry of Agriculture. The funds were channeled to coffee cooperatives through the Cooperative Bank of Kenya under an agreement with the said Ministry and the Treasury. Third, there is the International Fund for Agricultural Development (IFAD). It supports rural SACCOs in information technology training through the Cooperative Bank of Kenya. Fourth, the United States Agency for International Development (USAID) has funded WOCCU to provide management technical assistance to credit unions in Kenya (Evans, 2002). USAID is also indirectly supporting cooperatives through its funding of capacity building initiatives in the Strategy for Revitalizing Agriculture (SRA).

3.1 Definition

A cooperative is defined by the International Co-operative Alliance's Statement on the Co-operative Identity as an "autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise".

Co-operatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity.

A cooperative comprises a commercial entity owned by its members, with no passive shareholders. A cooperative may assign different numbers of votes to different members. The seven principles of cooperative are detailed in Exhibit 5.

Insight 5: Cooperative Principles

:

1st Principle: Voluntary and Open Membership

Co-operatives are voluntary organisations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination

2nd Principle: Democratic Member Control

Co-operatives are democratic organisations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership.

3rd Principle: Member Economic Participation

Members contribute equitably to, and democratically control, the capital of their co-operative. A part of that capital is usually the common property of the co-operative.

4th Principle: Autonomy and Independence

Co-operatives are autonomous, self-help organisations controlled by their members. If they enter to agreements with other organisations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their co-operative autonomy.

5th Principle: Education, Training and Information

Co-operatives provide education and training for their members, elected representatives, managers, and employees. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of co-operation.

6th Principle: Co-operation among Co-operatives

Co-operatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures.

7th Principle: Concern for Community

Co-operatives work for the sustainable development of their communities through policies approved by their members

3.2 Organisation

The Board of Directors elected by the members, hires a professional business manager, establishes operating policies, and supervises management of the cooperative.

Specialized committees are created by the board and are in charge of specific issues on the name of the board such as, Procurement committee or education and training committee. In the case of Kavokiva for example the board of directors decided to create XXXX

Delegates are elected by the members and are in charge of reporting to the members about the activities of the board of director and the manager.

The manager reports to the board of directors, recommend actions and is responsible for day to day activities. Manager Responsibilities are to promote the economic activities of the cooperative. He plans, organize, coordinate and control the activities.

3.3 Types of Cooperatives

A cooperative can decide to be of one or more of the following types.

- *Consumer cooperatives* are owned by the people who do business there. One particularly common business is in retail food sales. In the U.S. today, this is usually a natural foods store, but historically food cooperatives have tended to operate supermarkets and small grocery stores. Other examples include the sporting goods cooperative REI and Group Health Cooperative. Any cooperative can create also a consumer cooperative by opening a store which will buy and sell them products at a better price than in the open market.

□- *Worker cooperatives* are businesses which are owned by the employees. This kind of cooperative forms can be used even by a small group of business partners running, for example, a bakery or bookstore.

However, they can also run large industrial operations, including some of the world's largest co-ops.

□- *Producer cooperatives* are owned by people who produce the same type of goods. Such cooperatives will often operate shared facilities for processing or distribution. These are generally agricultural co-ops. Kuapa Kokoo in Ghana is not only a production cooperative but also a trading organization, a credit association and a manufacturing company producing chocolate (Insight 7). For all those purposes Kuapa Kokoo has created the following structures:

- Farmers Union – a production cooperative.
- Kuapa Kokoo Ltd – farmer owned private licensed cocoa buying company i.e. the commercial and trading wing of the farmers' union.
- Kuapa Kokoo Farmers Trust – a trust company for managing premiums from sales to fair trade companies abroad.
- Kuapa Kokoo Credit Union – promoting savings and making credit easily accessible to members.
- Day Chocolate Company – manufacturing wing.

They trade their cocoa in cooperation with Fair Trade organization which provide some stability to their revenues.

They operate as marketing cooperatives in which each farmer maintains a fairly independent path to market, but shares a name brand.

□- *Purchasing/service cooperatives* are used by independent business owners to raise their visibility and cut costs for services such as funding (credit cooperative or insurance).

□- *Housing cooperatives* are owned by the residents. This can range from a single house to apartment complexes with thousands of units. It also includes co-housing projects, in which dozens of homes are cooperatively owned.

www.nwcdc.coop. Taïba Housing Cooperative in Senegal succeeded to cut by 50% the cost for building houses for its members (Insight 7).

Insight 6: Kuapa Kokoo Limited: a symbol of success and hope in the Ghanaian cooperative sector

Kuapha Kokoo means 'good cocoa farmer' in Twi, the local language

Kuapa Kokoo Union was founded in 1993 by a group of cocoa farmers and Twin Trading, a UK alternative trading organisation, as a response to the liberalisation of the cocoa market in Ghana. Its mission is to improve the social, economic and political status of its members and protect their business interests from the vagaries of world market forces (see Liberalisation of the Cocoa Industry below.)

Kuapa is a national (third-level) co-operative and umbrella organisation for 1,300 village-level farmers' societies, 48,854 members in 1,200 village societies and regional organisations

Kuapa purchases and markets its members' cocoa beans. It is the only co-operative among 24 private buying companies which have been granted export licenses. This allows Kuapa to buy up to 30% of the cocoa it purchases from members and export it to buyers via the Cocoa Marketing Company Ltd (CMC), a subsidiary of the Ghana Cocoa Board (Cocobod). The remainder has to be sold to CMC for export.

Kuapa Kokoo members produced 35,000 tonnes of cocoa beans in 2007, representing

5% of Ghana's total production of 690,000 tonnes (FAO). The average farm is 4 hectares with around 3 hectares under cocoa, which accounts for virtually 100% of farmers' cash income.

The four sub-units are:

Kuapa Kokoo Limited: the commercial and trading wing, a private company accredited as a Licensed Buying Company (LBC) and authorized to carry out cocoa purchasing activities throughout the country. It provides a range of training programmes and services such as subsidised agricultural inputs.

Kuapa Kokoo Farmers' Trust: a trust fund which receives Fairtrade Premiums and other funds intended for farmers and their communities and uses them to provide social infrastructure and income generation for farmers.

Kuapa Kokoo Credit Union: a legal entity that promotes savings schemes and performs the role of a rural bank by enabling members to access credit at competitive rates. Members can take out loans to pay for school fees, build or renovate houses and pay for other social obligations.

Divine Chocolate: a UK chocolate company set up by Kuapa Kokoo, Twin, and partners, which markets chocolate products made from Kuapa Kokoo cocoa. Kuapa Kokoo owns a 45% share in the company and has two elected representatives on the board. It contributes to manufacturing and marketing decisions and receives a share of company profits.

Members are predominantly smallholders living in remote and deprived parts of the country. Most of the cocoa growing villages do not have access to healthcare, clean drinking water, or electricity and rely on kerosene for artificial light. Most villages lack basic schools, educational materials, and teachers. High illiteracy rates are improving with the introduction of the government's free compulsory basic education programme.

Insight 7: The experience of the Building and Housing Cooperative of the Workers of Taïba, Senegal (CCHTT)2.

Taïba Housing Cooperative, located at Mboro, 90 km from Dakar commenced with a jump-start. After its first ordinary general meeting it had 231 members. At the beginning members contributed CFA 2,500 (approx. US\$ 5) per month to a working capital fund and a monthly fee of at least CFA 10,000 (approx. US\$ 20). It had exceeded the needs expressed collectively and individually. The collective needs were concentrated on the towns providing accommodation for workers, such as Mboro, Tivaoune and Dakar. As for individual needs, demand was mainly centred in those three towns as well, although it should be noted that members also wanted to build in the town or village where they were born. During the first five years, the investment part of the working capital fund enabled funding to be provided, without interest, for those who were close to retirement age, for projects not exceeding CFA 2 million (approx. US\$ 4,000). Collective programmes were arranged for Mboro-Tivaoune-Dakar. In Dakar, for example, this working capital fund enabled 23 building plots to be acquired without interest in a "medium quality" housing area. In addition, one of the special features of the CCHHT is the fact that, following the collapse of Senegal Chemical Industries (ICS), the first collective project in Mboro and Tivaoune, the cooperative arranged to purchase work using qualified workers which it was able to find in its vicinity or from among its own ranks. From that moment onwards, a collective ambition of "self-empowerment" was born. People could now build for themselves, so that they were no longer at the mercy of dubious entrepreneurs. The CCHHT signed confidential contracts directly with all the beneficiaries of the building that it was able to identify. It was also able to obtain equipment, and purchased a cement-mixer lorry. In order to do this, the CCHHT created an Economic Interest Group (EIG) which was later turned into a public limited company. From then on, the cooperative became the successful bidder for the contract. Now it is the only cooperative in Senegal which really builds for itself and its prices defy all competition: CFA 3,800,000 (US\$ 7,600) for a house, while others are around CFA 8,000,000 (approx. US\$ 16,000).

The CCHTT also introduced a system of internal insurance which made it possible to cover four deaths, where the dependants remained the owners without further formalities. As far as job creation is concerned, the CCHTT now employs, on a full-time basis, an advanced construction engineer and technician, a secretary, a driver and two caretakers. On a temporary basis it employs, for three quarters of the year, five foremen (two labourers per foreman), three masons, one form setter, one electrician and one painter.

Finally, in the period from 1995 to 2006, the CCHTT succeeded in raising CFA 800,000,000 (US\$ 1,600,000).

- *Other types of cooperative.* Artists can organize themselves in cooperative and provide to the public education in arts or "culture" in music, theater. Agricultural schools can organize themselves in cooperative and provide education and training services.

3.4 Gender & Cooperative

According to a report carried out by CECOP, women are the main cooperative entrepreneurs in Western Europe.

For example, in Sweden, 80% of the founders of new cooperatives are women.

They see cooperatives as a good way of starting up a business, and they value the positive flexibility and influence and control over their work situation that the cooperative framework is able to provide.

In Finland, 40% of the founders of worker cooperatives are women.

The main sectors in which they operate are social services, health care, marketing of handicrafts, culture and media.

In Germany, many new cooperatives have also been set up by women, who in many cases see them as an opportunity to combine social, political and ecological work. In Italy, France and Spain, where the cooperative movement has a long tradition in certain sectors, cooperative enterprises have been established in new and innovative sectors such as in the provision of services, social care, tourism, cleaning, catering, environment and architectural conservation and many others.

The growing number of cooperative enterprises, many of which are run by women, has greatly helped to absorb the steadily increasing number of women entering the labour force in these countries.

CECOP(1997) characterizes these new cooperatives created by women as a “veritable laboratory of new methods of work sharing and methods for positive flexibility. This experimentation in the restructuring of working time has not only contributed to the individual aspirations of women, but also to better reconciliation of individual, family and working time.”

In developing countries women do face barriers to their participation in Cooperative, as a result of related laws that discriminate against women in regard to property ownership and inheritance. In some countries, women are also restricted from conducting business independently or without their husband's consent. In other cases women's legal rights may be stipulated in a law but not necessarily enforced or they may be superseded by customary law.

In agricultural cooperatives, ownership or control over land or property are often stipulated as a condition for membership. Or, if the cooperative only allows one member per farm/household, the general tendency is that a man is chosen. When the women household members are excluded from membership, they are consequently excluded from the services that cooperatives provide in rural communities. To address this problem, cooperatives in some countries allow for participation and voting rights for several members per household. In Norway, for example, it is stipulated that “there must be at least two votes per farm”. In order to exercise one's right to vote, personal attendance at the general meeting is obligatory.

Individuals can be also organized under a Partnership umbrella.

Common initiative groups in Cameroon, Mali and Niger; economic interest groups in Senegal and other French-speaking African countries; credit cooperatives in Indonesia; mutually aided cooperatives in Andhra Pradesh (India) and precooperatives in Côte d'Ivoire.

References

- Ambrose, M. L., & Kulik, C. T. 1999. Old friends, new faces: Motivation research in the 1990s. *Journal of Management*, 25: 231–292
- Atkinson, J. W. 1964. *Introduction to motivation*. Princeton, NJ: Van Nostrand
- Barling, J., Weber, T., & Kelloway, E. K. (1996). "Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment". *Journal of Applied Psychology*, 81(6), 827-832
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Basic.
- Bijaoui I (2012). From Necessity to Business Entrepreneurship: The Case of the Songhai Center, Porto Novo, Benin. *African Journal of Business Management*. Vol. 6(18), pp. 5872-5878
- Brymer E. Gray T. (2006) "Effective leadership: Transformational or transactional?" *Australian Journal of Outdoor Education*, 10(2), 13-19, 2006
- Bijaoui I. and Regev D., (2015), "Entrepreneurship and rural development in rural Western Negev in Israel, *Journal of Research in Marketing and Entrepreneurship*, Vol. 17 Iss 1 pp. 54 – 66 Permanent link to this document:
<http://dx.doi.org/10.1108/JRME-09-2014-0023>
- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). "Further assessments of Bass's (1985) conceptualisation of transactional and transformational leadership". *Journal of Applied Psychology*, 80(4), 468-478.
- Brymer E. Gray T. (2006) "Effective leadership: Transformational or transactional?" *Australian Journal of Outdoor Education*, 10(2), 13-19, 2006
- Campbell, J. P., & Pritchard, R. D. 1976. "Motivation theory in industrial and organizational psychology". In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*: 63–130. Chicago: Rand McNally
- Crown, D. F., & Rosse, J. G. 1995. "Yours, mine and ours: Facilitating group productivity through the integration of individual and group goals". *Organizational Behavior and Human Decision Processes*, 64: 138–150.
- CEOP (1997) "Participation and flexibility: An Opportunity for Women's Employment", EURb/100/97, CECOP (European Confederation of Workers' Co-operatives, Social Cooperatives and Participative Enterprises)
- Davidsson, P. (1989). *Continued Entrepreneurship and Small Firm Growth*. Ph.D.Dissertation. Stockholm School of Economics.
- Davidsson, P. (1991). "Continued Entrepreneurship: Ability, Need and Opportunity as Determinants of Small Firm Growth," *Journal of Business Venturing* 6: 405-429.
- Develtere P., Pollet I & Wanyama F.(2008) Cooperating out of poverty The renaissance of the African cooperative movement International Labour Office World Bank Institute
- Dunkelberg, W. C., and Cooper, A. C. (1982). "Entrepreneurial Typologies," In *Frontiers of Entrepreneurship Research*, Wellesley, MA: Babson College
- Fiedler, F. E. (1967). *A theory of leadership effectiveness*.

- New York: McGraw-Hill.
- Frese, M. and de Kruif, M. (2000), "Psychological success factors of entrepreneurship in Africa, a selective literature review," in Frese, M. (ed.) *Success and Failure of Microbusiness Owners in Africa: A Psychological Approach*, London: Quorum Books
- Hersey, P., & Blanchard, K. (1982). *Management of organisational behavior: Utilizing human resources*. Englewood Cliffs, NJ: Prentice-Hall.
- Herzberg, F. 1966. *Work and the nature of man*. Cleveland: World Publishing.
- Howell, J. M., & Avolio, B. J. (1993). "Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance". *Journal of Applied Psychology*, 78(6), 891-902
- Hsu, C., Bell, R. C., & Cheng, K. (2002). "Transformational leadership and organizational effectiveness in recreational sports/ fitness programs. *The Sport Journal*, 5(2), 1-
- Hull, D. L., Bosley, J. J., Udell, G. G. (1980). Renewing the hunt for heffalump: identifying potential entrepreneurs by personality characteristics. *Journal of Small Business*, 18, 11–18
- Kolvereid, L. (1992). "Growth Aspirations Among Entrepreneurs," *Journal of Business Venturing*, 7: 209-222.
- Kolvereid, L. and E. Bullvag, (1996). "Growth Intentions and Actual Growth: The Impact of Entrepreneur Choice," *Journal of Enterprising Culture*, 4(1): 1-17.
- Komaki, J. 2003. "Reinforcement theory at work: Enhancing and explaining what employees do". In L. W. Porter, G. A. Bigley, & R. M. Steers (Eds.), *Motivation and work behavior* (7th ed.): 95–113. Burr Ridge, IL: Irwin/McGraw-Hill
- Kuratko, D. I. , J.S. Hornsby and D.W. Naffziger. (1997). "An Examination of Owner's Goals in Sustaining Entrepreneurship," *Journal of Small Business Management*, January: 24-33
- Locke, E. A. 1968. "Towards a theory of task motivation and Incentives". *Organizational Behavior and Human Performance*,3: 157–189
- Locke, E. A. 1996. "Motivation through conscious goal setting" *Applied and Preventive Psychology*, 5: 117–124.
- McClelland, D. C. (1971). "The achievement motive in economic growth" in Kilby, P.(ed.) *Entrepreneurship and Economic Development*. New York: Free Press.
- McClelland, D. C. 1961. *The achieving society*. Princeton, NJ: Van Nostrand.
- McClelland, D. C. 1971. *Assessing human motivation*. New York: General Learning Press.
- McDougall, W. 1908. *An introduction to social psychology*. London: Methuen
- Munkner H. H. (ed.) (1989), *Comparative Study of Cooperative Law in Africa*, Marburg Consult, Marburg.
- Newstrom J.W. and Davis (1993) *Behavior in Organizations* 9th edition. New York McGraw-Hill
- Olomi, D.R., Nilsson P., Jaenssoon J.E. (2002) " Evolution of entrepreneurial Motivation: The Transition From Economic Necessity to Entrepreneurship" Babson College May 2002
- Rutashobya, L. K. (1995). "Women Entrepreneurship in Tanzania: Entry and Performance Barriers," A research report submitted to OSSREA, Addis Abeba.
- Schumpeter, J . (1934). *The Theory of Economic Development* Mass: Harvard

University Press.

Straub, W. F. (Ed.) (1980). *Sport psychology: An analysis of athlete behaviour*. Ithaca, NY: Movement

Van Dijk Alberts, 1994

Reynolds, P.D.; Camp, S.M.; Bygrave, W.D.; Autio, E. and Hay, M. (2001): *The Global Entrepreneurship Monitor, 2001 Executive Report*, London Business School and Babson College.

Rosa P. , Kodithuwakku S.S., Balunywa W (2009). "Entrepreneurial Motivation in Developing Countries: What Does 'Necessity' and 'Opportunity' Entrepreneurship Really Mean?" Babson College, JEL Classifications: M13
Working Paper Series March 10, 2009

Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1997). "Effects of leadership style and anonymity on group potency and effectiveness in a group decision support system environment" *Journal of Applied Psychology*, 82(1), 89-103.

Steers, R. M., & Porter, L. W. 1974. "The role of task-goal attributes in employee performance". *Psychological Bulletin*, 81: 434–452.

Steers R. M., Mowday R.T, Shapiro D.L.(2004) " The Future of Work Motivation Theory" *Academy of Management Review* 2004, Vol. 29, No. 3, 379–387..

Szilagyi, A. D., & Sims, H. P. (1974). "An exploration of the path-goal theory of leadership in a health care environment". *Academy of Management Journal*, 17, 622-634.

Timmons, J.A. (1999), *New Venture Creation*, 5th. ed., Irwin McGraw-Hill, Burr Ridge, IL.

Timmons A (2004) *A Guide For Small Business*, by Jeffrey A. Timmons, Andrew Zacharakis, Stephen Spinelli, McGraw Hill, 2004

"Participation and flexibility: An Opportunity for Women's Employment", EURb/100/97, CECOP (European Confederation of Workers' Co-operatives, Social Cooperatives and Participative Enterprises)

PART II: ECONOMIC ANALYSIS, COMPETITIVE ADVANTAGE AND INNOVATION STRATEGY

A business determine first its Vision, the long term objective and its Mission, the specialization, the competence and the business objectives (). According to it, the firm will select opportunities in the market of which the added value to the customer could be improved by its competence and innovation strategy along the "Value Chain" (Porter,). We first will define the concept of vision and mission and illustrate it. Afterwards, we will explain the classic and behavior segmentation and how different levels of needs can improve the added value of the customer. Finally will present how the firm can improve its margin by more efficient activities in the "Value Chain and its competitive advantage by the relevant innovation strategy.

1. Vision versus Mission

Vision defines the aspirations of the firm. What do we want to achieve? This long term objective has to be specific, valuable and feasible.

The Mission determine how to achieve that vision: What business are we in and what are we doing now?

Fedex vision is "Leading the way". Its long term objective is to be always the leader in transportation efficiency, speed, maybe also price. There is also a second meaning linked to open new ways, new services new transportation means.

Fedex Mission is more classic and is defined by:" higher financial returns", growth as the objective. And also " high value added logistics, transportation and related information services".

Lexmark vision, "Customers for life" expects to change the habits of customers of printers or faxes, toward more fidelity and to come back and buy again and again Lexmark products.

Lexmark mission defines the objective and the competence " A leading developer, manufacturer and supplier of printing and imaging solutions for offices and homes". The competence "printing and imaging solutions" is enough wide in order to cover different home and office printing and imaging systems such as photo shop systems.

Ikea started in the sixties a social revolution in furniture by providing to youth and especially new couples, new furniture at an affordable price. Before Ikea, they use to buy second end furniture. Ikea Vision, " A Better Everyday Life', refers to the fact that Ikea is at every moment of the day with you in order to satisfy your need for, a good bed,, table or chair.

Ikea Mission is ": To offer a wide range of home furnishing items of good design and function, excellent quality and durability at a low price. Instead of furniture, Ikea use today furnishing and in such a way expanded its activity to lamps, cover bed or carpet.

Zara Vision is "To democratise fashion by offering the latest fashion in medium quality at affordable prices. "good design and good quality at good prices.". Fashion was for the upper class and Zara propose it at an affordable price for middle and upper middle class.

Zara Mission is focused on "Quick response policy and advanced information technology all combined to enable quick response to customer's changing demands" Zara invented the fast fashion concept. No more seasonal collections but new models every two weeks in the market.

Bank for Agriculture and Agricultural Cooperatives Thailand defined is Vision as "to be a secured rural development bank, with modern managerial technology focusing on the uplift of small-scale farmer's quality of life". The bank is focused on rural development, use and will use the best available technologies in order to insure farmer;' quality of life.

According to its mission the bank wants to become a full-fledged rural development bank and to provide sufficient sources of funds, and develop and provide services to promote good quality of life for farmers

2. Customer's segmentation

The objective of customer's segmentation is to evaluate the potential size of the different segments represented in the analyzed market.

A segment has to be composed by people with a similar profile and attitude toward the market analyzed. In such a way the XXX sample will represent the attitude of the whole population of that segment.

The classic segmentation is done according to four parameters: geography, demography, economy and culture. At a second stage we use behavioral segmentation in order to determine more specifically how large is the impact of personal and social attitude on the fulfillment of a need.

2.1 Classic segmentation

Geography: the natural environment, weather, seashore or mountain, local raw material has a direct impact on how the customer consumes. In hot region the consumer will drink more soft drinks and lighter clothes than in cold one. He will use furniture made in bamboo in Thailand and in wood in mud in African villages.

Demography: The main classification is

- Gender, man or women
- Age,
- Pace of life, single, married, family with children and aged single or couple
- Education or knowledge level
- Living in cities or villages

Men and women will buy different clothes. Children of different age will ask for different toys, A single will buy different furniture than a new couple, or a couple married with children.

Cell phone companies will propose different model, each one adapted to the level of education-knowledge of the customer, one model with voice communication, 0-9 and SEND for low education level, and one with camera, GPS and Internet for high education level.

People living in cities will buy a wider range of products in a smaller quantity per unit than people living in villages because products are more available for them.

Economy: The level of net revenues of a customer will determine which television he will buy, second end television for the low level of revenue, and wide HD, LED flat television for the higher level of revenue

Culture: We differentiate between local, ethnic and imported culture. Salmon in Norway, Vodka in Russia or Attieke in Cote d'Ivoire are the habits the local culture in those countries. In different sub culture they will find different adaptation, such as in wine, cheese or even cassava products. Imported culture is for example Chinese food in US, couscous in France or shawarma in Germany.

2.2 Behavior Segmentation

The classic segmentation is not enough accurate in order to determine the different customer's attitude in a determined market. Social, Psychological, Technology and Situation behavior segmentation are used for that purpose.

Social factors: Students will buy similar professional literature, engineers similar, computer, doctors, similar tools and also literature. Vegetarian will buy similar food, People who will have similar leisure, such as sport, horse driving or fishers will buy also similar products. Those are called reference groups.

Psychological factors: "Emotion" minded people will buy similar romantic clothes, perfume or will prefer to see love, fantasy, historic or even futurist movies

"Learning" minded people will ask for training and educational programs or professional literature

Exhibit 8 : Behavior Customer's Segmentation

Social Factors

Reference groups, family,
Culture

Psychological Factors

Perception, Learning,
Motivation, Emotion,
Involvement, Attitude,
Psychographic

Technological Factors

Web access- search-
evaluation capabilities ,
Purchase options, post
purchase feedback

Situation Factors:

Physical surroundings,
Time, Mood

"Attitude" or "Motivation" minded people will buy similar representative, cars or clothes

Technological factors: People who have a microwave oven in the kitchen will be "technology" minded customers and will buy, frozen pizza, ready meals in order to warm it in their microwave oven.

"Web" buyers will have a similar attitude and will seek for better price low and medium price branded products

Situation factors: Physical surrounding, Mood and Time may change or have some impact of the customers' attitude.

Physical surrounding: People living close to the sea will have common habits of entertainment and will buy similar leisure products. Similar common attitude with people living in mountains about ski, shoes, clothes...

Mood: Christmas or Eid mood customers will buy similar food products or gifts.

3 Levels of needs: Primary Needs, Wants and Demands

Kotler () defines three levels of needs: primary needs, "Need", improved need, "Wants" and customized need, "Demand". Those three levels exist simultaneously because different customers segments ask for each one of it. Some customers seek to fulfill primary need at a low price and are satisfied by a product supplying the "Need" level. Other, seeks for higher added value and are ready to pay for a product a higher price supplying the "Want" level. For the last group it is not enough and they ask for a product supplying a "Demand" level more customized to their needs.

The customer who asks for a primary need will buy a white yoghurt. The customer asking for a "Want" will be ready to buy a yoghurt with fruits. The customer asking for a "Demand" will buy a bio yogurt with vitamins. In a similar way a customer will ask for a cell phone for voice communication only as a primary need, a cell phone with the possibility to send SMS with internet option as a "want" need and a GPS for "demand" need.

Herewith two products illustrating how those three levels of needs can be planned in different versions of one product.

E- Reader, Amazon Kindle (Figure 1)

Amazon is the world leader of books sales ordered through Internet. In order to improve their business capabilities they developed Amazon Kindle, a e-reader book based on E Ink's micro-encapsulated ink imaging film, Vizplex. The Vizplex technology requires no front or backlight, can be viewed under a wide range of lighting conditions, including direct sunlight, and requires no power to maintain an image". Books fulfill a primary need and Amazon kindle fulfill a "Want" need because

- The book is sent electronically quickly, through internet.
- Hundreds of books can be saved in Kindle
- Selection in different books can be saved

Its direct competitor, Sony in partnership with Google, chose also the similar "Wants" need level by proposing the availability of one million printed documents in comparison to 350000 books for Amazon.

Txtr, a German competitor decided to open its system to application, a Demand need such as a e-reader able to support a teacher with the required literature and the possibility to intervene and interact with e-reader of his pupils.

Plastic logic a other competitor, developed, e-reader for a businessman, a Demand need level in which he can have, reports, documents, books...

Figure 1 : E-Reader Amazon Kindle

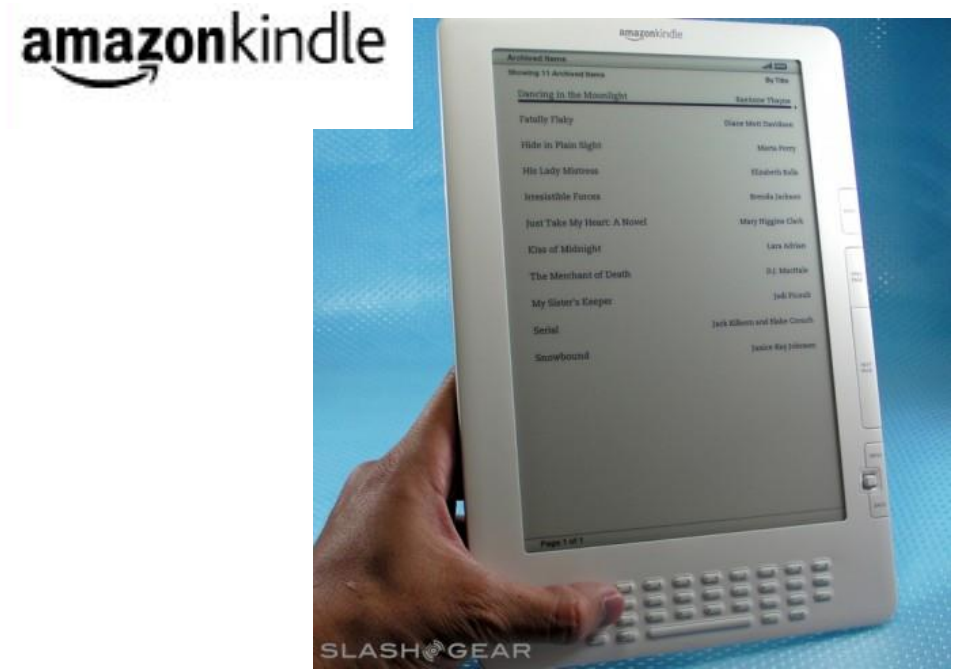


Figure 2: Cell Phone Modu



Voice telecommunication



Music Application

- *MODU cell phone (Figure 2)*

MODU is a "brain" cell phone which can be integrated in various "jackets". Each jacket will use the "brain" in order to implement specific applications. Primary need level is a simple jacket providing basic voice telecommunication application a low price. Want need level is fulfilled by jackets providing music or office applications. Demand level is fulfilled by jackets providing GSP services or even bank services applications.

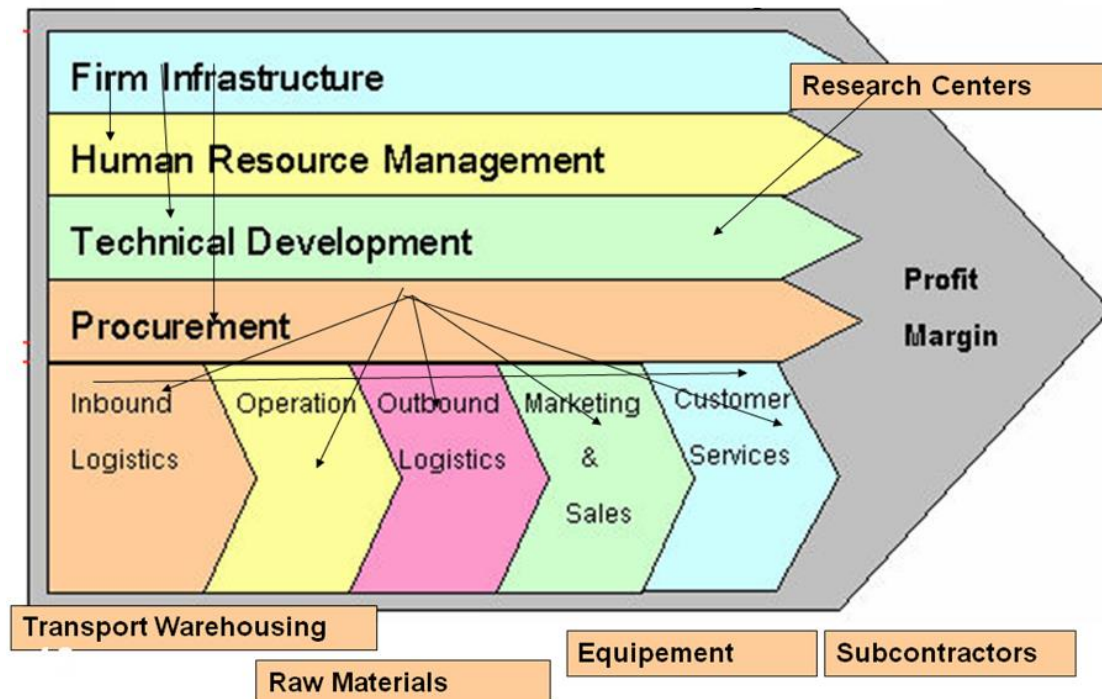
4 Value Chain efficiency

Each potential opportunity is analyzed in the firm by the different support and primary activities in the Value Chain (Porter,)(Exhibit 9). The Firm Infrastructure-Top Management in the Value Chain decides to which opportunity to answer and by which product. The top management requires knowledge in both market and firm activities and in depth understanding of the role of each activity. In the Value Chain.

The cost efficiency of the products depends on how the firm decides to organize its activities in the Value Chain.

Support and primary activities complete each other and cooperate in order to achieve the best margin.

Exhibit 9 : Value Chain Efficiency – Internal and External Activities



4.1. Support Activities

- Human resources management is in charge to provide the required human capital to the different activities in the Value Chain and to improve its knowledge over time. The co management of human resources with the different departments requires a two ways multi channels communication network sharing information, knowledge and responsibilities. Who to hire and when? When to hire people and when to use subcontractors instead of it?

The decision referring to those questions may have a critical impact on cost, efficiency and competitive advantage.

- Research and Development is in charge of preparing the future and as to develop a product under time, cost and performance xxx. Any change risks to have a negative impact on the whole value chain process and its results. An internal cooperation with the other activities is compulsory and an external cooperation with research centers or subcontractors may be required in order to improve the chances of success.

- Procurement supports each activity to find the relevant sources of inputs from raw material to equipment or subcontractors and insure availability on time by using the more efficient logistic.

4.2 Primary activities

Inbound logistics uses the sources of inputs and transportation services selected by procurement in order to supply it to the other primary and support activities. Its efficiency may save time and money.

Operations (Production) receive orders from customers and manage the process of production until the transfer to Outbound logistic.

Outbound logistic is in charge of the physical distribution to the relevant warehouses and locations where the products are sold.

Different innovation strategies are required in order to improve competitive advantage by selecting the relevant classic or behavior customers' segment, the relevant level of needs or the relevant innovation in product or process in the Value Chain.

5 Innovation Strategies (Exhibit 10)

According to Chesbrough (2006), “companies that don’t innovate, die” . Arthur D. Little (2005) confirms the importance of innovation for the business sector. From 800 companies operating in different business sectors in the United States, Canada, Latin America, Europe and the Asia-Pacific region, the top innovators have 2.5 times higher sales of new products and get more than ten times higher returns from their innovation investments.

The classic comparative advantage based on high relative endowment of labor, relative cheaper manpower, is not sufficient today in order to compete in local and international markets.

The innovation process has traditionally been viewed as a simple linear sequence process with emphasis on R&D and in which “the market is a recipient of the fruits of R&D” (Rothwell, 2002). The purpose of R&D was not new products (Arrow, 1962; Nelson, 1959) but technological innovation.

In the early 1970s, innovation became linked to customer needs in the market. The source of innovation is no longer the R&D department only, but the marketplace also. Von Hippel (1978) found that the market is the most influential function in the innovation process. In the project NewProd, Cooper and Kleinschmidt (1990) and Cooper (1994, 1999) also found that strong market orientation is one of the basic reasons for success.

In the “Simultaneous Coupling Model” of innovation (Galbraith, 1982), neither technology nor the market leads the innovation process. The simultaneous activities of R&D, manufacturing (“Technology Push”) and marketing (“Marketing Pull”) generate the innovation process. Each side provides its

own expertise and the management of the organization leads the whole innovation process and selects the relevant innovation at the right time. In the mid-1980s, the novel product organization of Japanese firms led to the “Network” innovation model (Imai *et al.*, 1985). In this model, the different in-house departments interact with each other. The objective is to reduce the product “lead-time cycle” and costs. Innovation is the result of the co-operation between the functions, and each one can initiate innovation, R&D, technological innovation in product, manufacturing, technological innovation in processes, and marketing, innovation in market needs.

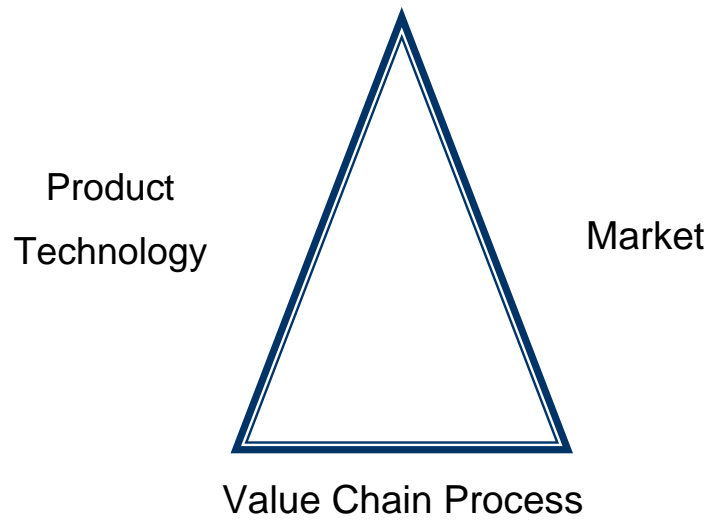
In the 1990s, the focus moved from network innovation to “System Innovation” (Lundvall, 1992; Edquist, 1997). The external network is based on current, but also in unknown technological and market environment. By interacting with the internal sources of knowledge, the external sources of knowledge improve the innovative capabilities of the firm and its capability to enter new markets in order to reach higher returns (Rothwell, 2002), due to market and technological “open innovation” Chesbrough’s (2003, 2006). Open Innovation is “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively” (Chesbrough *et al.*, 2006).

Herewith we will illustrate how close and open innovation in “Value Chain” process, in product and market may improve competitive advantage of a firm.

5.1 Innovation in “Value Chain” process

Products providing primary needs have to be sold at a low price and so require low cost of production. Cheap labor is not enough. Chinese companies match low cost, and innovation in production process in order to achieve economies of scale in products requiring mass production. Competition between car manufacturers is not based only on low cost labor but also on robots, innovation in production and new composite material based on polymers or magnesium, innovation in resources.

Exhibit 10: Innovation Strategies



ZARA , the Spanish leading company in fashion, confronts Chinese competition successfully due to wise use of open innovation in "Value Chain". Activities. They use a wide range of technologies in primary and support activities from, R&D to "Procurement", "Inbound logistics to Operations (production) and Outbound logistics and are able to bring in two weeks new fashion models in their shops in 65 countries. Based on this process integration and technologies, from the thread to the end product they cut costs developed a new competitive advantage, the fast fashion concept. There is no more seasonal collection but models changing every two weeks. The potential customer doesn't enter to ZARA shops one or two times during a season but every two weeks when the new models arrive to the shops.

Innovation in primary activities of the "Value Chain" is also feasible in the agri business market.

- *Irrigation systems, Greenhouse.*

In developing countries most of the agricultural inputs are imported by traders or growers who are not specialists in that domain. Traders are interested to sell and give very few professional support. Growers import directly at a high price and don't have also the relevant technical background
Open innovation of local firms specialized in agricultural equipment is required in order to introduce Value Chain innovation process in agri business market.

The following case illustrates that issue. In Pockara, Nepal most of the greenhouses have similar shape, use similar plastics cover (Figure 3), and buy from the same trader plastics cover and seeds. They did not receive any training support. The first production of tomatoes was big but tomatoes were not of the same type. In the second season the quantities were very low and fungicides attacked the plant because they did not use any pesticide.

Figure 3: Greenhouse in Pockhara



Agriculture in most of the arable land in developing countries depends on natural conditions. Production is mainly concentrated in the few months of the rainy season. It is the case for coffee, cacao but also for fruits and vegetables. The use of relevant irrigation systems adds a season of production and may increase the quantities produced and production efficiency.

Growers seeking for irrigation systems can choose between one of the three levels of needs:

Primary need: water pump and transfer of water to a pool close to the plantation. From there irrigation is done by using "arrosoirs" or by channels transferring the water (picture). The two ways are better than no irrigation at all but are not very efficient because the quantity of water integrated by the plants is not monitored.

Want need: pipes bringing the water to the plants with drips or sprinklers according to the required product (Figure 4). The level of want can differ from one grower to the other.

- family drip irrigation system for the production of vegetables, using gravity as a source of energy. (Figure 5) The surface is limited to 500 m².
- drip irrigation system using pumps and a source of energy such as, generator, national electric system or solar energy. Surface unlimited
- monitoring of the quantity of water per plant according to the slope of the soil.

Figure 4: Irrigation Systems

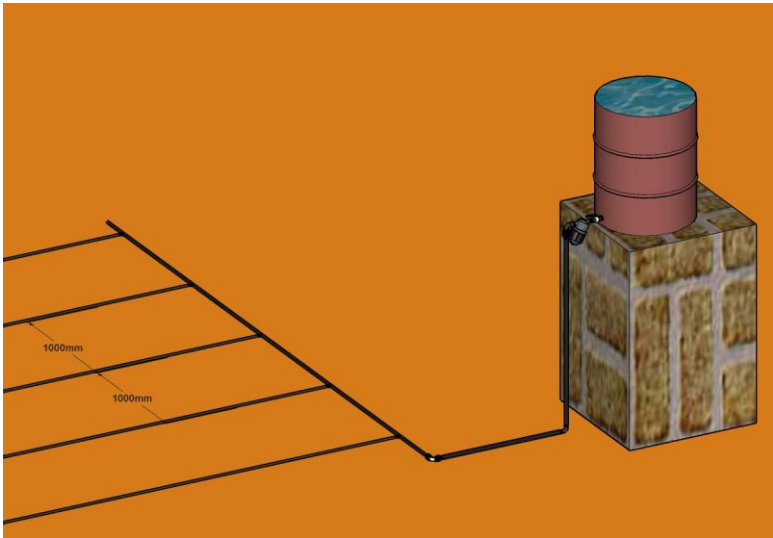


Mini Sprinklers

Sprinklers

Drippers

Figure 5.1: Family Drip Irrigation system using gravity instead of energy



Foldable Tank

Figure 5.2: Family Drip Irrigation System in Uganda



Cauliflower



Tomatoes

Any interesting example of the level of want is the use of drippers in Tanzania in order to produce tea (Exhibit 11).

An irrigation system based on drippers instead of sprinklers succeed after the third year to improve the production efficiency up to two time the quantity in five years.

Demand need: Monitoring of feeding process of the plant using drippers xxx and liquid fertilizers. This process allows to control the evolution of the plant and the vegetable or the fruit. One the impressive implementation is the use of brackish water with a concentration of 1700-2700 mg/l salt in the Negev (Insight 8). The only source of water located in the Negev (beyond few rain) a big underground aquifer of brackish water starting in the Negev and ending west in Africa. Not any plant can grow with such a quantity of salt in water. But by using drippers and controlling the quantity of salted water we succeed to develop the relevant knowledge in order to grow vegetables, olives and spices. This kind of water provides also to the products a new competitive advantage: less water in the product and so sweeter tomatoes, watermelon and higher quantity of oil in olives.

Greenhouse system is an integrated open innovation of several value chain process: irrigation system but also use of plastic covers filtrating sun rays, liquid fertilizers, neutral soil and reuse of water and bees pollination.

Primary need: use of plastic cover and relevant irrigation system

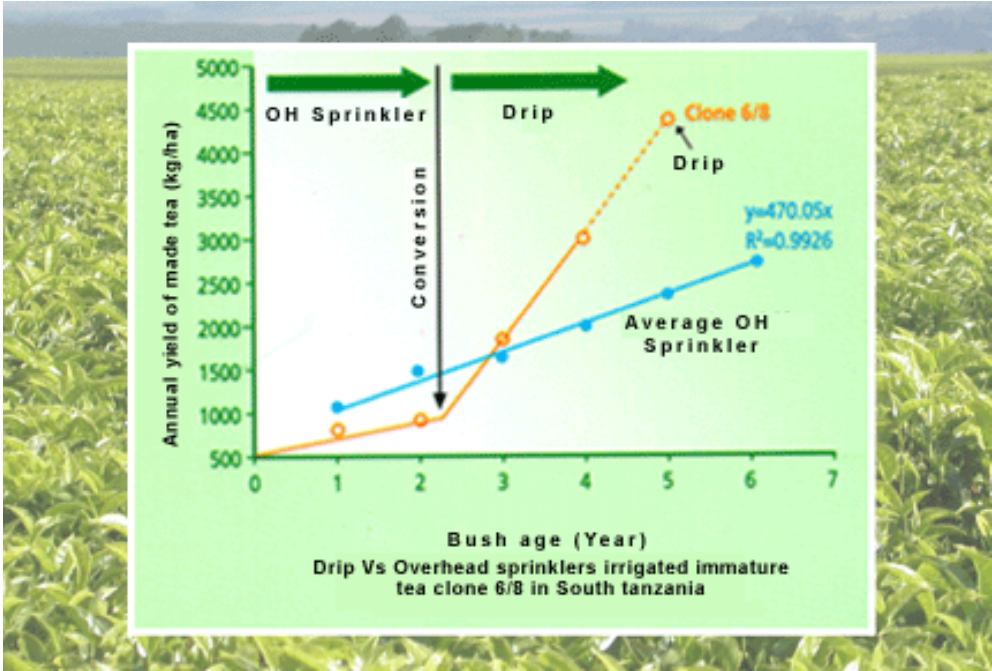
Want need: use of plastic filtering the relevant sun rays and use of liquid fertilizers, neutral soil and reuse of water

Demand need: Adaptation of the greenhouse conditions to the relevant plant by using, humidity, temperature, water control systems

- *Post harvest (Figure 6)*

A fruit or a vegetable continues to live after picking it, but it is no more monitored by the plant or the tree. His temperature grows and grows even faster under the sun until it is wasted. In order to stop this process three level of needs are feasible.

Exhibit 11: Sprinklers Versus Drippers in Yea Production in Tanzania



Insight 8: Ramat Negev Desert AgroResearch Center. Irrigation using brackish water

The Ramat Negev Desert AgroResearch Center (RNDARC), a regional government facility, is located at the junction of two different soil terrains to study multiple crop/ecosystem interactions. The Center works cooperatively with, and provides extension services to, agricultural communities in the Ramat Negev region.

The Center is a world leader in brackish (salty) water irrigation research and crop response (growth, yield, quality, variety) and has developed environmentally sound principles curtailing the deleterious effects of salinity. As a result of their findings, brackish water is now being used widely for crop cultivation in the Negev.

DESERT SWEET™

The cultivation of specialty crops such as cherry tomatoes, melons, peppers, wine grapes, olives, pomegranates, jojoba (used in cosmetics), fodder crops, organic crops and strawberries, all irrigated with brackish water, has been perfected at RNDARC. Farmers today throughout the Negev utilize techniques developed at the Center and market their products under the brand name of Desert Sweet™, which has become synonymous for the high quality and excellent sweet taste of its produce.

OLIVE ORCHARDS

Olive trees are associated with the Middle East. Since olive orchards require minimal irrigation, they are an appropriate crop for extensive cultivation in the Negev. The Negev Foundation funded research focused on the effects of brackish water irrigation on tree growth and fruit/oil quality of different cultivars.

NEGEV VINEYARDS

In 1997, The Negev Foundation sponsored a long-term experimental study aimed at the production of high-quality Sauvignon Cabernet and Sauvignon Blanc grape varieties. Research today includes analysis of grape cultivation under different salinity regimes and the resultant effect on the taste and aroma of the fruit for wine production.

SAND DUNES POTENTIAL

When the RNDARC was first conceived 25 years ago, it was located close to water sources and existing roads. Large quantities of sand were trucked in at considerable expense from the sand dunes area more than a mile north of the Center. Following the huge success of experimentation with sand as an inert substrate for plant cultivation over the next two decades, the Center wished to bring its expanding research facility closer to the dune area.

AQUACULTURE

Aquaculture in the Negev is a relatively new field in Israel, which has evolved due to economic need and the abundant supply of underground brackish geothermal waters. Cultivated fish account for some 20% of the total world fish consumption today and more than a third of the annual worldwide aquaculture production. In responding to this trend, Israeli scientists are perfecting the propagation of new fish varieties in brackish water with an eye toward export market potential such popular varieties as sea-bream (Denise), sea bass, tilapia (St. Peters), shrimp and mini-lobsters.

Primary need: Use of a mobile tank of cold water in order to quickly after picking the product to slow down its temperature improve their self life.

Want need: Manual or semi automatic cleaning, cooling and packing system

Demand need Post harvest systems cleaning cooling and packing system using spray of hot water in order to kill bacteria and fungicides and improve shelf life (Figure 6, Shelah system).. In Israel we use to export peppers to Japan, by airways for 3000\$ per ton. Due to the use of the Shelah system and the prolongation of the product shelf life by two weeks, we succeed to export by sea for 300\$ to Japan.

The new demand need open innovation in post harvest is based on polymer packaging allowing to the product to breathe and continue its current life as it was on the plant or the tree. The result is that mangoes will not change its weight and freshness during 30 days in a storage at 10oC (Figure 6, Stepac). It is the case of fresh spices and other vegetables.

Innovation for demand need fulfillment can be based also on low tech technology, manual machine in order to shell maize developed in Uganda (Figure 7) and fonio developed in Senegal (Figure 7)

Figure 6: Post Harvest Systems



Spray of hot water killing
fungicides Shelah Ltd



Plastic allowing fresh
fruit (mangoes) of
vegetables to breath
Stepac Ltd



Grain Storage System
Grainpro

Figure 7: Maize and Fonio Shelling Machinery



Maize system developed at Uganda



Fonio husking machine was
invented by Sanoussi Diakité,
Sénégal

- Poultry (Figure 8)

In the process of production of broilers or layers the quality of drinking water is essential for chicken growth and health. Water in contact with air can be contaminated by any bacteria or virus. This is the current way in Nepal (Figure 9) and many over developing countries. We can prevent those risks by fulfilling three levels of needs.

Primary need: the farmer can use fixed clean recipients with water daily changed.

Want need: the farmer uses a system with water circulating in pipes and providing in different stations clean water

Demand need: the system provides to each chicken the possibility to drink water as he needs as presented in the (picture explanation)

Figure 8: Poultry drinking and feeding systems
Kibbutz Maagan Michael

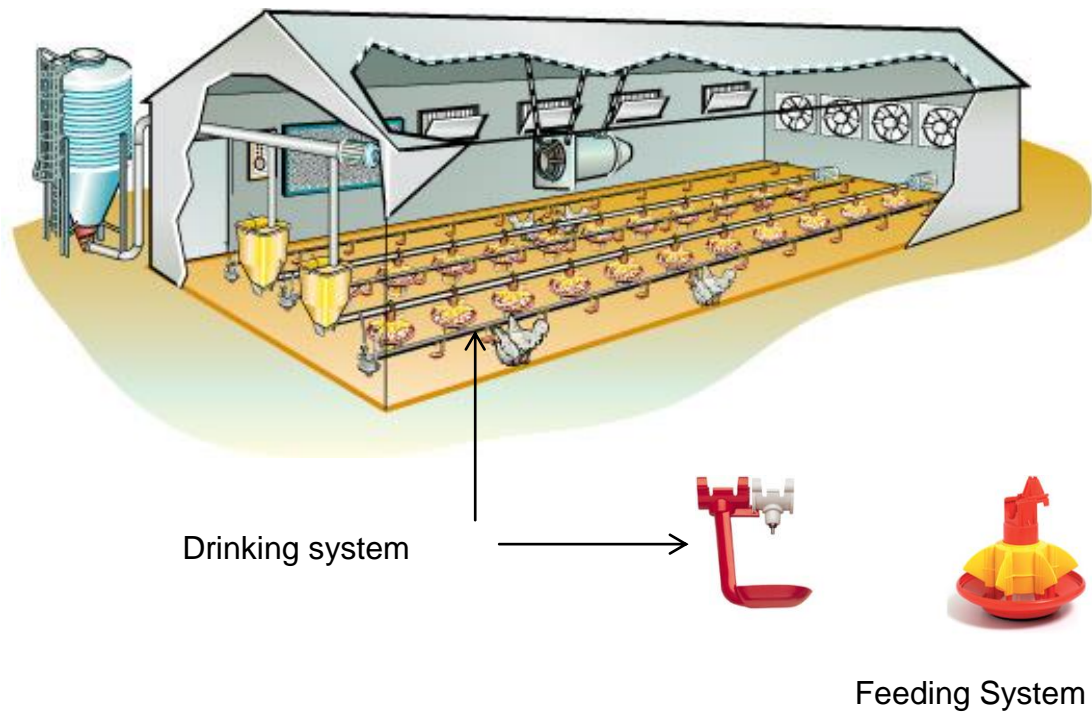


Figure 9: Poultry production in Pockhara, Nepal



5.2 Open Innovation in product and market

Herewith classical illustration of product/ market innovation.

- The compact disk

Philips had developed the prototype for CD by 1978 but recognized that it would be difficult to turn the concept into a mobile portable system in the market. Sony was chosen as a partner, because it had the requisite development capability of product miniaturization, technological innovation in product/market and manufacturing capability, innovation in process. Sony developed three integrated systems which eliminated 500 components making CD smaller, cheaper to produce and more reliable. .

- Nike sport shoes

In 1964, Nike founders Phil Knight and Bill Bowerman detected a "Demand" need in the United States for lighter, more resistant athletic shoes for runners, to compete with German brands Adidas and Puma. They decided to develop a running shoe style with a nylon upper and have it manufactured through Japan's Onitsuka Tiger. This new concept of running shoe, open innovation in product/market, provided the light weight and durability demanded by professional runners.

- The microwave oven

In 1946, Dr. Percy LeBaron Spencer of Raytheon Corporation (www.amana.com) decided to improve radar performance by developing an open innovation in embedded technology in products, microwave technology, and to take advantage of competitors. Spencer used to eat chocolate and by inadvertence he passed through a microwave and the chocolate bar in his pocket "fondre". He decided to embed the microwave technology into a oven, and invented the microwave oven, an open innovation in product/market, provided to an assumed need in the market of quicker cooking process in the market.

In 1947, the first commercial microwave oven hit the market weighting 750 lb, or 340 kg, at a unit cost of US\$5,000. The heavy weight and high price obviously did not suit the needs of private and professional customers. Amana, a specialist in electric appliances that was acquired by Raytheon, developed a lighter and cheaper microwave oven and introduced it in the oven market as the quicker cooking oven fulfilling a need level of "Want". In fact, the microwave oven was not a "want' need but a "Demand" for not cooking but warming/de freezing/no-cooking pre-prepared food, a new market, an open innovation in the market,

- *Open innovation in product/market in agri business*

Open Innovation in products and markets is also feasible in agribusiness specialization. Improvement or new species of vegetables of fruits, cross breeding of cows are able to increase the added value of the farmer or the grower. Herewith we present some cases relevant for developing countries based on Israeli or international knowledge.

Tomatoes

Tomato is a basic vegetable in many developed and developing countries. Hundreds of species have developed supplying primary needs, wants and demands.

Primary need is mainly supplied by olive tomatoes . The main problem of those species is the short shelf life.

In Israel we developed at the need level of "Wants" tomatoes such as the Galina (round shape) and the Galilea (olive shape Roma type) resistant plants with high yield potential. high quality fruit with long shelf life (Figure 10).

Cherry tomatoes such as "Camelia", First Love" and Recital can be considered as belonging to : "Wants" level of need. But the "Pnaly " specie is at the Demand need level because the concentration of lycopene in it is higher than in any other tomato. This substance (red color) protects against cancer of the prostate

Watermelon (Figure 10)

Watermelon is currently used as a basic fruit in most of developed and developing countries, Species fulfilling two new levels of needs have been developed during the last years. Seedless watermelon fulfill a need level of "Want" and provide an easier way to eat watermelon. Small size personal seedless watermelon provide fulfill the need of demand mainly in developed countries.

Fish

Fish fulfill a primary need in populations living close to sea or lakes. The international growing demand is faster than the natural development cycle of fishes. Fish ponds are able to produce the relevant fish species for the local or international demand at any time, any location and are able to fulfill "Wants" and "Demand". With a higher added value to the consumer and to the producer.

Figure 9: Types of Tomatoes and Seedless Watermelon Hazera Genetics Ltd



Adrienna

Pninaly High lycopene content



First Love excellent flavor, color & shelf-life



Recital



Camelia

Summer Sun high concentrations of sugar make honey sweet. 25 \$ per kilo



Tiger seedless watermelon



Extazy seedless watermelon

"Wants" need

FSG company in Cotonou detected an interesting "Want" level need for grey shrimps from the lagoons in Belgium and Switzerland. But the quantities are limited due to during several months due to the natural reproduction cycle.

Pools starting the reproduction process of grey shrimps in different periods can be the solution in order to fulfill the "want" level need all the year.

"Out of natural season" fishes species are produced in ponds and sold in the market at a higher price than during the full season. Trout, cat fish, salmon and other species fulfill a "Want" need level providing a higher added value to the customer and the producer than during the full season.

Demand need

A local fish company in Uganda, close to Victoria lake, found an interesting way to fulfill a demand need in China. They clean stomachs of Tilapia dry it and export is to China where it is appreciated as a high value, high price product (Figure 10)

Caviar is produced from Sturgeon fish eggs. At the natural level this fish exist in the Caspian sea only. It is today protected and so the available supply of caviar is diminishing. This opportunity in the international has been exploited by Kibbutz Dan, in Israel, which grows Sturgeon in ponds and fulfill a demand need for caviar in the international market (Figure 11).

Cow breeding

The objective of cow breeding is to improve the added value to the farmer and or also to the end customer.

The primary need is currently provided by local breed for meat or milk.


The Want need requires open innovation in feeding, breeding and veterinary treatment:

Figure 10: Dried Tilapia Stomach in Uganda exported to China



Figure 11: Strugeon production in Kibbutz Dan, Israel



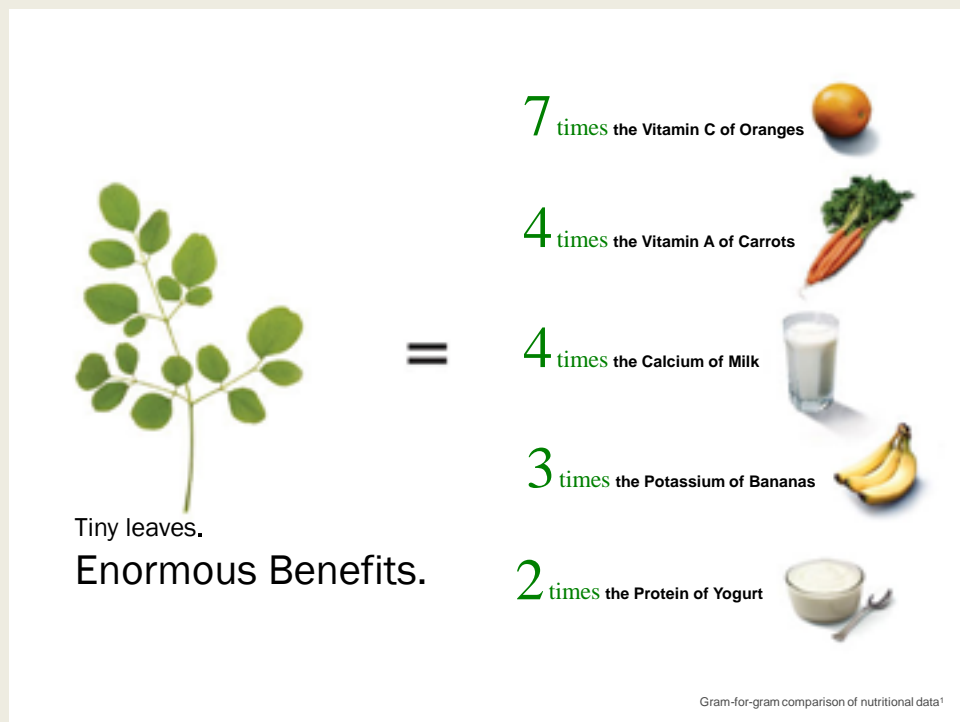
- Feeding of cows has an impact on milk, meat quantity and quality but also on cow reproduction. In dry season pasture is poor and complementary feeding are required. Vitamins proteins and other ingredients are or imported or based on dried local agricultural products. Moringa leaves are integrated in the cattle feeding because of its content in most of the required vitamins A, B1, B2, B3 C, D and also proteins and (Insight 9).
 - This plant is natural in Africa and Asia but started to be utilized only during the last years. The leaves of this tree stay green all the year and so can provide fresh feeding along the year
- 

Insight 8: Moringa Tree


History of Moringa

Moringa oleifera is the best known of the thirteen species of the genus Moringaceae. Moringa was highly valued in the ancient world. The Romans, Greeks and Egyptians extracted edible oil from the seeds and used it for perfume and skin lotion. In the 19th century, plantations of Moringa in the West Indies exported the oil to Europe for perfumes and lubricants for machinery. People in the Indian sub-continent have long used Moringa pods for food. The edible leaves are eaten throughout West Africa and in parts of Asia.⁵

Nutritional Value of Moringa Leaves



- In veterinary aspects, open innovation is mainly focused on preventive treatments by using vaccines or providing relevant sanitary conditions. Vaccines cost money but improve the business results of farms by cutting mortality rate of the cattle. Sanitary conditions can be improved by using new technologies such as those preventing or diminishing the reproduction of insects and especially mosquitoes. (Insight 9). Herewith a slow release system, Runtush, allowing to kill larvae of mosquitoes without any negative impact on the environment.



Insight 9: Runtush - an innovative biological, environmentally safe mosquito larvicidal control product

Source: ALICOM Biological Control Ltd. , September , 2002 .

Two important reasons to control mosquitoes are to avoid nuisance biting, and to preclude the spread of mosquito-borne diseases including malaria, encephalitis, dengue and yellow fevers, as well as West Nile Virus.

ALICOM an Israeli startup company, has developed a new formulation that enables sustained delivery of chemicals effectively extending its efficacy. This new technology is expected to substantially increase the effectiveness of substances in the field currently limited due to instability. ALICOM has applied this technology to the field of mosquito control with the Company's initial product, Runtush. Early field trial experiments have shown that Runtush sustained BTI activity for up to ten days, while commercial BTI products are only effective in the field for two to four days. Commercial products require six to eight applications of BTI per season in order to cover the 21-day life cycle of a mosquito. Each application is expensive since it requires costly aerial operation. In addition to sustained activity, the Runtush formulation protects BTI from harmful effects of the sun and sinking. BTI floats, and is available to mosquitoes in their feeding habitat, giving Runtush a competitive edge since three to four applications per season are sufficient to promote more effective mosquito control.

Advantages of Runtush biological larvicide:

- * Sustained release of Bti over an extended period of up to 10 days
- * Bti is environmentally friendly being toxic only to mosquito larvae
- * Granule remains floating on water (where larvae feed) for the duration of the slow release
- * Granule coated and protecting the Bti from UV radiation

Multiple kilometers of field trials have shown that Runtush effectively controlled mosquito larvae in high organic and polluted water for over 8 days where other BTI products failed entirely. Prior to obtaining EPA approval, ALICOM must complete several additional laboratory and field trials in the United States, as well as certain toxicological and ecological studies. Field trials are underway in the United States in collaboration with the Harvard School of Public Health and are expected to continue through 2002.

Cassava

The largest producer of cassava is Brazil, followed by Thailand, Nigeria, Zaire and Indonesia. Production in Africa and Asia continues to increase, while that in Latin America has remained relatively level over the past 30 years (Aerni , 2006).

Cassava is a basic need in many developing countries in Africa and South America. In Western and Central Africa the local consumption per capita is between 200 to 250 kg per year and in Eastern Africa around 100 kg in South America the consumption decreased from 40 kg in the 70's to 20 kg now. Cassava is a basic and important vegetable product for Africa and can fulfill basic, want and demand need by using open innovation.

Primary need

The increasing demand for cheap cassava in the growing African cities induces many cassava producers to shorten the time of the traditional fermentation process from four to two days. This leaves detoxification (cyanogens) of cassava incomplete and heightens the risk for urban consumers to be affected by Konzo (Feldmeier, 1999).

The short run solution is to use open innovation in order to improve production efficiency by using clean planting material (clean stakes). Tissue culture was assessed to have the biggest potential for solving the problem of lack of clean stakes.

Want level

The long run solution is to develop new species of cassava. Researchers at Ohio State University are developing cyanogen-free transgenic cassava that is still resistant to pests. A team at the University of Bath is developing cassava varieties that are more resistant to postharvest deterioration. Transgenic cassava varieties that are resistant to ACMV disease have been

developed at the Donald Danforth Plant Science Center in Missouri, USA and the Swiss Federal Institute of Technology (ETH Zurich) in Switzerland.

Demand level

The team at ETH Zurich has also developed transgenic cassava varieties with delayed leaf senescence and higher protein-content in cassava roots.

Brazilian researcher at Embrapa inm Brazil discovered cassava varieties preserved over centuries by indigenous tribes in the Amazon region.

Among these varieties was a yellow cassava that was rich in beta carotene, a variety that contained a root-specific protein rich in glutamic acid, and another one that produced sugar instead of starch (babyfood cassava). (Carvahlo et al., 2000).

The indigenous cassava varieties with higher nutritional content discovered in the Brazilian Amazon are being introduced in Africa through IITA via the CBN (Luis Castelo Branco Carvalho,Embrapa, personal communication, November2003; his research will also be part of the global biofortification initiative within Harvest Plus

The case of Thailand proved that cassava can even become a profitable export crop if successful international breeding partnerships, a national commitment to applied breeding (distribution and selection of improved materials), and marketing are combined. Fresh root yield was improved by 100% and root dry matter content by more than 20% (Kawano, 2003)

Coffee

Coffee prices are determined by international supply and demand in the stock exchange of commodities. But the added value to the grower doesn't depend from those prices only. There are different possibilities to improve it and go beyond the basic need level for the grower and the end customer.

Wants need

Better is the quality of the coffee and higher will be the price to the grower.

But the grower has to be able to improve and control the quality and not to be dependent on that issue from the trader or the exporter.

Demand need

Like wine the value of coffee to the customer changes according to the type the location, the weather the soil and many other parameters. Forest coffee produced for Nestle or coffee "appellation" according the location in Rwanda are two interesting cases of open innovation improving the added value of the grower and the end customer (Figure 11)

Fonio (Insight 10)

Fonio is used mainly in West African countries as a "cereals" and fulfill a basic need.

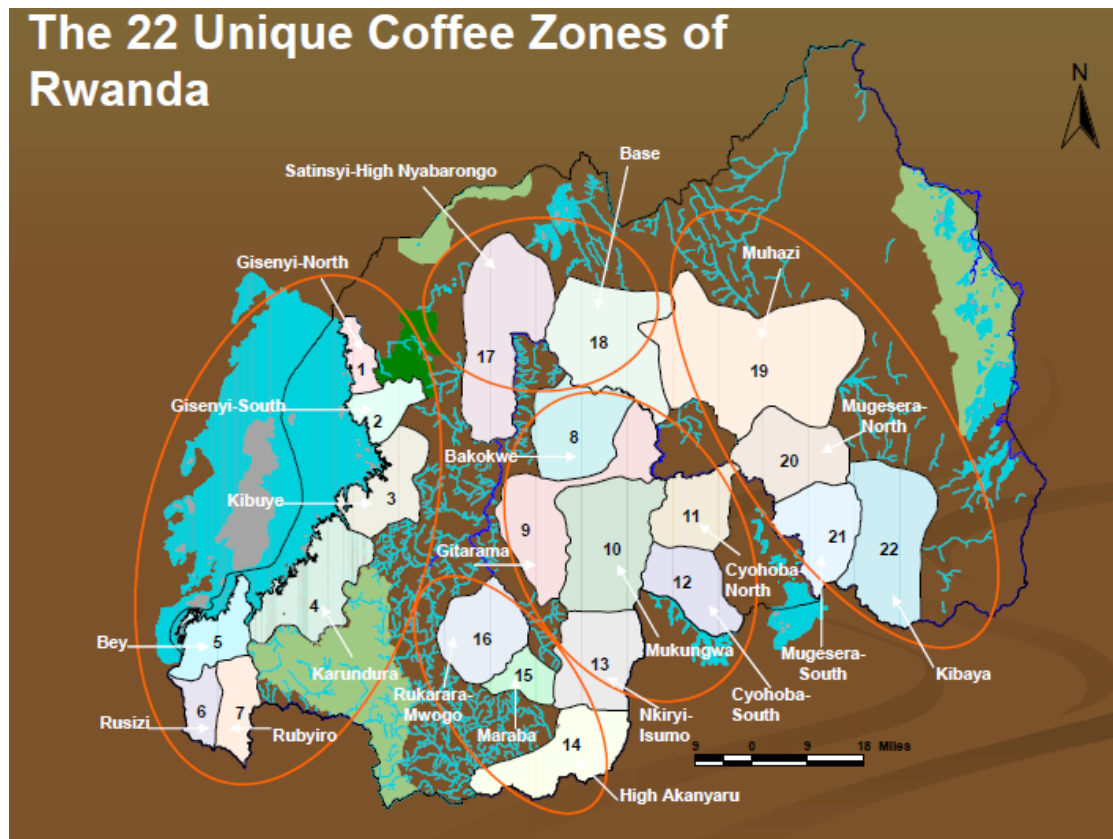
According to the mythology of the Dogon people of Mali, among whom it is known as **po**, the supreme creator of the universe, Amma, made the entire universe by exploding a single grain of fonio, located inside the "egg of the world".

Fonio (*Digitaria exilis* Kipp. Stapf and *Digitaria iburua* Stapf) is a minor cereal crop which is cultivated throughout West Africa from Senegal to Lake Chad. In this zone, it is either a staple food or food for hunger period. The crop supplies food to 3-4 million people. Its production is restricted to certain ethnic groups for which it has high socio-cultural and economic value.

Fonio's major handicap is the two brittle husks that surround each tiny seed – each about the size of a grain of sand – and make the actual husking process extremely difficult and time consuming. For hundreds of years,

Figure11: Selection of location according to potential 22 unique Coffee Zones in Rwanda

Geo-IT as a Marketing Tool for Rwandan Coffee



Dr. M. Schilling, Dr. A. Lyambabaje, A. Mukashema, J. P. Bizimana, I. Nzeyimana*,
Dr. T. Schilling** & P. Songer***

AgriBusiness Forum
Rome, Italy, 18-20 June 2008

Source:

Insight 10: Fonio, A small Grain with potential

LEISA Magazine • 20.1 • March 2004

Jean-François Cruz

Fonio (*Digitaria exilis*), a small cereal from West Africa, is much loved by farmers and consumers because of its many advantages. Fonio has a short growing season and is well adjusted to harsh environments. The cereal has excellent culinary and nutritional properties. The only drawback is that the grains are tiny and difficult to peel, which makes processing a tedious job. These difficulties have reduced the crop to a marginal cereal. However, efforts are now being made to develop equipment that will facilitate the processing of fonio.

Fonio is possibly the oldest indigenous cereal cultivated in West Africa. The domestication of fonio seems to go back 7000 years, but the first references to fonio as food date from the fourteenth century. The Dogons of Mali, an ancient people, refer to the fonio seed as "the germ of the world". They believed that the whole universe emerged from the fonio seed – the smallest object known.



Nowadays, fonio still grows in farmers' fields over a vast area extending from Senegal to Chad. Fonio is a staple food for many rural communities, especially for communities in the mountainous areas of the Fouta Djallon in Guinea. Farmers in Mali, Burkina Faso, Ivory Coast, Nigeria and Senegal also cultivate the small cereal. West African farmers mainly cultivate white fonio (*Digitaria exilis*), which is also called fundi, findi, acha or "hungry rice". In Nigeria, farmers grow black fonio (*Digitaria iburua*) as well. In Guinea, farmers also occasionally plant the so-called "fonio with large seeds" (*Brachiaria deflexa*) but this is, in fact, a different species.

Fonio is known for its nutritional properties. Although the protein content of fonio is similar or slightly lower than that of other grains, it contains amino acids like methionine and cystine which are essential to human health. These are often deficient in today's major cereals. As fonio is known to be easy to digest, it is traditionally recommended for children, old people who cannot digest other cereals, sick people and for people suffering from diabetes or stomach diseases. Local pharmacists also recommend fonio for people who want to lose weight.

Comparison of nutrients contents of fonio and other cereals collected and analyzed in Mali in 2002.

	Protein (%)		Lipid (%)		Minerals (%)		Carbohydrate (%)	
	intact	polished	intact	polished	intact	polished	intact	polished
Fonio	9 – 11	7 – 9	3,3 – 3,8	0,8 – 1	1 – 1,1	0,3 – 0,6	84 - 86	89 - 91
Sorgho	11	10	3,5	1,2	1,2	0,5	84	88
Mil	12	11	4	1,2	1,2	0,8	83	87
Maize	11	10	4,5	1	1,3	1	83	88
Rice		8		0,9		0,5		90

R: Vodouhé (2004) Promoting fonio production in West and Central Africa through germplasm management and improvement of post harvest technology. International Plant Genetic Resources Institute, Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles

Processing fonio is a difficult and time-consuming task because of the extremely small size of the grain. One gram of fonio contains nearly 2000 grains and each egg-shaped grain is only about 1 - 1.5 mm long. After threshing, the grain is still surrounded by husks.

Dehusking and whitening of the grain is done by hand and require four to five successive beatings using a pestle and a mortar alternated with as many winnowings.

Country	Production (t)	Area (ha)
Guinea	120 000	160 000
Nigeria	70 000	130 000
Mali	21 000	30 000
Burkina Faso	17 000	26 000
Ivory Coast	15 000	22 000
Guinea Bissau	3 000	5 000
Benin	1 500	2 500
Senegal	1 500	2 500
Niger	1 000	2 000
Total	250 000	380 000

Primary need

African women have carried out the painstaking task of preparing fonio by pounding and threshing a grain and sand mixture with a pestle and mortar. After one hour of this tedious work, only two kilograms of fonio are available for consumption and fifteen liters of water are needed to remove the sand.

Want need

Sanoussi Diakité is a 36-year-old Senegalese mechanical engineering teacher who is familiar with fonio invented a husking machine which, by taking the drudgery out of preparing fonio, improve the quality and quantity of fonio ready to be consumed.

Demand need level

Fonio is also increasingly highly prized by nutritionists because it is rich in methionine and cystine, two amino acids vital to human health and deficient in today's major cereals such as wheat, rice, maize, sorghum or barley. Open innovation in the international market increase the chances to improve the added value to the grower and the customer.

Exotic fruits (Figure 11)

Fresh pineapple, mango or coconuts fulfill primary need. Want need could be related to the size and shape of the fruit. Bio fruits fulfill a demand need level. African organic, a company from Uganda, succeeded to improve that demand need level by providing in the European market dehydrated bio exotic fruits. A solar oven dehydrate the fruits.

Figure 11: Dehydrated exotic fruits, African Organic, Uganda



E

Mission Vision Ikea Lexmark Zara Fedex

Bank for Agriculture and Agricultural Cooperatives Thailand

Aerni P. (2006) " Mobilizing Science and Technology for Development: The Case of the Cassava Biotechnology Network (CBN) *AgBioForum*, 9(1): 1-14. ©2006 *AgBioForum*.

Arthur D. Little (2005), *Global Innovation Excellence Survey*, New York

Chesbrough, H. (2003), *Open innovation: The new imperative for creating and profiting from technology*, Harvard Business School Press: Harvard, MA.

Chesbrough, H. (2006), *Open Innovation*. Harvard Business School Press, Boston Massachusetts

Cooper, R. (1999), "The invisible success factors in product innovation", *Journal of Product Innovation management*, 16(2) 115-133

Cooper, R. and Kleinschmidt, E. (1990) *New products: The Key factor in success*, American Marketing Association, Chicago

Carvalho, L.C.B., Thro, A.M., & Vilarinhos, A.D. (Eds.). (2000). *Cassava biotechnology*. IVth International Scientific Meeting— CBN. Brasilia: Embrapa

Feldmeier, H. (1999, April 21). Von der krankheit zu den ursachen. Konzo als beispiel medizinischer detektivarbeit. *Neue Zürcher Zeitung*, 91.

Hofman K D et all (2006) Marketing Principles and Best Practices Thomson

Kotler.P (2004) Principles of Marketing. Prentice Hall

Imai, K., Nonaka, I. and Takeuchi, H. (1985), "Managing the new product development process: how Japanese companies learn and unlearn", in Clark, K.B., Hayes, R.H., Lorenz, C. (Eds), *The Uneasy Alliance*.

Kawano, K. (2003). Thirty years of cassava breeding for productivity— Biological and social factors for success. *Crop Science*, 43(4), 1325-1335.

Lundvall, B. (1992), *National systems of innovation: Towards a theory of innovation and interactive learning*, Pinter, London.

Porter value chain

Galbraith, J.R. (1982) "Designing the innovation organization", *Organisational Dynamics*, Winter, 3-24

Porter, M. E. (1996). What is strategy? Harvard Business Review, November-December, 61-78. The value chain

Rothwell, W.J. (2002). Putting success into your succession planning. *Journal of Business Strategy*, 23(3), 32-38

Von Hippel, E. (1978), "Users as innovators", *Technology Review* 80(3), 30-4

Zara

PART III

PROJECT MANAGEMENT AND BUSINESS PLANNING

1. Project management, Definition

In a project, human capital and economic analysis are planned and managed according to "a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time cost and resource" (Project Management in Agricultural Extension)

Project management is the "skills, tools and management processes required to undertake a project successfully" (Project Management Guide Book)

Efficient management of a project requires a good selection process of opportunities, the relevant human and physical capital and continuous updating of the data related to the market and to the activities of the firm along the Value Chain.

Three levels of management interact in order to achieve the objectives of the project:

- Management of the process of evaluation and selection of opportunities in the market:
- Management of the activities in the Value Chain
- Business planning and financial analysis management

2. Managing the process of evaluation, selection and follow up of opportunities

Based on the vision and the mission of the firm, the project manager screens demographic, cultural, geographic, economic, technological and political environment in the market, in order to select and monitor opportunities related to the competitive advantage of the firm.

Demographic environment

Gender, age, pace of life (single, married, children), level of education and living location, cities or villages may change and have an impact on the potential or selected opportunities.

Cultural environment

Local culture may be different according to the country or the region. Cheese in France is different than in UK and does'nt exist in the Chinese local culture. In Cote d'Ivoire cassava is consumed as Attieke, in xxx as gari and in xx as .

Globalisation process encourages import of foreign culture. Coca Cola in Europe, Pizza in United States, Mc Donald in Israel, Chinese food and Sushi in Europe are example of imported culture. It is the case and many other domains such as clothes, furniture or sport.

Economic environment

Changes in the economic environment may have an impact on market size. Less taxes, more credit or leasing and more customers can buy. Leasing improves the capability of a grower to by a tractor or irrigation systems.

Technological environment

Changes in technological environment create new opportunities. A microwave oven at home will encourage a customer to buy products such as ready meals.

Political environment

The government can take decisions which have an impact on the customer such as increase of custom taxes on frozen chicken in order to encourage the local production and consumption or nre regulations in the telecommunication market.

3. Managing activities in the Value Chain

Inbound logistics management is in charge of transferring required inputs, raw materials, equipment, subcontracting into the firms. This process requires cooperation with the other activities of the Value Chain and with external providers of logistics services. Cost and timing management may be critical . In Kavokiva case the cacao cooperative decided to create its own inbound logistics process based on 180 collection points, 30 trucks and 10 warehouses. The efficiency of this network logistics is the result of a close cooperation between the different participants in the collection network.

Operations management includes all the processes required in order to produce, from order processing to production. This activity needs first to cooperate with inbound logistics but also with external partners in order to complete the manufacturing process or improve its added value. The members of Kavokiva cooperative dry the cacao beans, and the management control the quality and package it according to the exports requirements. Kavokiva plan to cooperate with potential partners in order to process cacao bean into cacao paste as do it Barry Callebaut at San Pedro.

Outbound logistics management starts with ordering process followed by warehousing and transportation to the market. The management of those processes requires close cooperation and coordination between the activities of the Value Chain and the customers in the market.

The case of Fiord Fiesta production in Europe (Figure 12) assembled in Spain and UK illustrate how complicated can be the management of operations, when the parts are produced in Germany, Belgium, U.K., Ireland and France.

Figure 12: Ford Fiesta Production Network in Europe



Sales management: more intermediaries we have, and less revenues remain in the hand of the producer. In order to have an efficient sales management and improve its margin and the revenues of the grower, Kavokiva decided to create an export company in Ivory Coast and an import company in Switzerland.

Procurement Management selects the best sources of inputs and takes in account numerous parameters, such as availability, efficiency, quality and price. Selection of wrong sources can have a critical impact on business. In the region of Pokhara, Nepal, the growers purchase seeds and plastic cover for greenhouse from a non professional importer. The result was that the cover plastic did not filtrate sun rays, the tomatoes produced had different shapes and size not related to the local habits (Figure 13). During the second season, the production diminished by 50% and fungicides attacked their production.

Technological Development provides the knowledge. Sources of technology development can be internal if the firm has its own R&D department. But mainly the sources are external to the firm. It can be research centers or other firms. The research center is the external source of seeds and relevant compost for the production of new mushrooms for growers of mushroom in Baktapur, Nepal (Figure 14).

Figure 13: Production of tomatoes in Greenhouses, Pockhara, Nepal



Figure 14: Mushroom production in Baktapur, Nepal



4. Business Planning and Financial Analysis

The business plan integrates the different stages of project management in a common framework composed by the following chapters.

- *Executive summary*

The entrepreneurial team, the opportunity and the competitive advantage, the market potential and the results of the financial analysis are shortly presented.

- *Human Capital*

The entrepreneurial team, the leadership and the external sources of human capital are the main asset of the firm and are presented before any analysis (see Part I).

- *Market strategy and opportunity analysis*

Customers segmentation based on the potential opportunity provides a preliminary evaluation of the market size.

The basic segmentation is done according to "impact factors", geography, demography, economy and culture, and "behavior factors", social reference group, psychology, technology and environment factors

The analysis of the competition, the opportunity and the competitive advantage of the firm determine the evaluation of potential sales.

- *Product and price strategy*

The selection of potential products and price, results from the market strategy and opportunity analysis. The products of which the value –price for the customer equal the value (benefit) –price for the firm will be produced and sold in condition that the market is enough large in order to provide some benefit.

- *Value Chain activities*

Tasks and cost evaluation of each activity in the value chain from Project management staff to Research and Development ,Procurement , Inbound logistics , Operations, Outbound logistics and Sales and Distribution management

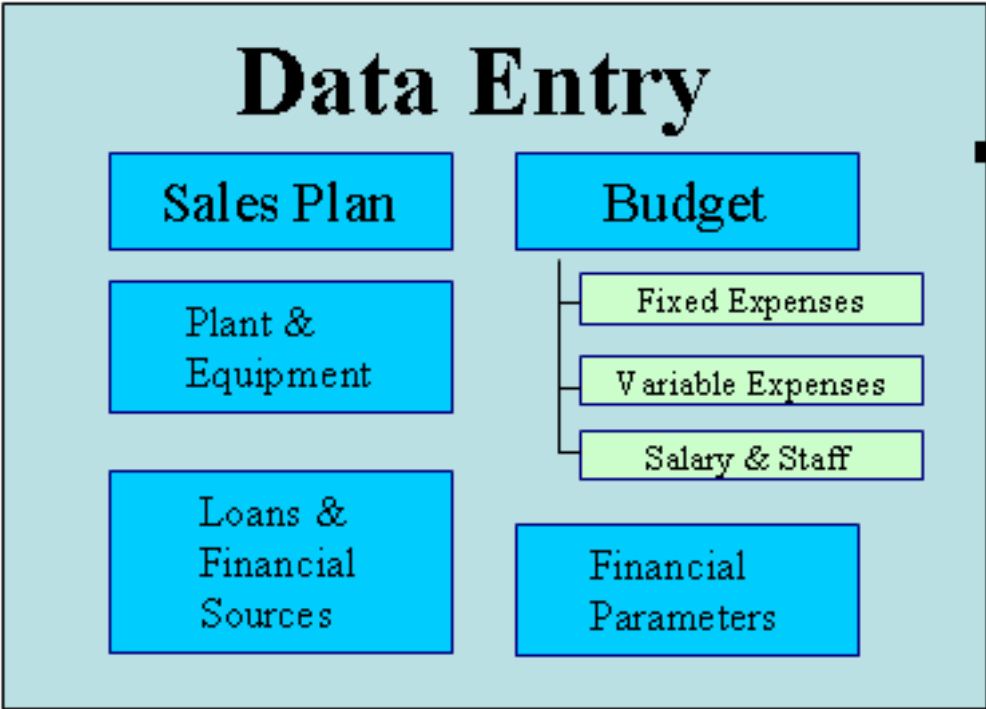
- *Financial resources*

Own capital and loans are the main sources of financial resources.

Preliminary payment received from customers or postponed payments to suppliers are also two other sources of financing.

All the required data for a business plan are detailed in Exhibit 11

Exhibit 11: Data required for a Business plan



- *Financial analysis*

Herewith the different stages of the financial analysis (Exhibit 12)

Breakeven analysis

It is the point where total sales equal variable + fixed cost (see Exhibit 13). At that point we don't have no benefit and no lost

The parallel line to the horizontal axe, Pf, represents the fix cost

The line from the origin represents the market price

The line from Pf represents the variable cost

$$P_b \times Q_b (\text{sales}) = P_f \times Q_b (\text{Fix Expenses}) + (P_b - P_f) \times Q_b (\text{Variable Expenses})$$

Or

$$P_b = \text{Fix Expenses}/Q_b + \text{Variable Expenses (per unit)}$$

In Exhibit 14 Break even point is illustrated by an example:

The breakeven point is when $Q_b = 77$ units with a market price of , Total Sales = Fix expenses + Variable expenses

But if we have more that one product the breakeven point will be calculated according the total sales in comparison to fix and variable cost.

In Exhibit 1 the quantity at the breakeven point is calculated as a percentage of the total sales during the analyzed period. 77% of the total quantity is required in order to achieve the breakeven point.

Exhibit 12: Financial analysis

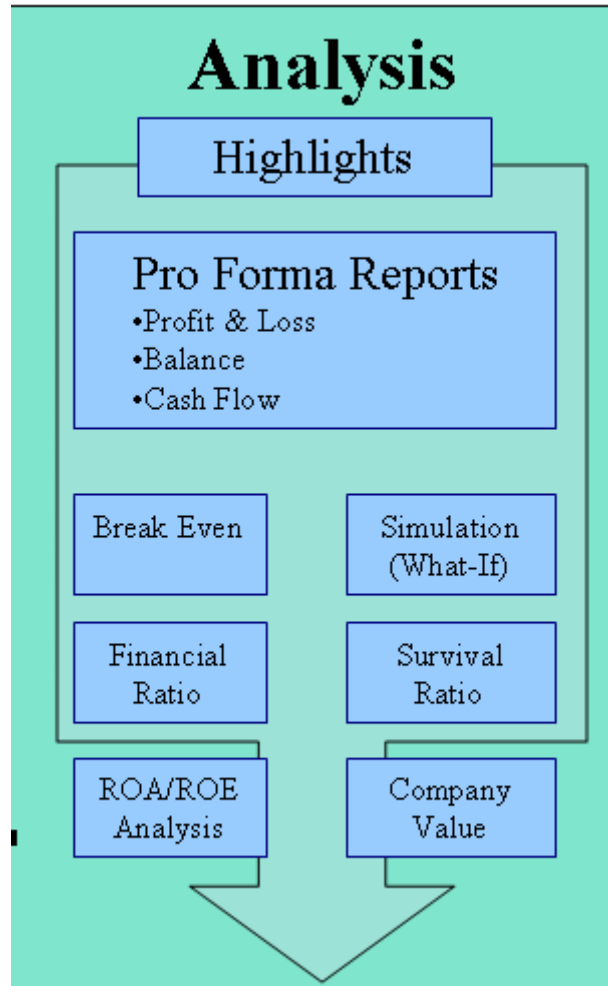


Exhibit 13: Breakeven chart

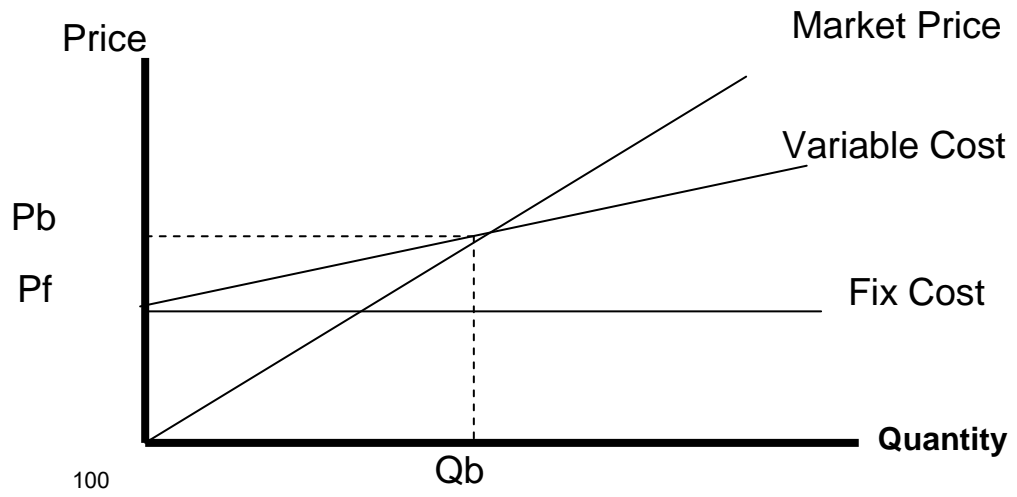
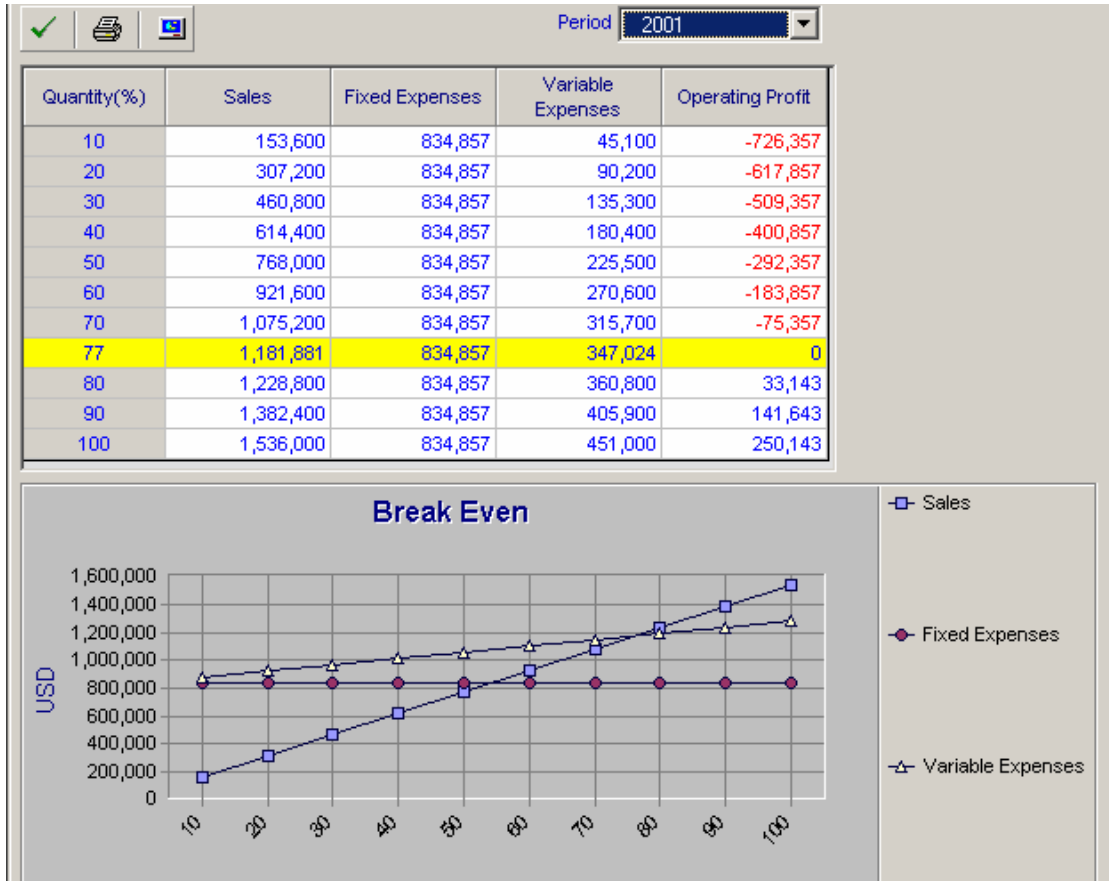


Exhibit 14: Illustration of Break Even Point



Cash flow

Cash flow summarizes the expenses and sales and allow to the project manager to know at any time there is the financial situation is positive or will be negative and so he will need a loan (Exhibit 15).

Profit and Loss

Profit is the final result expected by any project manager. It takes in account, all current and former economic activities such as debts and unrecoverable debts (Exhibit 16).

What if analysis:

"What If analysis" allow to verify how sensitive is the financial and business situation to changes of prices, sales or cost. In Exhibit 17, sensitivity to change in price is analyzed

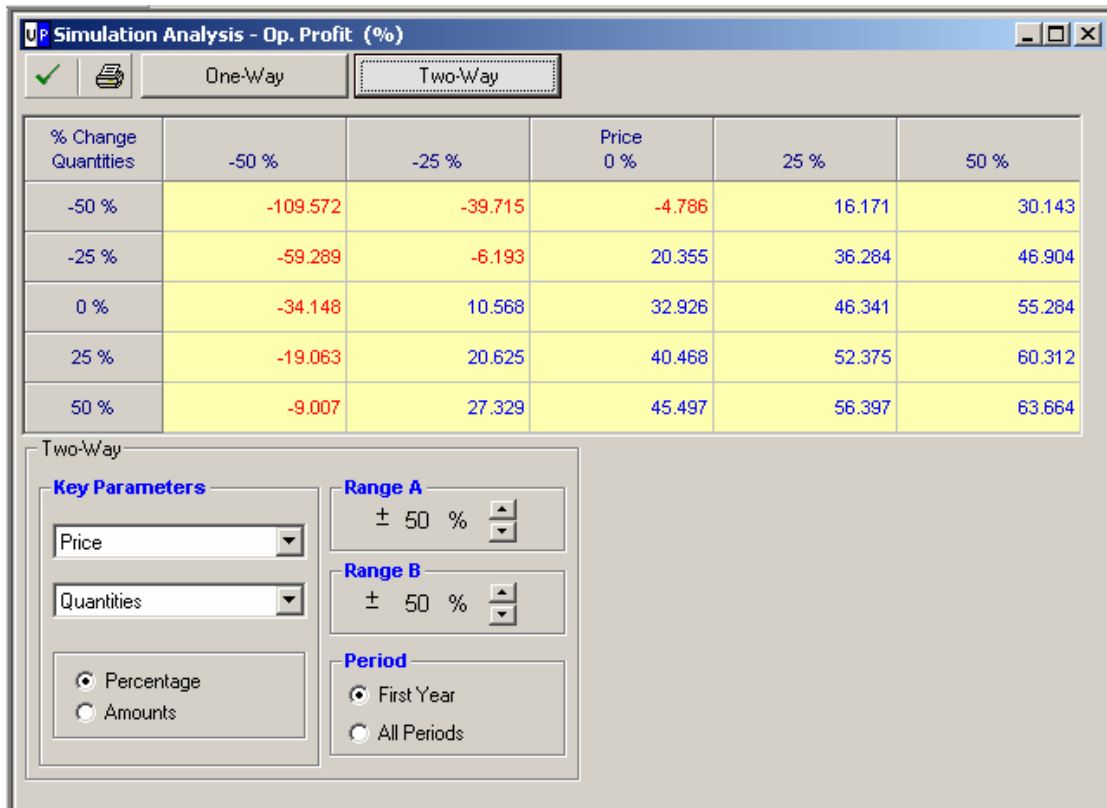
Exhibit 15: Cash Flow

Cash Flow Statement [USD]					
Description	2001	2002	2003	2004	2005
1 Net Income	96,301	485,874	825,730	1,018,347	1,057,664
2 Depreciation	120,857	128,000	135,143	142,266	149,429
3 Change in long term provisions	0	0	0	0	0
4 Cash Flow	217,158	613,874	960,872	1,160,633	1,207,093
5 Net changes in operating assets and					
6 Accounts Receivable	0	0	0	0	0
7 Inventory	-13,667	-2,278	-4,556	-2,278	0
8 Accounts Payable	162,455	221,418	205,981	114,736	20,856
9 Accrued Expenses	0	0	0	0	0
10 Net Cash provided by (used in)	365,946	833,015	1,162,298	1,273,091	1,227,949
11 Cash Flows from Investing Activities					
12 Purchase of property, plant, and	-1,740,000	-50,000	-50,000	-50,000	-50,000
13 Disposal of property, plant and					
14 Net Cash provided by (used in)	-1,740,000	-50,000	-50,000	-50,000	-50,000
15 Cash Flow from Financing Activities					
16 Owners' Equity	0	0	0	0	0
17 Changes of long term debt	1,473,137	-322,936	-346,281	-371,314	-398,156
18 Changes in short term debt	0	0	0	0	0
19 Payment of Dividend	0	0	0	0	0
20 Net Cash provided by (used in)	1,473,137	-322,936	-346,281	-371,314	-398,156
21 Net Cash increase (decrease) during	99,084	460,079	766,017	851,777	779,793
22 Net Cash in the beginning of the year	0	99,084	559,162	1,325,179	2,176,956
23 Net Cash at the end of the year	99,084	559,162	1,325,179	2,176,956	2,956,749

Exhibit 16: Profit and Loss

UP Profit and Loss [USD]								
Description	2002	(%)	2003	(%)	2004	(%)	2005	(%)
1 Revenues	2,240,000	99.898	2,880,000	99.842	3,200,000	99.929	3,200,000	100.000
2 Inventory Change	2,278	0.102	4,556	0.158	2,278	0.071	0	0.000
3 Other Operating Income	0	0.000	0	0.000	0	0.000	0	0.000
4 Total Production	2,242,278	100.000	2,884,556	100.000	3,202,278	100.000	3,200,000	100.000
5 Direct Cost	576,278	25.701	742,556	25.742	822,278	25.678	820,000	25.625
6 Gross Profit	1,666,000	74.299	2,142,000	74.258	2,380,000	74.322	2,380,000	74.375
7 Depreciation	128,000	5.708	135,143	4.685	142,286	4.443	149,429	4.670
8 Operating Expenses	255,600	11.399	255,600	8.861	255,600	7.982	255,600	7.988
9 Unrecoverable Debts		0.000		0.000		0.000		0.000
10 Provisions	0	0.000	0	0.000	0	0.000	0	0.000
11 Salary	458,400	20.443	458,400	15.892	458,400	14.315	458,400	14.325
12 Operating Profit	824,000	36.748	1,292,857	44.820	1,523,714	47.582	1,516,571	47.393
13 Interest Income	16,456	0.734	47,109	1.633	87,553	2.734	128,342	4.011
14 Interest Expenses	92,957	4.146	69,612	2.413	44,580	1.392	17,737	0.554
15 Total Finance	-76,501	-3.412	-22,504	-0.780	42,974	1.342	110,605	3.456
16 Other Income	0	0.000	0	0.000	0	0.000	0	0.000
17 Other Expenses	0	0.000	0	0.000	0	0.000	0	0.000
18 Total Others	0	0.000	0	0.000	0	0.000	0	0.000
19 Income before Tax	747,499	33.337	1,270,353	44.040	1,566,688	48.924	1,627,176	50.849
20 Income Tax	261,625	11.668	444,624	15.414	548,341	17.123	569,512	17.797
21 Net Profit	485,874	21.669	825,730	28.626	1,018,347	31.801	1,057,664	33.052
22 Dividend	0	0.000	0	0.000	0	0.000	0	0.000
23 Retained Earnings	0	0.000	0	0.000	0	0.000	0	0.000
24 Provision Profit	485,874	21.669	825,730	28.626	1,018,347	31.801	1,057,664	33.052

Exhibit 17: What If Analysis



Project Management in Agricultural Extension

National Institute of Agricultural Extension Management (MANAGE),
Rajendranagar, Hyderabad – 500 030, Andhra Pradesh, India
First Published: 2008

Project Management Guide Book (2003) Method 123

PART IV

FAIR TRADE GOOD FOR WHOM?

1. Introduction

The Free Trade movement started in the Netherlands in 1973. The oldest and best known of the Dutch organizations is Max Havelaar, founded in 1988. (Hiscox, 2007).

In the United States, fair trade certification is organized by Transfair USA, created in 1998. These separate national organizations (there are now about twenty) have created an umbrella international organ known as FLO (Fairtrade Labelling Organizations) to coordinate their activities and harmonize fair trade standards and methods of inspection and certification.

FLO claims that Fair Trade products are sold in over 55,000 supermarkets. In Switzerland, for example, Fair Trade products account for over 45% of the banana market, over 25% of the flower market and nearly 10% of all sugar sold.

2. Definition

DFID

FINE' is the acronym for a loose network of umbrella bodies and is comprised of the first letters of the 4 network members: FLO (Fair Trade Labelling Organizations) International, IFAT (International Federation for Alternative Trade), NEWS (Network of European World Shops), and EFTA (European Fair Trade Association

FINE (Mayoux, 2000) defines Fair Trade as "an alternative approach to conventional international trade. It is a trading partnership which aims at sustainable development for excluded and disadvantaged producers. It seeks to do this by providing better trading conditions, by awareness raising and by campaigning"

The producer lack information, skills, networks or resources to fully participate in existing markets or develop new ones.

The aim of Free Trade is to address these inequalities and imperfections through intervening at different points of the supply and marketing chain and promoting an enabling environment within which all enterprises can operate according to ethical principles (Mayoux, 2000)

3. Free Trade Supply Chain

The conventional Supply Chain, starts with the grower who sells in his country to traders who sells to a processor and/ exporters. The exporters sell to international brokers who sells to multinationals corporations which sell to distributors who provide the products to the store or the coffee shop and finally to the end customer.

In the Fair Trade Supply chain, the NGO buys from producers organized as a cooperative, and sell to a distributor or directly to stores and to end customers. The added value is shared between fewer intermediaries.

The grower is supposed to receive a higher added value than without fair trade.

4. Free Trade principles (FINE)

Free Trade principles are as follows:

- 1.To improve the livelihoods and well-being of producers by improving market access, strengthening producer organisations, paying a better price and providing continuity in the trading relationship.
2. To promote development opportunities for disadvantaged producers, especially women and indigenous people and to protect children from exploitation in the production process.

3. To raise awareness among consumers of the negative effects on producers of international trade so that they exercise their purchasing power positively.
4. To set an example of partnership in trade through dialogue, transparency and respect.
5. To campaign for changes in the rules and practice of conventional international trade.
6. To protect human rights by providing social justice, sound environmental practices and economic security.

5. FT Support and Impact

The Fair Trade organization supports not only the producer but also its environment. Technical support, price support, finance, organizational support, market linkages, networking, link to the customers and environmental planning are provided to the producer. At the community level the fair trade organization provides activities provides facilities such as water pumps and development education

5.1 Positive impact of fair trade

Some businesses have been saved, others have been introduced to exports for the first time, or export sales have increased (AMKA). Fair Trade employment may be the only source of income in areas of high unemployment or for certain types of worker e.g. women, the disabled (ECOTA Forum). Fair Trade employment, particularly in handicrafts complements other activities like agriculture through giving work in the off-season when alternative employment would not be available (Oxfam). Both prices and wages are generally higher than in the private sector (Oxfam, SEWA-Lucknow, PRADAN, Maquita). The income benefits may be small when commodity prices are buoyant, but are significant in difficult times when commodity prices slump (comments from Twin on Kuapa Kokoo and other partners).

Educational and social services There have often been improvements in children's education (Oxfam). Premiums are often used for building social amenities leading to improvements in health and education (Kuapa Kokoo see Insight 10).

Fair trade has generally contributed to development of new skills and greater access to international markets(Oxfam).

In some groups the development of fair trade activities led to impressive results in terms of the leadership role taken by women in their communities and at a regional level (Oxfam, Kuapa Kokoo, SEWA-Lucknow, ECOTA Forum).

5.2 Problematic impact of fair trade

Many FTOs are not dealing with the poorest producers and may be disadvantaging them in markets (Blowfeld et al 2000, Candela).

Income increases for women workers in more crowded industries (Oxfam study) and businesses in more remote areas run by poorer entrepreneurs (Just X, Zambili and AMKA) are less marked.

Gender inequalities persist in many organisations. Within organizations and enterprises women are often assigned to traditional and low paid tasks although generally there is equal pay for equal work (Oxfam). Wages for women in handicrafts are often less than those for male agricultural labour (Swallows Thanapara embroidery workers).

The effects of Fair Trade on marginalised producers: an impact analysis on Kenyan farmers¹
Leonardo Becchetti²Università Tor Vergata, Rome Marco Costantino³
FORMEZ, RomeAutonoma di Trento under the cooperation project "*Programma di sostegno all'attività produttivo - commerciale delle organizzazioni artigianali senza scopo di lucro del Kenya*", managed by Cooperativa Mandacarù (Trento) and by Consorzio Ctm altromercato, and coordinated byLorenzo Boccagni.

Very few researches tried to analyze and quantify the impact of FTO activities. One of the very few impact studies testing the statistical significance of fair trade is performed by Bacon (2005) on a sample of Guatemalan coffee producers. The study shows with a two way Anova approach that the access to certified markets has a positive and significant effect on sale price

The report on FT impact on the “Productores de Miel Flor de Campanilla” in Oaxaca, Mexico (Castro, 2001) presents mixed findings. Also in this case FT played a positive by providing financial and technical assistance and improving quality standards. Nonetheless, the author observes that results, in terms of livelihood improvement, have the cooperative is still struggling for survival in the international trade market.

The DFID (2000) study on the effects of FT in the Ghana KK cocoa cooperative and in the Tanzanian coffee market shows that, in the two case studies, FT has mainly relationships with first level producer organisations and not with the individual producers. The research also concludes that the main role of fair trade is in, capacity building, equipment, technical and business skills.

Leonardo Becchetti analysed the effects of Fair Trade on marginalised producers in Kenya . He used a sample of 120 Kenyan farmers divided into four groups. The first (Bio group), includes certified organic farmers with long term affiliation to Meru Herbs and long term access to FT channels. The second group, (Conversion group), Meru Herbs farmers under conversion toward the organic certification with short term or starting partnership with FT. The third group (Onlyfruit group), Meru Herbs farmers which are fruit producers and have a non systematic relationship with FT. The fourth group (Control) is selected in order to closely match the characteristics of the previous three with the qualifying difference that its members are not part of Meru Herbs and have no relationship with FT.

The descriptive findings presented in the previous section suggest that farmers participating to the FT initiative have better price conditions, more diversified crops, higher food consumption, less episodes of child mortality and superior income satisfaction. The researcher concludes that Fair trade is definitely responsible for crop diversification, creation of an additional trade channel and higher price satisfaction of marginalised producers. Fair trade and Meru Herbs affiliated have also been shown to have relatively higher food consumption expenditure and dietary quality, with the latter being seemingly related to the previously mentioned FT direct effects on price satisfaction.

All those studies show a direct light positive impact on income of the targeted producers but not a real economic development in the concerned regions. There is no a common economic policy of the FTO in order to have an economic and social impact beyond the direct support of such or such cooperative. They are not also organized together in their downstream activities such as quality control, warehousing, exports processing and distribution. Their activities are organized and managed as charitable activities than business, social and economic activities.

In the following chapter we will present the economic development models mainly used in developed countries and how they can be adapted to the social and economic conditions of developing countries.

5.3 Case studies analysis

5.3.1 Kuapa Kokoo Ghana

Kuapa Kokoo is a cooperative of 1200 villages with around 45000 members, specialized in the production of cocoa and related products. They received the Fair Trade certification in 1995. To day they sell around 12% of their production to Fair Trade organizations. They have created their proper structure of exports in order to cut the cost of intermediaries.

A part of their production is processed locally into raw material for cosmetic uses, and chocolate sweets and tablets. The remained production is exported through the national network (Figure 14).

They succeeded in cooperation with The Body Shop, Christian Aid and Comic Relief, to produce locally high quality cocoa end products, and to sell it under their own trade mark "Divine", in the UK market (Insight 10). The cooperative has in this partnership 45% of the shares. The turnover in 2008 was around 12 Million pounds. Processed cocoa for cosmetics uses is sold to The Body Shop.

In March 2009, Cadbury announced the groundbreaking move to convert all Cadbury Dairy Milk chocolate in the UK and Ireland to Fairtrade. This will triple the sales of cocoa under Fairtrade terms for cocoa farmers in Ghana to 10,000 tons a year.

This move will also open up new opportunities for thousands more farmers to benefit from the Fair trade system. Around 650,000 mainly small-scale cocoa growers in Ghana do not belong to farmers' organisations and sell their crop individually to licensed buying companies. In the longer term Fairtrade will be working with Cadbury and local organisations to help organise more groups of cocoa farmers into co-operatives and work with them to achieve Fair trade certification. This will build on the Cadbury Cocoa Partnership (CCP), launched in January 2008, in which they are investing £30m over 10 years in Ghana to improve the lives of cocoa farmers.

The support of fair trade organizations helped to fund social projects as detailed herewith:

Health and Safety

Several communities have benefited from pump wells.

Periodic mobile clinics provide medical services to the members.

Insight 10 Kuapa Kokoo cooperative in Ghana and Free Trade

Kuapa Kokoo was certified as a Fairtrade producer organisation in 1995.

Kuapa Kokoo's partnership with Fairtrade is helping develop a strong, democratic institutional framework at all levels of the organisation. With the additional income from Fairtrade premiums, Kuapa Kokoo has been able to improve the livelihoods its members; projects undertaken by the organisation have helped the farmers, especially the women, empower themselves, build confidence and independence, and ensure a sense of community participation and ownership.

The Divine Story

In autumn 1998, Divine, the first ever Fairtrade chocolate bar aimed at the mass market was launched onto the UK confectionery market. In an exciting new business model, the co-operative of cocoa farmers in Ghana own shares in the company making the chocolate bar. Two farmers' representatives came to London to celebrate at the most Divine launch party in town.

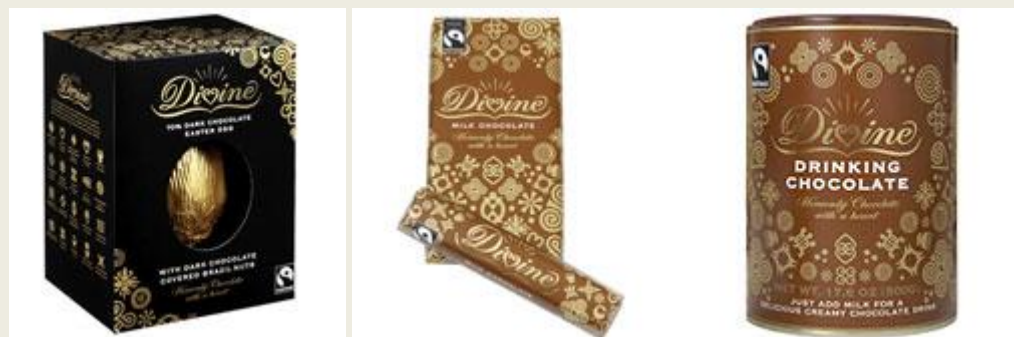
A Brand New Day

Together with Twin, Kuapa helped set up The Day Chocolate Company in 1998, with the enthusiastic support of The Body Shop, Christian Aid and Comic Relief. The company was named in memory of Richard Day, a key member of the team at Twin that had helped Kuapa Kokoo develop its organisation.

The Department for International Development pulled out all the stops to guarantee Day's business loan, and NatWest offered sympathetic banking facilities.

Simply Divine

Divine Fairtrade milk chocolate, made from Kuapa's best of the best fairly traded cocoa beans was launched in October 1998 and by Christmas 1998, had made it onto the supermarket shelves . . .



<http://www.divinechocolate.com/products/beverage.aspx>

Figure 15 Manufacturing Process of Cocoa in Kuapa Kokoo cooperative in Ghana



Education

Several schools have been built.

Kuapa Kokoo in collaboration with Trading Visions, a United Kingdom (UK) based NGO runs the Fairtrade Education Project in three (3) schools in Ghana and several others in the UK linking them through the internet for cultural exchange. Activities under this project include Webcasts, Video Conference, Kids Camps, Variety Shows, and Exchange Visits.

Economic and Social Empowerment

Kuapa Kokoo has invested in corn mills and palm oil extractors, training in soap making, batik etc. for societies to provide alternative means of livelihood during the off-season.

5.3.2 Kavokiva cooperative, Cote d'Ivoire

Kavokiva, is with 6000 members, one of the largest cooperative of cacao in Cote d'Ivoire. More than 50% of its production is sold to Fair Trade Organizations. But, still the economic situation of the grower is very difficult. The audit realized in 2009 by Free Trade Laboratory ((FT Laboratory, 2009) evaluates the revenue per kilo to the grower to 400 FCFA when the cooperative receive 1300 FCFA (2600 USD) (Exhibit 17

Exhibit 17: Cacao price, costs and net revenue to the grower

Official Price to the cooperative per kg : 1300 FCFA FOB / kg (2600 USD)

FT support 175 FCFA/ Kg

Price CIF 1425

Taxes in Côte d'Ivoire :

- Fix : DUS (Right to export) : 220 FCFA /kg
- Tax d'enregistrement : 10% of the price : 142,5 FCFA / kg
- Parafiscal : ARCC : 50 FCFA / kg

FDPC : 18,96 FCFA fixe /kg

Cost of boarding : 30 FCFA / kg (mise à flot)

Cost of processing : 15 FCFA + 15 FCFA / kg

Cost of packaging : 10 FCFA / kg

Total taxes and preparation for export : 502,5 F CFA / kg

Cost and margin of the cooperative : 233 FCFA / kg

Payment to producers : 689,5 FCFA / kg

Labor cost 213 F CFA / kg

Net Revenu producer 400 F CFA / kg

The net revenue per capita for a representative grower is as follows:

3 ha , 1.5 tons of cocoa

At that period the price per kilo was 450 FCFA + 60 (FT support) + 40 (quality) = 550 FCFA

So his total revenue is around 550 FCFA x 1500 kilo = 825,000 FCFA

Labor cost was evaluated at 160,000 or 320000 FCF and so

Net revenue 505,000 to 675, 000 FCFA . A family counts in average 8 people. The annual revenue per head is between 63125 to 84375 FCFA or per day between 174 to 231 FCFA . 1 Euro equal to 600 FCFA.

The revenue per capita is between 0.3 to 0.4 EURO. In better period it can be around .70 Euro.

In such conditions the grower cannot invest in his plantation and improve its efficiency.

Training of the members have been postponed and not implemented at all.

The plantation are old the growers don't have enough revenues in order to renew it.

The economic situation of the member of Kuapa Kokoo seems better that of the member of Kavokiva. Kuapa Kokoo is business entrepreneurship oriented with its trade mark chocolate "Divine" and its production of raw material to cosmetic industry.

Kavokiva members are still at the subsistence level

5.5 Fair Trade business entrepreneurship minded

Fair Trade model try to improve the quality of life the subsistence entrepreneur by increasing his revenue and the social infrastructure around him, road, medical services, schools. Training programs, support to processing activities, branding as implemented in Kuapa Kokoo cooperative foster is the way to achieve the level of business entrepreneurship.

The cooperation of Fair Trade organizations with business minded companies in UK such as Cadburry or the Body Shop is the right fair trade model in order to achieve economic development

PART V

Agribusiness in Africa: Towards Industrialization. The Missing Link From Subsistence to Business: the Progressive Model of Development

4. Introduction

Growth versus Economic Development in sub-Saharan African countries
GNP annual growth rate of sub-Saharan African (SSA) countries enjoyed higher prices of crude petroleum, minerals and agricultural products and grew from 2.4% in 1999-2001 to 3.9% in 2001-2004 (World Bank, 2001, 2006). But this economic growth has not had any impact on economic development and poverty. The income poverty indicator of Millennium Development Goal No. 1 (MDG1), the number of people living on less than US\$1 per day (purchasing power parity, or PPP), did not change from 1990 to 2004 (UNECA, 2006). While the total number of people worldwide living on less than US\$1 per day from 1981 to 2001 declined from 1.45 to 1.1 billion, the number in SSA countries increased from 164 to 314 million (World Bank, 2004). Poverty is expected to decrease in Asia and Latin America, but to increase in Africa and the Middle East.

According to analyses initiated by the International Labour Organization (ILO, 1999; 2007), growth in the extractive mineral and fuel sectors has generated very few jobs across economies.

From 2008, the world economic crisis generates a slow down of demand for oil and minerals and cut the revenues of several SSA countries, worsening their economic situation. From an overall current account surplus position of 2.9% of GDP in 2008, the continent will face a deficit of -4% of GDP in 2009. The large surplus of 8.8% of GDP for the group of oil exporters will turn into a deficit of -4% of GDP (ADB, 2009). This is a direct result of the expected decline in oil revenue

Africa will not be spared from the pessimistic world trade outlook for 2009. Exports and imports growth rates are forecast at 3.6% and 10.5% in 2009,

respectively compared to 10.6% and 15.2% in 2008. As a result, the impact of the crisis on foreign exchange is expected to be negative. Having benefited from the recent primary commodity boom, Africa will experience a loss of 45.4% of its exports value in 2009 (ADB, 2009). Losses in export growth rates are not compensated for by decreasing import growth rates in value terms, implying that the trade balance may deteriorate.

In such a situation, SSA countries have to take advantage of the dramatic expansion of the global population and the world growing interest in the agribusiness sector.

The United Nations estimates that the global population will expand from 6.5 billion in 2005 to 8.3 billion people in 2030 (UN, 2007). However, availability of land per capita will diminish from 2.2 to 1.8 m². Moreover, global warming is causing extreme temperatures and adverse weather conditions, putting a further strain on food supply. Global stocks cover only five weeks of international corn consumption and eight weeks of international wheat consumption.

FAO estimates that arable land area in developing countries will increase by about 120 million ha over the 2003–30 period, an increase of 13 percent, mainly in SSA countries (60 million ha) and Latin America (40 million ha).

The growing demand for bio fuel energy, resulting from the new Obama's policy of energy, compete for this arable land with food and open new economic opportunities for SSA countries.

The availability of land and the growing demand for products related to agribusiness, from food to energy, is for SSA countries an excellent opportunity in order to start the industrialization process.

The main objective of this paper is to discuss and propose relevant models able to transform economic growth into economic development based on industrialization of the agribusiness sector.

5. Production Versus Market-Innovation Approach

2.1 Production Approach

The production approach considers production as the main function of the firm. The value chain presents the different activities able to improve the margin resulting from production and products. Porter (1998) refers to two kinds of activities, primary and support activities.

Primary activities refer to inbound logistics (inputs and transfer of inputs), operations (production), outbound logistics (warehousing, transportation to the market), sales and after-sales services. Support activities refer to procurement, research and development, human resource and strategic management.

The impact of primary activities on production can be improved by:
better availability and logistics of inputs (inbound logistics);
more efficient production (operations)
higher cost-efficiency of transportation and warehouse networking, which brings the products to the market (outbound logistics);
more efficient distribution and sales network.

Growers in the United Republic of Tanzania used of drip irrigation systems (inbound logistics) and succeeded to double the production of tea per ha after the third year (Netafim, website).

Post-harvest technologies (operations and outbound logistics), improve output efficiency by providing a longer shelf life to agricultural products. The Agricultural Research Organization (ARO, see websites list) in Israel, in cooperation with a local company, Shelah (see websites list), has developed a rotary brush washer, using sprays of hot water killing fungicides. This process prolongs the shelf-life of peppers by more than two weeks.

The impact of support activities on production can be improved by:
suitable, long-term business strategy;
efficient human resources management;
improvement of products;

efficient selection process of procurement sources.

The production approach improves current products but doesn't allow the prospection of new markets and products.

2.2 Market Approach

Market approach starts with needs, wants and demand of market segments needs and seeks for relevant products able to satisfy both customers and firm (Kotler, 1977). Kotler defines it as "an effective marketing organization focused on the external environment, which is said to include both customers and competitors".

Market approach (Narver and Slater, 1990) consists of three behavioural components – customer approach, competitor orientation and interfunctional coordination – and two decision criteria – long-term focus and profitability. Customer approach is "the sufficient understanding of one's target buyers to be able to create superior value for them continuously" (Narver and Slater, 1990). Competitor approach means that "the seller understands the short-term strengths and weaknesses, and long-term capabilities and strategies of the competitors." Interfunctional co-ordination refers to "the co-ordinated utilization of company resources in creating superior value for target customers" (Narver and Slater, 1990). Kohli and Jaworski (1990) acknowledge the importance of customer focus, but in their definition, market intelligence is at the centre of market approach. They introduce market intelligence instead of customer focus, since in their view, the former is much broader.

This approach includes consideration of exogenous market factors that affect customer needs and preferences, current and future.

In another study on market orientation, Ruekert (1992) borrows from definitions by Narver and Slater (1990) and Kohli and Jaworski (1990), but focuses on strategy as a tool to implement market orientation. He defines market orientation in a business unit as "the degree to which the business unit: obtains and uses information from customers; develops a strategy that

will meet customer needs; and implements this strategy by being responsive to customer needs and wants.”

Several studies have supported a positive correlation between market orientation and profitability (Martin and Grbac, 2003; Slater and Narver, 2000).

The literature on the market orientation concept has assumed that the implementation of market orientation would lead to superior organizational performance (Piercy *et al.*, 2002). Kohli and Jaworski (1990) argue that the greater the market orientation of an organization, the greater would be its overall performance, and that this relationship would be moderated by several external forces such as weaker economy, greater market turbulence and competition.

Despite the significant attention to market orientation in the marketing literature, three general problems can be identified. Levitt (1960) stated that the marketing concept is not a “fixed point in space”, nor is its implementation always successfully achieved.

Nilson (1992) and Zebal (2003) also stressed the importance of revising the marketing concept. Market orientation and all of its four components – customer emphasis, intelligence generation, intelligence dissemination and intelligence responsiveness – were found to make significant contributions to both the economic and non-economic performance of business.

The interactive production-market orientation approach, which first checks and evaluates the potential market and then improves the production-oriented value chain of the selected product, provides better chances to increase the business added value of the firm.

Innovation Approach

Jaworski and Kohli (1996) suggest that market approach could have been an antecedent to innovation, and that market-oriented organizations tend to be more innovative (Liu *et al.*, 2003). Erdil *et al.* (2003) proved that the behavioural component of market orientation is positively related to product

innovation. The innovation process includes the acquisition, dissemination and use of new knowledge (Calantone *et al.*, 2002) and successful implementation of creative ideas within an organization (Amabile *et al.*, 1996).

Corporate entrepreneurship and innovativeness are highly correlated (Liu *et al.*, 2002). A firm's capability to innovate consists of product innovativeness from customers' and firms' perspectives and innovation in production processes (Victor *et al.*, 2000), based on work organization and human resource management (Baer and Frese, 2002). Verhees's research on rose growers in the Netherlands (2001), shows that market orientation is also applicable to small independent companies and that the behavioural component of market orientation stimulates product innovation.

Processing of kola to anti fatigue and anti depressive medicine, as the Australians do (see website list), coconuts into yoghurt, cream and cosmetic oil as the Malaysians do (see website list) and of cassava to flour, attieke, gari or baked products, are some of many potential feasible innovative products.

6. Models of Regional Development

The main models of development discussed in the literature are the Incubator, the Industrial District, the Cluster and the Regional Innovation System (RIS).

3.1 The Incubator Model

The United States National Business Incubation Association (NBIA) (see websites list) defines the business incubator as "a dynamic process of business enterprise development, providing, under one roof shared office services, access to equipment, flexible leases, and expandable space". Its

main task is to create a dynamic of development in the supported small and medium-sized enterprises (SMEs) by providing management and consulting services as well as relevant material and financial resources. Its wider task is to support macro-economic-related (employment) or micro-economic-related (implementation of technologies) objectives.

In 1956, Massey-Fergusson, the largest industry in Batavia, New York, United States of America, closed down, leaving vacant an 850,000 ft² complex of multi-story buildings. The Mancuso family purchased the complex and charged Joe Mancuso with the responsibility of creating jobs and making money. Mancuso decided to divide the building and rent its units to individual businesses that he would nurture by providing shared office services, assistance with raising funds and business consulting.

One of his first tenants was a chicken processing company, thus the origin of the name “incubator” and of a new model of promoting SME development.

The first business incubator, Batavia Industrial Park (BIP), was thus created. BIP reached capacity after five years and created thousands of jobs for the area and appreciable earnings for its owners, its tenants and the city of Batavia.

The incubator model supports the development of SMEs as a source of local economic development. In 1979, June Lavelle, in her capacity as Executive Director of the Industrial Council of Northwest Chicago, developed the incubator concept as a model for neighborhood revitalization programmes. In a vacant 350,000 ft² facility in northwest Chicago, the Fulton-Carroll Center for Industry (FCCI) became the headquarters for the revitalization of an abandoned industrial neighborhood. As a result of the work of FCCI’s support team of successful business people, the vacancy rate of the surrounding neighborhood’s commercial property dropped sharply and real estate values have risen. The FCCI incubator fosters local development by creating job opportunities initiated by new entrepreneurs.

The United Nations Industrial Development Organization (UNIDO) adopted the incubator model to “create a favourable environment for entrepreneurship

and the expansion of SMEs” in developing countries (UNIDO, 2002). It has been implemented in many SSA countries such as Angola with the INEFOP-PEA Business Incubator in Luanda, in Kenya with the Jomo Kenyatta University of Agriculture and Technology Center for Business Innovation (JKUAT-CBI), and the private incubators Kountry Business Incubator (KeKoBI) and SACOMA. (<http://www.busyinternet.com/incubator/>). But, Nigeria is quite representative of the difficulties encountered by SSA countries in order to implement the incubator model. The Nigerian Incubator System Foundation (TBI) founded in 1993 as a cooperation with UNFSTD, the private sector, the states and the federal government, decided to create three incubators, in Lagos, Nara and Kano. But due to corruption, the Federal government nationalized it in 1995. Lagos incubator started only with 11 tenants.

South Africa only differs from the other SSA countries and succeeded in implementing the incubator model (Giddings, 2009).

South Africa has 21 incubators supporting entrepreneurs in diverse sectors: 9 technology incubators (one biotech; one bio-medical; two chemical and five ICT), six manufacturing incubators (automotive, wood, stainless steel, base metals, aluminum, platinum), one mining incubator, three agricultural incubators (flowers, biodiesel, essential oils), one construction incubator and one fully private sector. Most are supported by the national government and to a lesser extent by provincial and local governments. The South African Business and Technology Incubator Association (SABTIA) was created by incubator professionals and has since become an organization representing incubators in South Africa. The few hundreds of entrepreneurs supported by those incubators have a small impact on economic development in South Africa.

3.2 The Industrial District Model

Becattini (1990) conceptualizes the industrial district, defining it as: “a socio-territorial entity which is characterized by the active presence of both a community of people and a population of firms in one naturally and historically bounded area” (Becattini, 1990). In the district, community and firms tend to

merge. In Italy, the industrial district model first appeared in the 1970s. Industrial districts in the textile industry in Carpi and Prato, the furniture industry in Brianza and Cascina, and the footwear industry in Vigevano opened new markets in Europe and Japan for the Italian industry (Brusco, 1982).

Today, industrial districts in textiles, ceramic tiles, food processing, furniture and agricultural machinery tools are concentrated in northern and central Italy (Paniccia, 1998).

The industrial district model requires flexible specialization, deepening division of labour between firms, differentiation of enterprises by process or products (Rabellotti, 1995; Schmitz, 1995; Rabellotti and Schmitz 1999), inter-firm cooperation and mutual trust, and a positive industrial atmosphere (European Commission, 2002).

The main feature of an industrial district is the role of the institutions, which can be defined as “a set of humanly devised behavioral rules that govern and shape the interaction of human beings, in part by helping them form expectations of what other people will do” (Nugent and Lin, 1996).

Institutions and local authorities in SSA countries are weak and so, Industrial District model is difficult to implement.

3.3 The Cluster Model

The cluster model (Porter, 1998) is a “geographic concentration of an array of linked, competitive firms that have close buy-sell relationships, utilize common technologies, share customers, or share a labour pool that provides them with a competitive advantage”.

The cluster model gains competitive strength due to its better access to trained and experienced employees, suppliers, specialized information and public goods, as well as from motivating forces of local competition and customer demand (Rosenfeld, 1996; Enright, 2000; Saxenian, 1994). In their research on successful cluster development practices in the United States

and Italy, Christensen, McIntyre and Pikhoid (2002) emphasize the business generator aspect of the cluster. Lissoni (2001) argues that authorities and institutions should facilitate collaboration and networking, but Porter does not endorse this view on the grounds that such networking would lead to a reduction in competition.

An example of bottom-up development is the Silicon Valley, the first United States cluster model, which was initiated by private parties. Frederick Terman, Professor and Provost of Stanford University, proposed the leasing of Stanford's lands for use as an office park, the Stanford Industrial Park (SIP). Leases were limited to high-tech companies. Its first tenant was Varian Associates, founded by Stanford alumni in the 1930s to build military radar components. Terman also found venture capital for civilian technology start-ups. One of the major success stories was Hewlett Packard, which was founded by Stanford graduates William Hewlett and David Packard.

Networks were generated autonomously in both regions, Silicon Valley and SIP (Saxenian, 1994; Segel, 1985).

In most European Union (EU) countries, the clustering process was the initiative of governments. The EU Expert Group's final report *Enterprise Clusters and Networks* surveyed 59 traditional clusters and 25 science-based clusters (European Commission, 2007). According to the report, in the member states, policies towards cluster development are generally issued by national governments with the co-operation of regional or local governments. National authorities focus on designing and coordinating cluster policies to create the general framework conditions and developing R&D programmes. In certain countries such as Belgium and Spain, cluster policy is strictly a regional government initiative.

Regions in these two countries enjoy autonomous authority in this field and develop their own approaches and instruments.

In Germany, projects such as EXIST and BioRegio are the result of the Federal Government's cluster policy, a top-down approach (Colovic-Lamotte and Tayanagi, 2004). Regional governments have been required to share with the Federal Government the provision of financial support to spin-off companies from universities. The Finnish Government also encourages the development of industrial clusters. Finland's best-known cluster,

"Networking", located at Turku and Oulu, specialized in telecommunications and involves companies such as Nokia and ABB (TEKES, 2005).

The best examples of functioning clusters in SSA countries are in South Africa. The South African Petro Chemical cluster around Sasol near Witbank, which manufacture oil from coal, is one of the most successful cluster. In this cluster various supporting industries and downstream linkages were created, manufacturing products like: solvents such as alcohol, ketones, tar products, sulphur, ammonia, krypton/xenon, nitrogen and oxygen, feedstock, fuels like petrol, diesel, gas and paraffin (Nortjé, 1998). These and other by-products are used in the production of paint, fertiliser, plastic and plastic products, washing detergents and feedstock.

The cluster's motor vehicle industry around East London and Uitenhage in the *Eastern Cape* already produces 40 per cent of the country's output of vehicles, components, like motor spares and platinum exhausts, services and ten per cent of the chemical, pharmaceutical and petroleum industries (Nortjé, 1998).

But even those clusters have a limited impact on development. McCormick (1999,) differentiates between "groundwork clusters", "industrialising clusters" and "complex industrial clusters". Kleynhans (2003) thinks that even those successful clusters cannot be classified as complex industrial clusters. They tend to be smaller and less developed than their counterparts in Western countries.

In the 80s and early 90s, the government of Uganda ran a number of state enterprises and projects including those engaged in the production of fish nets (Uganda Fishnet Manufacturers), fish trawling (the Sino-Ugandan Fisheries Joint Venture with the Chinese), fish processing, three fish distribution centers, and a fleet of fish trucks (Uganda Fisheries Industries Limited) and the supply of fishing inputs (EEC funded Artisanal Fisheries Rehabilitation Project). Many of these state outfits ran into management and financial trouble prior to their closure or privatization (Kiggundu, 2007). According to Kiggundu, the key point is that despite this long history of public

investments in the fisheries, no attention was paid to the need to build and support local systems for learning and innovation.

The experience of the fisheries sector in Uganda suggest that public efforts have a vital and multi-faceted role to play in enhancing technological improvement for greater competitiveness. This role is not limited to enforcing regulation and standards of performance. It includes funding research, facilitating innovation, and arranging the provision of technical assistance. The Ugandan case underlines the vital role of public efforts in providing overall leadership and co-ordination of systemic learning, institutional change and continued interaction with the various players in order to ensure that combined efforts bring about the required knowledge flows.

For greater competitiveness of the fisheries sector in all three countries, public efforts will still have to play this multi-faceted role (Kiggundu, 2004).

The production of leather shoes in Ethiopia dates from the late 1930s when Armenian merchants founded two shoe factories in Addis Ababa. These factories nurtured a number of shoemakers, who opened their own factories in Addis Ababa and trained their workers. Today, the neighbourhood of Merkato, a huge marketplace in the city, swarms with shoemakers, wholesale shops dealing in leather, soles, and shoe accessories, and shoe retail stores (Adeya 2006). Sonobe, Akoten and Otsuka (2007) selected randomly a sample of 100 Large, medium and small firms in this cluster in order to analyze its development.

18 enterprises only in the sample were managed by second-generation entrepreneurs. The fact that the majority of the enterprises were new also indicates that only a small number of enterprises could survive in the face of intense market competition.

Van der Loop,(2003) selected also in Merkato, 42 enterprises composed of different footwear manufacturers and shops, such as large, medium and small-scale footwear producers, as well as shoe shops. He found that horizontal linkages, or the cooperation among similar types of enterprises, are rather weakly developed among footwear enterprises.

Seventy percent of the sampled firms do not undertake any joint purchase of raw materials with similar firms. In general terms footwear enterprises have rather weak vertical linkages. A minority of enterprises (29%) sometimes works jointly with other footwear enterprises in the form of receiving contracts or giving contracts, in particular capacity. The remaining enterprises do not work jointly at all, due to various reasons: they want to operate independently (47%), they do not have the trust (23%), there is no need for it (18%), or they are not aware of the possibility of joint work (12%). The first two reasons given (totalling 70%) are both pointing to a lack of trust in each other. The lack of trust among entrepreneurs seems to be an overriding argument.

In Kenya, McCormick, (2001) found that firms belonging to the textiles cluster undertake “production process”, while other activities such as design, procurement, and marketing are undertaken by firms located in developed countries. As a result, these firms operate at the lower level of garment GVC. To upgrade within the GVC, firms must seek to diversify their product mix.

3.4 The Regional Innovation System (RIS) Model

Innovation capability helps develop a sustainable competitive advantage over local and international competitors in local and global markets. It requires a relevant innovation policy at the government level.

Innovation policy in the forest and wood sector transformed Finland from a poor and underdeveloped economy into one of the international leaders of the paper sector. Finnish forest industry companies currently account for 25% of the global printing and writing paper exports (Sahi, 2003). Innovation policy in Finland in the telecommunications sector supported Nokia in developing a wireless communication system that could improve the reliability of the local telecommunication system all year round (TEKES, 2005). This was the starting point of the cellular phone, which, through Nokia, the world leader, also improved the economic added value for many other countries in the world.

Israel, a country without natural resources, and in which 60% of the land is desert, has provided the local and international market with improved agricultural products due to relevant innovation policy. It has developed the well-known drip irrigation system and products such as cherry tomatoes and seedless watermelons, among others.

As in Finland, the Israeli high-tech sector increased the added value of local and international economies by developing products such as the Disk-on-Key and Intel microprocessors for computer and cellphone applications.

Initially, the concept of the innovation system was applied in Europe at the national level (Lundvall, 1992; Nelson, 1993; Niosi *et al.*, 1993; OECD, 1999). Literature on the national innovation system (NIS) has revealed huge differences between countries in their economic structure, R&D base, institutional set-up and innovation performance (Edquist, 2001).

A growing interest in regional innovation systems (RISs) has emerged (Acs, 2000; Bathelt and Depner, 2003; Fornahl and Brenner, 2003; Mytelka, 2000). Autio (1998) provides a schematic illustration of the structuring of an RIS. An RIS is made up of two subsystems: the knowledge application and exploitation subsystem, which comprises the companies, their clients, suppliers and competitors, as well as their industrial cooperation partners; and the knowledge generation and diffusion subsystem, which consists of various institutions engaged in the production and diffusion of knowledge and skills. Key elements of the latter include public research institutions, technology-mediating organizations (technology licensing offices, innovation centres, etc.), educational institutions (universities, polytechnical institutes, vocational training institutions, etc.) and workforce-mediating organizations.

A strong RIS promotes competitiveness and growth, and is characterized by good framework conditions, strong capacity of knowledge generators and users, and public policies that try to strengthen systemic linkages between key actors in the region (OECD, 2007).

Innovation is the result of an interactive learning process that often involves several actors within companies as well as outside them (Simmie *et al.*, 2002). Innovation is a social and local process.

Innovation is, "in general, a groping, uncertain, cumulative and path-dependent process: knowledge is spatially sticky, and tacit knowledge", despite the growth of knowledge management tools, is not easily communicated, other than through personal interaction in a context of shared experiences" (Morgan, quoted in Amin, 2003).

The network of research centers in agriculture in SSA countries is the main infrastructure, able to create a RIS. In order to do so, they have to "merge with the community "as research centers do in" Industrial Districts"

Adaptation of the Models to the Economic Environment of SSA Countries

The Three Different Economies: the Informal Economy, the Formal Local Economy and the Multinationals

Within any SSA country, there are three different economies, each requiring a different model of development (Figure 1).

The informal economy, 80% of the economy in SSA countries, is composed mainly by SMEs such as small growers, farmers, producers of basic products (food, furniture, clothes) and providers of services (restaurants, kiosks, transporters, traders). These SMEs mainly supply the needs of the local customer. A small number of them sell in the international market indirectly (growers, farmers) through export companies. This is mainly a subsistence economy which cannot grow and contribute to economic development without undergoing a formalization process. Which model is able to generate such a process?

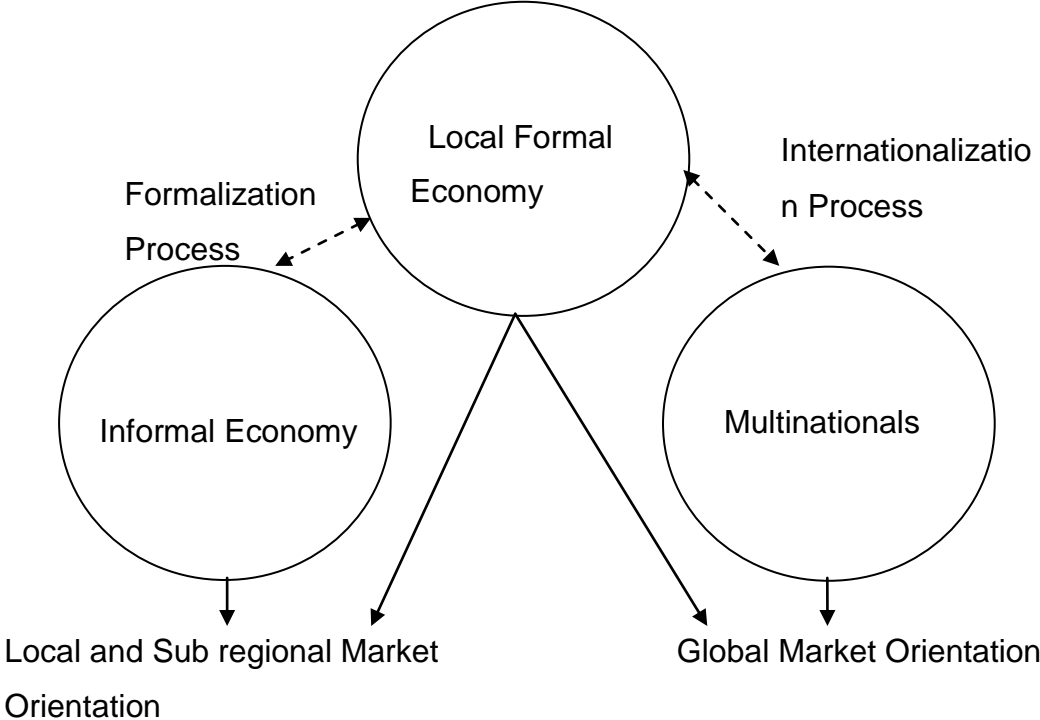
The formal local economy consists of firms of different sizes working in agriculture, industry, trade and many other services, such as banking, construction and telecommunications. Formal local firms mainly supply the needs of the local wealthier population and partially supply the needs of the

international customer (mainly exporters of agribusiness products). This economy, with relevant incentives from the government, can assist in formalizing a part of the informal economy. Unfortunately, in most of the SSA countries, however, this economy is the most taxed.

Which model will transform this economy as a support to the formalization process of the informal economy and as a generator of development?

The multinationals, the third economy, supply the needs of the local market and the international market. Some multinationals produce and sell mass products to local customers (soft drinks, ice, cream) or high-end products to the wealthier population (cellphones, computers). Others multinationals buy coffee, cacao, crude oil, minerals or rubber in SSA countries, but process it near the main customers in developed countries.

Figure 1 The Current and Potential Links between the Three Economies in SSA Countries



Natural rubber is at least 20% of the direct production cost of tires. This raw material is produced in Southeast Asia and West Africa. No one of its plants is located in countries producing this rubber. The production process is capital-intensive; the product (tire) is sensitive to the cost of logistics and the main customers are in developed countries. Michelin has no reason, therefore, to expand its production units in Africa. Two new plants are planned in Europe (Poland and Hungary) and one in Asia (India).

For years, Nestlé (see websites list) has been operating under the philosophy of decentralization in order to cater to local tastes and establish links with customers around the world. This is one of the reasons that most of its plants are located closer to the customer in developed countries: 95 plants are in Europe, 74 in North America and only five in SSA countries (not included South Africa). Even its cacao butter is mainly produced in developed countries. The reason, according to the World Cocoa Foundation (WCF, see websites list), is that, the shorter the time between the production of the cacao butter and the production of chocolate products, the better their quality.

How can we transform multinationals into generators of economic development for the benefit of the local market in SSA countries? Which model will be able to convince multinationals to invest in Africa?

These three economies have different objectives, needs and interests. Since their current and potential contributions to the local economy are different, they require different models of development.

The Incubator vs. the Open Incubator: A Model for Small and Medium-Sized Enterprises in the Informal Economy (Figure 2)

After the incubation stage (two years), each SME has to leave the incubator and is “transplanted” to its business environment in the community. There, the SME creates its own business networking (customers and suppliers) and confronts competitors. The transplantation process is a very sensitive stage that can succeed or fail. The new business community can reject those new entrepreneurs because they don’t belong to it,

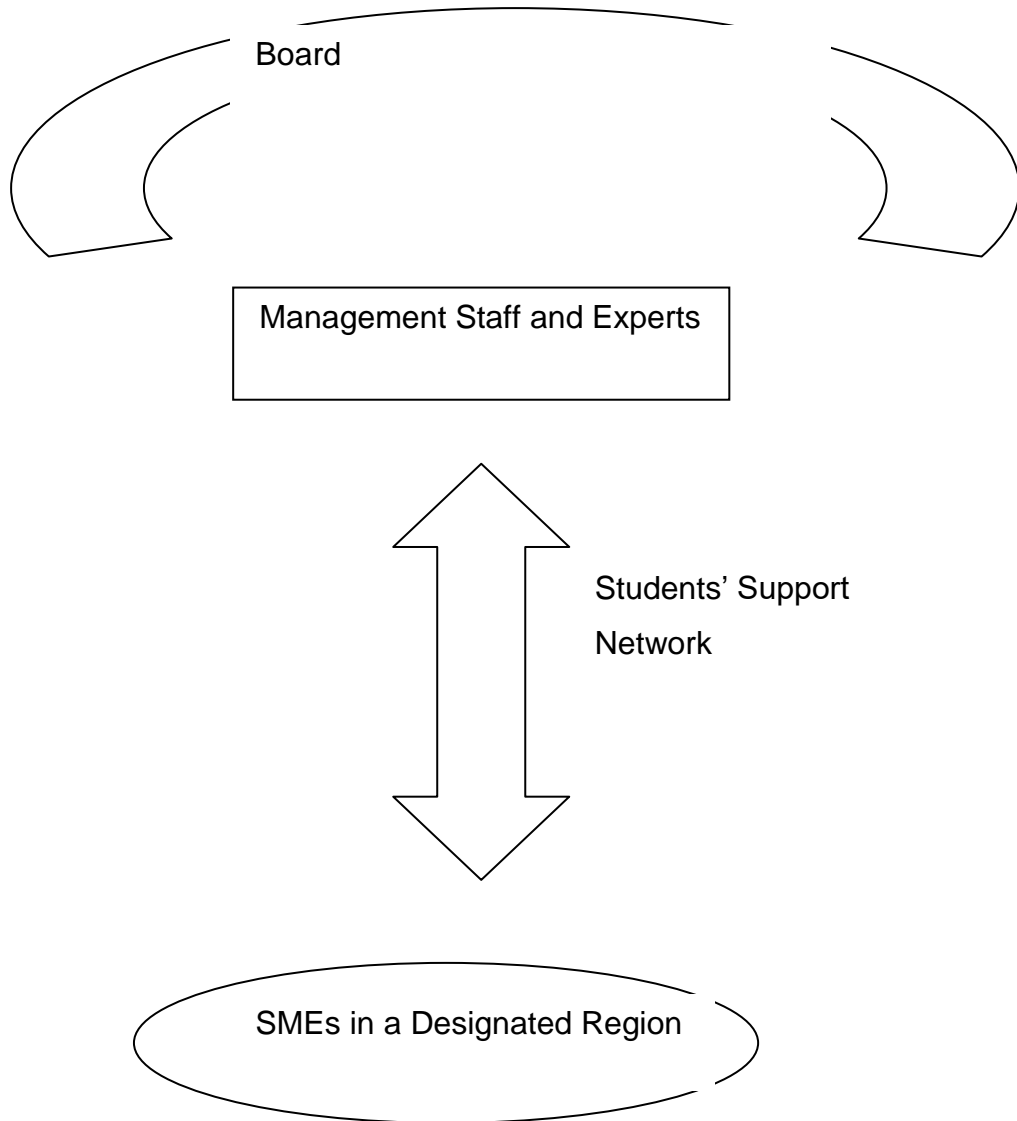
The staff and the group of experts supporting the SMEs in the incubator is exclusively dedicated to assisting them. An SSA country is able to open, very few incubators, because the number of its experts is very limited. Hundreds of entrepreneurs cannot generate the economic development of sectors or regions

A wide range of SMEs outside the incubator are not able to receive any support.

We propose opening up the services of the incubator to the hundreds of SMEs in the informal economy dispersed in a region and creating regional open incubators (Figure 3) (Bijaoui, 2015). In this way, the limited number of experts will serve a larger number of SMEs. The SMEs will remain in their natural business environment and will not face the risks involved in being transplanted.

In order to overcome both problems, i.e. the lack business knowledge of the informal SMEs and the limited available number of experts, we propose to establish a network of students in business management who would be responsible for presenting the SMEs’ requests and reporting on their business evolution to the managers and experts of the open incubator as the final project of their studies.

Figure 2 The Open Incubator Model



The students would thus acquire experience; some might even become employees or partners in the SME they supported. Students specializing in agriculture or any technical field could also be a part of this supporting student network. Their task would be to support the SMEs in improving production.

The Board of the Open Incubator will represent the different economic forces involved in the region/sector: Local authorities, Financial organizations, Educational infrastructure, Professional Associations

The Open Incubator Model provides the means to improve the formalization process of the informal sector by convincing SMEs in a positive way: Formalize and we will support you in your development. This model is able to generate this extremely important formalization process of the informal economy.

Industrialization of the Formal Sector based on Industrial Districts

Specialized open incubators will open the ground to the development of industrial districts, mainly focused on the fulfillment of local demand.

The formal sector can be structured in specialized regional industrial districts. The development of open incubators and industrial districts will improve the needs of the local demand, creating a growing interest of multinationals to supply higher added-value products to the local market.

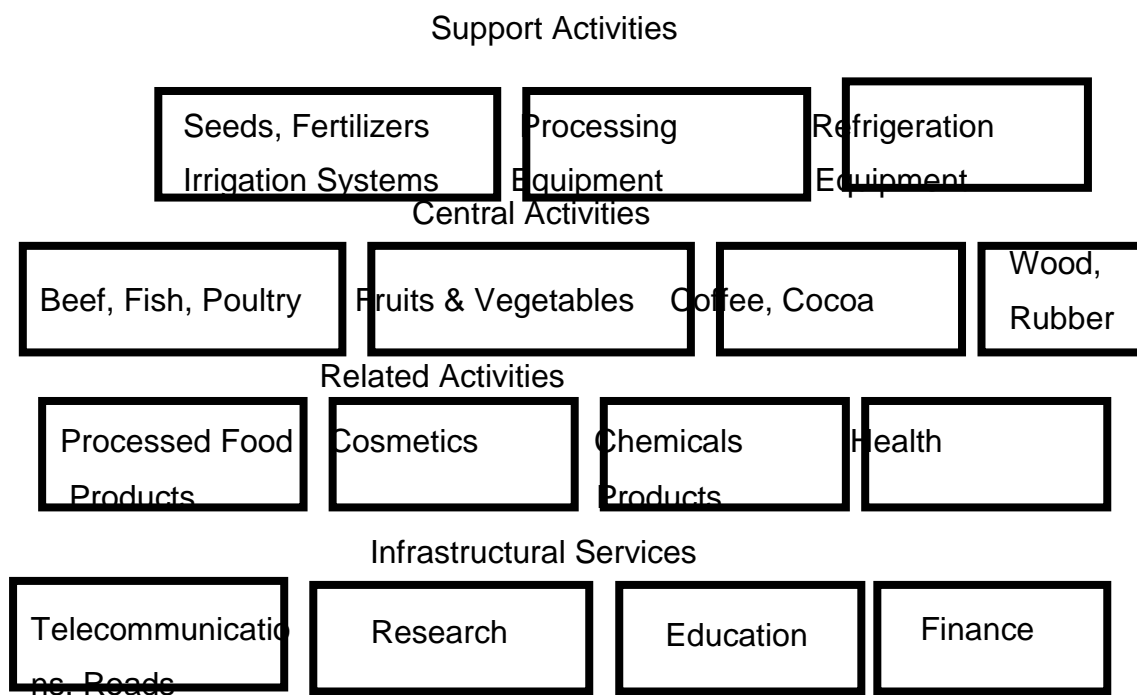
The Cluster Model: Upgrading Successful Industrial Districts with the Active Participation of the Multinationals (Figure 3)

The SSA cluster has to be invented. It requires a preliminary industrialization process as well as a critical mass of specialized companies. Successful open incubators and industrial districts will fulfill this condition. Due to the weakness of the private sector, the SSA cluster cannot be a bottom-up initiative such as the Silicon Valley, but must be a top-down initiative such as those in Europe.

The cluster model is composed of central, support and related activities with the backing of infrastructural services. An example of an agribusiness cluster is as follows (Figure 3):

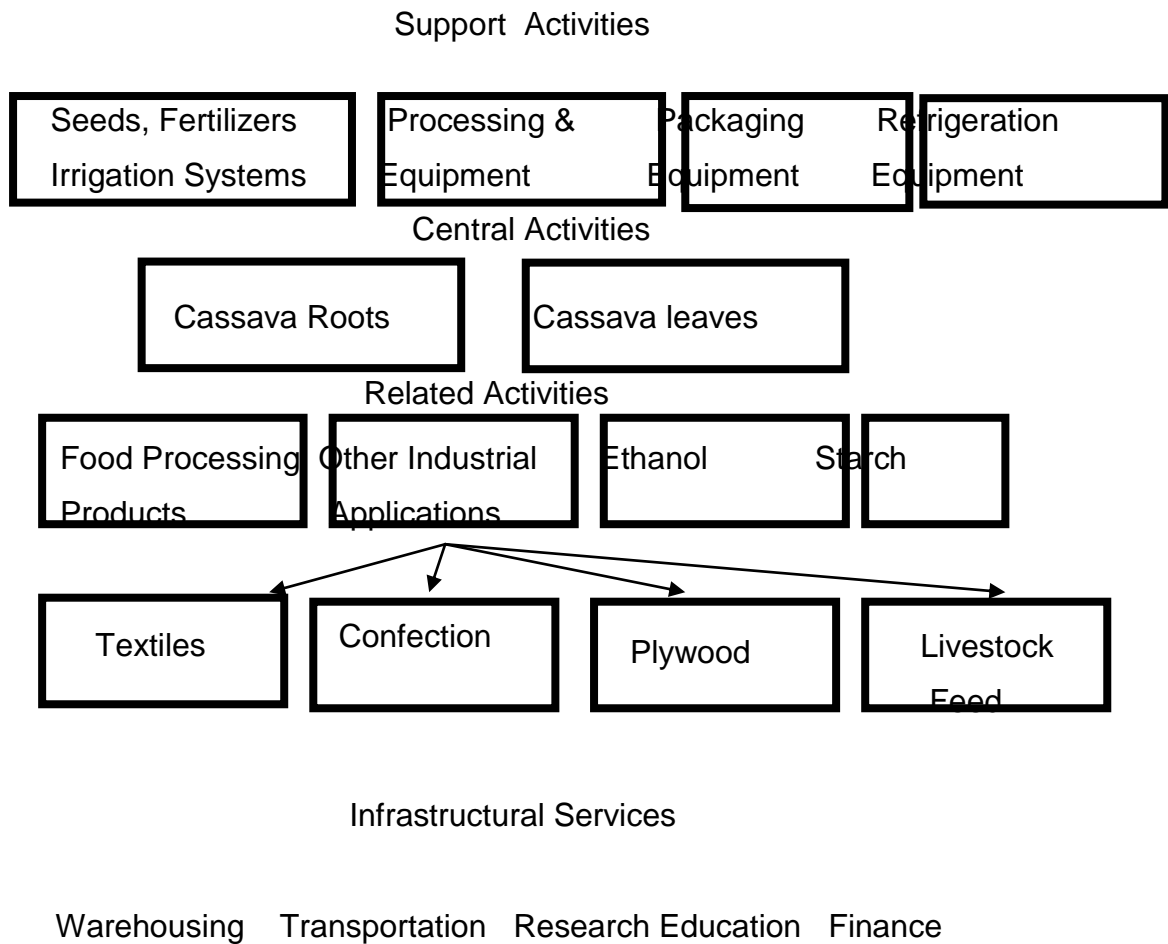
central activities: meat products (beef, poultry, fish), fruits and vegetables, basic crops (coffee, cacao, rice, sesame) and natural resources (wood, rubber);
support activities: seeds fertilizers, irrigation equipment, processing equipment refrigeration equipment;
related activities (processed food products, cosmetics, chemical products, health products);
infrastructural services (roads, telecommunication), research, education, finance.

Figure 3: SSA Cluster in Agribusiness



A sub-cluster can be developed around each central, related or support activity, An illustration of the cassava cluster is shown in Figure 4

Figure 4: The Cassava Cluster



The Regional Innovation System – A Source and Resource for Sustainable Economic Development

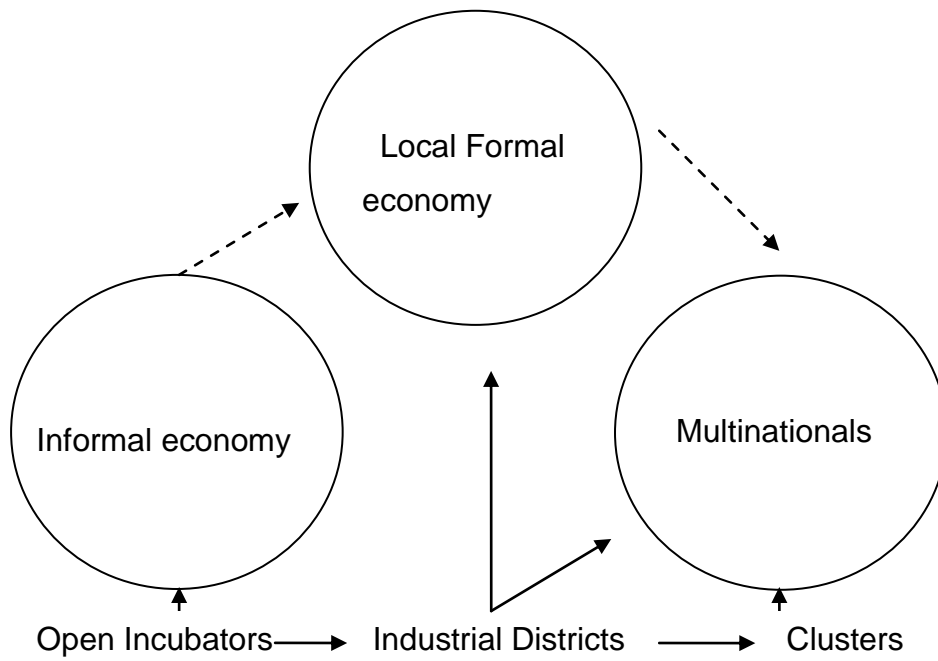
The RIS is an umbrella model, ensuring the growth of the open incubators, industrial districts and cluster models. It requires the active involvement of the national and regional authorities to create the relevant networking among the research centers, the educational infrastructure and the industries. ERVET in the industrial districts develops the basic innovation infrastructure through the creation of research centers, quality control laboratories and training institutions. The transformation of industrial districts into clusters requires an adaptation of this innovation infrastructure to the needs of the new basic, upstream and downstream activities.

3.5 The Progressive Model

The industrialization process in SSA countries requires a progressive approach on three parallel axes – the informal economy, the local formal economy and multinationals (Figure 5).

The informal economy needs professional and organizational support and relevant financial-fiscal incentives in order to be ready to be formal. Without formalization there is no possibility for growth. The Open Incubator Model provides the relevant framework for this formalization process. Specialized industrial districts will help the firms in the formal sector to organize and grow. Attracted by the development of the industrial districts, the multinationals will be interested in participating to clusters and RISs.

Figure 5: The Progressive Model towards SSA Industrialization



The agribusiness sector in SSA countries has to shift from production orientation, which is focused on the subsistence of local farmers and the needs of international customers, to a market - innovation orientation, which is focused on local economic development and higher added value of exports. The progressive model is the relevant step-by-step framework able to bring agribusiness in SSA countries to industrialization stage.

According to the top-down approach, the national and regional authorities will be able to transfer this new orientation using the progressive model: to the informal economy through open incubators, to the formal economy through industrial districts, and to the multinational economy through clusters (Figure 5).

References

- Acs, Z. (ed.). 2000, *Regional Innovation, Knowledge and Global Change*, Agricultural Research Organization (ARO), Pinter, London.
- Adeya N. (2006) "Knowledge, Technology and Growth: The Case Study of Lake Victoria Fishing Cluster in Uganda" Knowledge for Development (K4D) Program World Bank Institute World Bank
- African Development Bank (2009) "Impact of the Financial and Economic Crisis on Africa", Office of the Chief Economist, February 2009
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. & Herron, M. 1996, "Assessing the Work Environment for Creativity", in *Academy of Management Journal*, Vol. 39: 54-84.
- Autio, E. 1998, "Evaluation of RTD in regional systems of innovation", in *European Planning Studies* 6, 131–140
- Bathelt, H. & Depner, H. 2003, "Innovation, Institution und Region: Zur Diskussion über nationale und regionale Innovationssysteme", in *Erdkunde* 57, 126–143.
- Bear, M. & Frese, M. 2002, "Innovation is Not Enough: Climates for Initiative and Psychological Safety, Process Innovations and Firm Performance", in *Journal of Organizational Behavior*, Vol. 24: 45-68.
- Bijaoui, I. (2015) Open Incubators And Clusters In South Sudan: A Move To Achieve Economic Peace. *African Journal of Business Management*. Vol.9(20), pp. 725 - 733 , October 2015.
<http://www.academicjournals.org/journal/AJBM/article-abstract/DCBA63355768>
- Calantone, R.J., Cavusgil, S.T. & Zhao, Y. 2002, "Learning Orientation, Firm Innovation Capability, and Firm Performance", in *Industrial Marketing Management*, Vol. 31: 515-524.
- Christensen P., McIntyre N. & Pikhhold, L. 2002, Bridging community and development. A strategy for using industry clusters to link neighborhoods to regional economy. Shorebank Enterprise Group, Cleveland, U.S.
- Colovic-Lamotte, A. & Tayanagi, E. 2004, *What direction should the cluster policy take, top down implementation or bottom up emergence*. University of Paris-Dauphine Research Center DMSP. PhD thesis
- Edquist, C. 2001, "The Systems of Innovation Approach and Innovation Policy: An Account of the State of the Art". Presented at the DRUID Conference, June 12–15, Aalborg.
- Erdil S., Erdil, O. & Keskin, H. 2004, "The Relationships between Market Orientation, Firm Innovation and Innovation Performance", in *Journal of Global Business and Technology*

Enright, M.J. 2000, "Survey of the characterization of regional clusters. Initial results". *Institute of Economic Policy & Business Strategy. Competitiveness Program Working Paper* University of Hong Kong.

European Commission. 2002, *Regional Clusters in Europe*. Enterprise Publications Observatory of European SMEs, No 3.

European Commission. 2007, DG Enterprise Final Report of the Expert Group on Enterprise Clusters and Networks.

Food and Agriculture Organization of the United Nations (FAO). 2003, *World Agriculture: Towards 2015/2030: An FAO perspective*, ed. by Jelle Bruinsma.

FAO, International Fund for Agricultural Development (IFAD) & World Food Programme (WFP). 2005, *Working Together*. December 2005.

Fornahl, D. & Brenner, T. (eds.). 2003, *Cooperation, Networks and Institutions in Regional Innovation Systems*. Edward Elgar, Cheltenham

Haynes J. *Development Studies* 2008 Wiley

International Labour Organization (ILO). 2007, *The Decent Work Agenda in Africa: 2007–2015*. Eleventh African Regional Meeting, Addis Ababa, April 2007

ILO & UNECA. 1999, *Decent work*. Report of the Director-General, International Labour Conference, 87th Session, Geneva.

Jaworski, B.J. & Kohli, A.K. 1996, "Market Orientation: Review, Refinement, and Roadmap", in *Journal of Market Focused Management* 1: 119-135

Kamau P. (2005) "WTO and the Kenyan Garment Industry, a Value Chain Approach in Understanding Market Access UNU-IAS Working Paper No138

Kiggundu, R. (2005). "The How to of Technological Change for Faster Growth in Uganda's Fishery Exports", paper presented at The World Bank workshop on the "How to of Technological Change and Adaptation for Faster Growth", February 16-17, 2005 organized by PREM-EP, The World Bank in collaboration with ARD & DFID Washington DC.

Kiggundu, R. (2004). "Learning to Change: Why the fish processing clusters in Uganda learned to upgrade" in Oyelaran-Oyeyinka, B. and McCormick, D.(eds.) (in press). *The African Cluster: Pattern, Practice, and Policies for Upgrading*, UNU Press

Kleynhans E.P.J (2003). "The Effect of Globalisation on Regional Industrial Development. The South African Experience" Paper presented at the Conference on Clusters, Industrial Districts and Firms :the Challenge of Globalization.

Conference in honour of Professor Sebastiano Brusco Modena, Italy.

September 12-13, 2003

Giddings S (2009), "Incubation as a tool for Commercialisation Experiences from South Africa". KACST International Technology Incubator Forum March 16 2009. Worldbank.

Kiggundu R.(2007), "Learning to change: Why the fish processing clusters in Uganda learned to upgrade" in Oyeyinka B.O, McCormick D. *Industrial clusters and innovation systems in Africa: Institutions, markets and policy* United Nations University Press

Kohli, A. K. & Jaworski, B.J. 1990, "Market Orientation: The Construct, Research Propositions, and Managerial Implications", in *Journal of Marketing*, 54(April), pp. 1-18

Kohli, A. K., Jaworski, B.J. & Kumar, A. 1993, "MARKOR: A Measurement of Market Orientation", in *Journal of Marketing Research*, XXX(November), pp. 467-477

Kotler, P. 1977. "From Sales Obsession to Marketing Effectiveness", in *Harvard Business Review* 55 (November/December): 67-75

Levitt, T. 1960, "Marketing Myopia" in *Harvard Business Review*, Vol. 38, No. 4, pp. 45-56

Lika, T.(1997), Employment and Income in the Urban Informal Sector: A Case Study of Informal Leather Shoe Making Enterprises in Wereda 5, Addis Ababa. Unpublished M.A. Thesis, Addis Ababa University, Addis Ababa,

Liu, S.S., Luo, X. & Shi, Y. 2002, "Integrating Customer Orientation in Organizations –in-Transition: An Emprical Study", in *International Journal of Research in Marketing*, Vol. 19: 367-382

Liu, S.S., Luo, X. & Shi, Y., 2003, "Market-oriented organizations in an emerging economy: A study of missing links" in *Journal of Business Research*, June, Vol.56: 481-491

Lissoni, F. 2001, "Knowledge codification and the geographic if innovation: the case of Brescia mechanical cluster", in *Research Policy* 30 1479-1500

Martin, J.H. & Grbac, B. 2003, "Using Supply Chain Management to Leverage a Firm's Market Orientation", in *Industrial Marketing Management*, Vol. 32: 25-38

McCormick, D. (2001a) Value chains and the business system: Applying a simplified model to Kenya's garment industry, *IDS Bulletin* 32:3 pp. 105-115

McCormick, D. and H. Schmitz (2001b) Manual for value chain research on home workers in the garment industry, WEIGO Report, IDS, University Sussex, Sussex

McCormick, D., P. Kimuyu, and M. N. Kinyanjui (2001c) Kenya's garment industry: An institutional view of medium and large firms, *IDS Working Paper*, No. 531, Institute for Development Studies, University of Nairobi

McCormick, D., 1999, "African Enterprise Clusters and Industrialisation: Theory and Reality", *World Development*, vol. 27, no. 9, 1531-1552.

Mengistae, Taye (2001), "Indigenous Ethnicity and Entrepreneurial Success in Africa: Some Evidence from Ethiopia," *World Bank Policy Research Working Paper* 2534, 2001. ———, "Competition and Entrepreneurs' Human Capital in Small Business Longevity and Growth," *Journal of Development Studies* 42 (2006):812-36.

Mytelka, L. 2000, "Local systems of innovation in a globalized world economy", in *Industry and Innovation* 7, 15–32

Narver, J.C. & Slater, S.F. 1990, "The Effect of a Market Orientation on Business Profitability", in *Journal of Marketing*, 54(4), pp. 20-35.

Nilson, T.H. 1992, *Value-Added Marketing: Marketing Management for Superior Results*, McGraw-Hill, Maidenhead

Nortje, K. ed. (1997/1998)_. *South African provinces, cities and towns. (7)*. Auckland Park: Malnor.

OECD. 1999, *Managing National Innovation Systems*, Paris

Oyeyinka B.O, McCormick D. (2007) *Industrial clusters and innovation systems in Africa: Institutions, markets and policy* United Nations University Press

Piercy, N.F., Haris, L.C. & Lane, N. 2002, "Market Orientation and Retail Operative's Expectations", in *Journal of Business Research*, Vol. 55: 261-273.

Porter, M.E. 1998, "Clusters and the New Economics of Competition", in *Harvard Business Review*, Vol. 76, Issue 6, pp. 77.

Rosenfeld, S. 1996, "Bringing Business Clusters into the Mainstream of Economic Development", in *European Planning Studies Journal* Vol, 4.

Ruekert, R.W. 1992, "Developing a Market Orientation: an Organisational Strategy Perspective", in *International Journal of Research in Marketing* 9, 225-245.

Sahi A. 2003, "Promoting Sustainable and Profitable Private Forestry". Forest Academy Helsinki , Finland

Saxenian, A. 1994, "Regional Advantage: Culture and Competition in the Silicon Valley and Route 128". Harvard University Press

Schmidhuber, J. 2005, "The Nutrition and the Energy Transition of World Agricultural Markets", Plenary presentation at the German Association of Agricultural Economists (GEWISOLA), Göttingen, October

Scott, A.J. 1988, *New Industrial Spaces Plan*, London

Segel N. 1985, Cambridge Phenomenon: The Growth of the High-Technology industry in a university town. Cambridge, UK

Slater, S.F. & Narver, J.C. 2000, "Market Oriented is More Than Being Customer-Led", in *Strategic Management Journal*, Vol: 20: 1165-8.

Sonobe T. Akoten J.E. Otsuka K,(2007) Development of Industrial Clusters in Ethiopia: How Different from East Asian Experience? JEL Classification Numbers: L67, O31 Foundation for Advanced Studies on International Development.

TEKES. 2005, Annual Review. Finnish Funding Agency for Technology and Innovation (TEKES), Helsinki, Finland

UNCTAD, 2006. United Nations Conference on Trade and Development

United Nations Economic Commission for Africa (UNECA). 2007, *Economic Report on Africa* New York

UNECA. 2006. Millennium Development Goals, based on United Nations Database. Available at www.mdgs.un.org/unsd

United Nations Industrial Development Organization (UNIDO). 2002, "Business Incubators: The Concept", by M. P. van Dijk. Available at: www.unido.org/stdoc.cfm?did=300456

Van der Loop T. (2003) "Industrialisation, Value Chains and Linkages;The Leather Footwear Sector in Addis Ababa, Ethiopia Working Paper *Institute of Social Studies (ISS)* The Hague, The Netherlands

Verhees, F. 2000, "Market Orientation, Product Innovation and Market Performance: The Case of Small Independent Companies", Department of Marketing & Consumer Research, Hollandseweg, Wageningen, The Netherlands

Victor, B., Boynton, A. & Stephens, J.T. 2000, "The Effective Design of Work Under Total Quality Management", in *Organization Science*, 11: 102-117

World Bank. 2004, World Development Indicators. Available at: www.econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166093&entityID=000160016_20040608153404

World Bank 2006 p 297 Table 3

Zebal M. A., 2003, *Synthesis of Market Orientation for a Developing Country – The Case of Bangladesh*. Victoria University of Technology Melbourne, Australia. PhD thesis

Websites

Agricultural Research Organization: www.aro.org.il

DAI: www.dai.com

Hazera: www.hazera.com,

ICIPE: Africa Insect Science for Food and Health: www.icipe.org

Michelin: www.michelin.com

National Business Incubation Association: www.nbia.org

NETAFIM: www.netafim.com

Nestlé: www.nestle.com

Royal Tropical Institute: www.kit.nl

Shelah Systems: Agriculture Engineering Services: www.shelah.co.il

Sustainable Agriculture Initiative Platform: www.saipatform.org

PART VI: Project Analysis

SWOT Country

Strength Natural resources, Skilled manpower, Management Production Education Knowledge Finance Infrastructure	Weakness
Opportunities Competitive advantage – specialization Economic development Local-International markets Employment	Threats: Political, Cultural Environment Competition New technologies

SWOT project

Strength Skilled manpower, Management Products Production Knowledge Finance	Weakness
Opportunities Competitive advantage – specialization Local-International markets	Threats: Political, Cultural Environment Competition New technologies

Process of Management

Level

- Project, Program, Portfolio
- Phase
- Activities
- Activities in Sequence
- Products - Services

Processes

- Initiating
- Planning
- Executing
- Monitoring and Controlling
- Closing

Initiating

Investment

Own Capital
Loan
Partners

Human Capital

Director
Entrepreneur
Inventor
Promoter

Cost

Fixed Capital
Fixed Cost
Variable Cost



Value to the stakeholders

Society Investors Employees Suppliers Customers

"Authorize the Work"

Planning

Activities

Scheduling

Cost

Performance



Products-Services

Cost

Revenues

"Plan the Work"

Monitoring and Control

Monitoring



Evaluation



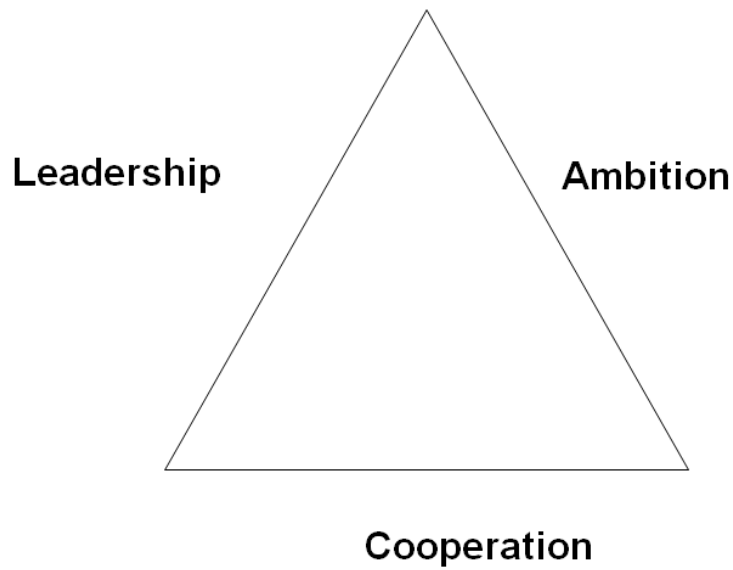
Adjustment



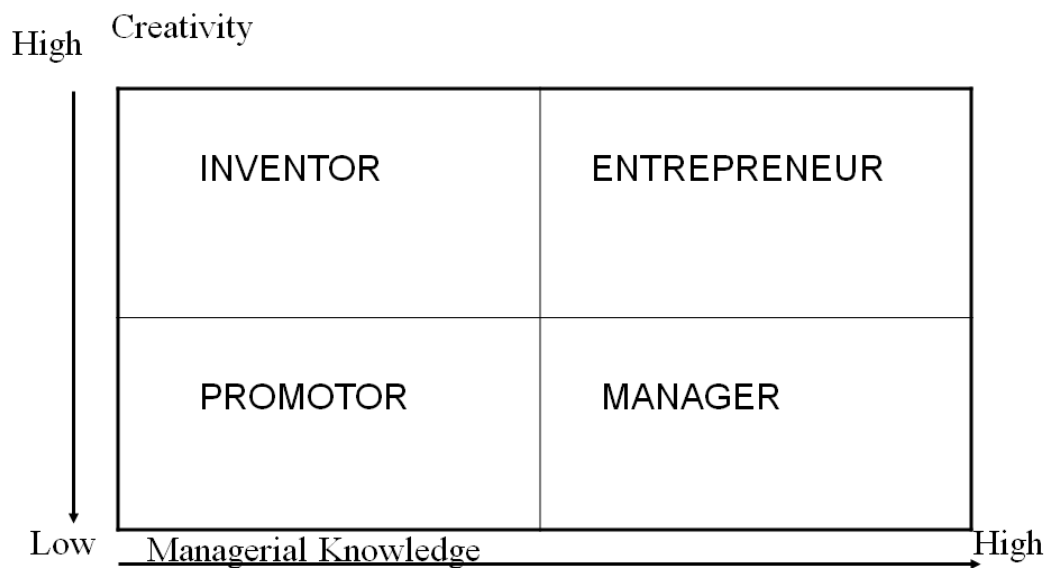
Control

“Control the Plan”

Entrepreneurial Drivers



The Entrepreneurial Staff



Innovative Reflection

(1) *questioning, what if*

(2) *observing, paying attention to everyday experiences to find new ideas;*

(3) *experimenting, hypothesis-testing mindset: new places, new things,*

(4) *idea networking, refer to others behavior patterns, to increase the probability of generating an innovative idea.*

JEFFREY H. DYER,^{1*} HAL B. GREGERSEN,² and CLAYTON CHRISTENSEN **Entrepreneur Behaviors, Opportunity Recognition, and the Origins of Innovative Ventures** *Strategic Entrepreneurship Journal Strat. Entrepreneurship J.*, 2: 317–338 (2008)

The two cognitive patterns

associational thinking (or pattern recognition), experience

a desire to change the status quo.

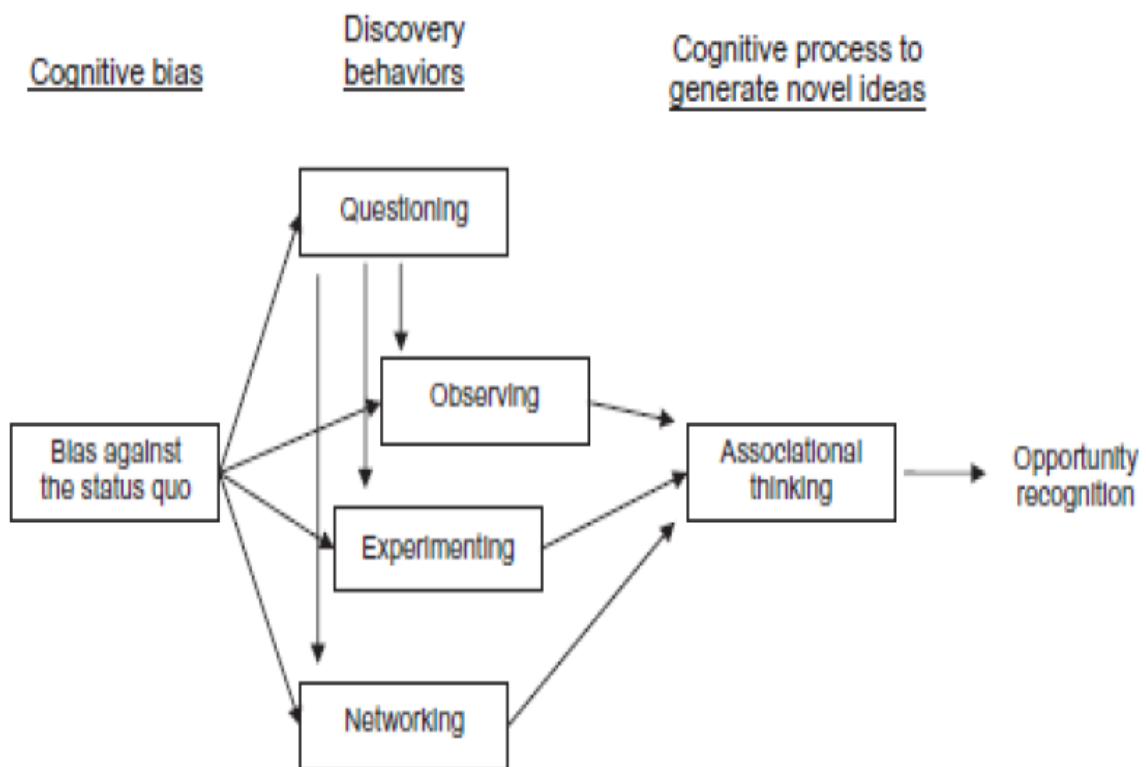


Figure 1. A model of entrepreneurial opportunity recognition

MS Project

File Options:

General

Display

Schedule

Gant Chart:

Day, Week, Months, Quarter

Network Diagram

Task

Indent

Predecessors

Percent completed

View Tables Cost

Resource sheet

Work, Material

View Tables Cost

Project

Change working time

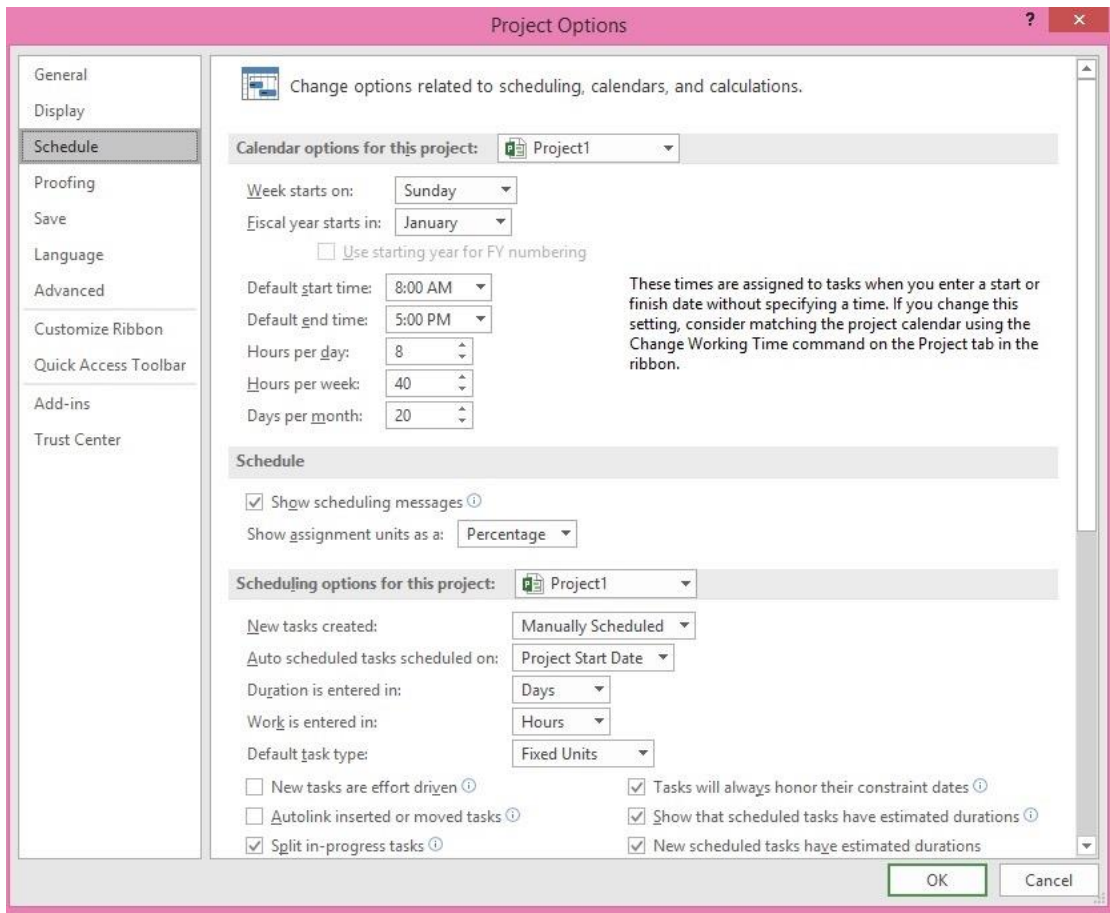
WBS

Visual reports

Reports

Set Baseline

,



Gestion
 Start: 12/06/18 ID: 1
 Finish: 13/05/19 Dur: 240 days
 Comp: 0%

Management
 Start: 12/06/18 ID: 2
 Finish: 13/05/19 Dur: 240 days
 Res: Directeur, Secretaire, Ordinateur

Recrutement-RH
 Start: 12/06/18 ID: 3
 Finish: 13/05/19 Dur: 240 days
 Res: D RH, Secretaire[50%], Ordinateur

Recherche
 Start: 12/06/18 ID: 4
 Finish: 13/05/19 Dur: 240 days
 Res: D Recherche, Ingenieur[200%], E

Approvisionnement
 Start: 12/06/18 ID: 10
 Finish: 08/04/19 Dur: 215 days
 Res: D Approv, Secretaire, Employes,

Logistique intrants
 Start: 02/07/18 ID: 11
 Finish: 26/04/19 Dur: 215 days
 Comp: 0%

Logistique intrants
 Start: 12/06/18 ID: 16
 Finish: 08/04/19 Dur: 215 days
 Res: Vehicule[1], Chauffeur, Employe:

Logistique produits
 Start: 08/10/18 ID: 18
 Finish: 26/10/18 Dur: 15 days
 Res: Employes[200%]

Distribution
 Start: 29/10/18 ID: 19
 Finish: 12/04/19 Dur: 120 days
 Res: Ingenieur[300%], Employes[200%]

Service support vente
 Start: 29/10/18 ID: 20
 Finish: 12/04/19 Dur: 120 days
 Res: Ingenieur[50%]

