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Entrepreneurship and Traditional Know-How: The Case of Rural Moroccan Women

Benmoussa Othmane¹, Slighoua Mounia, Bachiri Housseine,
Bounou Salim

Euromed Research Center
Euromed University of Fès

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Abstract

This paper seeks to study the migration dynamics of rural Moroccan women and, hence, to offer insights into from the new entrepreneurial process, so as to alleviate the effects of migration on both sending and receiving cities/countries. More specifically, the main objective is to develop anchored initiatives for rural women, in order to contribute to their welfare. Therefore, this paper endeavors to theoretically and empirically investigate the root causes of migration in rural exodus. In effect, the hypothesis behind the study assumes that if rural women are empowered through development initiatives to valorize and cement their traditional know-how - to generate financial independence to support both themselves and their families - they might potentially question their migration plans. Furthermore, this paper contributes to providing insights based on action research through an analysis of the immediate and mediate environment, using qualitative reasoning and/or systems thinking. Specific literature review, field visits, interviews, and real-case studies have been exploited to collect relevant data regarding the value chain.

Keywords: *Rural Women; Migration; Traditional Know-How; Social Entrepreneurship; Systems Thinking; System Modeling; Innovation; Process; Valorization.*

¹ Corresponding author (o.benmoussa@euromed.org)

INTRODUCTION: THE SOCIO-ECONOMIC CONTEXT

This paper stems from the conviction that research should contribute to shedding light on the most delicate or sensitive matters (Rogers 2005), where progress is needed. In the case of the current project, three major questions will be raised: (1) what are the types of interactions between (potential) women migrants, their territories, their traditional know-how and entrepreneurial initiative? (2) Is the creation of economic activities a factor which decreases rural migration flows? (3) What kind of insights can be made to decelerate the migration of rural women?

No progress can be achieved without the full participation of men and women together, to create ‘societal change’. In this sense, the project looks more closely at women’s potential contribution to various processes of development in Morocco (Mejjati Alami 2006). More particularly, through this project, questions are being raised regarding the contribution of rural women towards economic empowerment. Oftentimes, rural women possess traditional know-how which could be cemented and commercialized. Undeniably, rural areas are, for the time being, part of the “*arrière-pays*”. Indeed, multiple worlds seem to coexist within the same country and it is legitimate today to ask how rural areas can follow progress through utilizing or valorizing their know-how and related traditional skills? The question’s legitimacy emerges to draw constructive insights and, simultaneously, exposes tangible up-to-date results, revealing the true situation on the ground.

Rural areas undergo multiple problems related to the precariousness of the majority of their population (Brydon and Chant 1989). However, it would be unfair to point out the lack of resources in rural Moroccan areas. Here resources, both natural and cultural are to be used for the prosperity of the population (Berriane, Michon and Skounti 2015). These areas, globally, seem to have resources, which are not valorized. Thus, nowadays, rural populations increasingly consider leaving the countryside.

Today, migration from rural to urban areas and from the rural areas to the European Eldorado has become a phenomenon that needs to be taken more seriously (De Haas and Van Rooij 2010). Some consequences of such forms of migration cannot be considered as mild. Thus, the project seeks to raise and address questions related to the prevention of such consequences. Furthermore, the endeavor of this project is to contribute to conveying insights and answers based on the research process.

It should be emphasized that, when referring to traditional know-how, the project aims to consider such a concept as a form of intangible cultural heritage (Vecco 2010; Smith and Akagawa 2008; Lenzerini 2011) to be preserved, protected and valued. In effect, within rural areas, there are multiple forms of intangible cultural heritage (Zaazaa et al. 2016) that can potentially be valorized and transferred into an economic or revenue-generating activity (Bastian et al. 2018).

The relevance of the project’s main questions fundamentally emanates from the necessity to proactively reflect upon the various challenges faced by rural women in Morocco

(Skalli 2001; Brydon and Chant 1989). For this project, it is of the essence to go beyond assessing the situation of rural women in Morocco or offering a dark or melancholic representation of the multiple realities. The impetus of the project is to participate hand-in-hand with stakeholders who have the potential to weave change in partnership with rural women. Change is possible through processes of empowerment of women through valorizing their know-how and the “*terroir*” products (Morse 2003; Zaazaa et al. 2016; Hamimaz 2009) becoming successful in their community.

Rural women in Morocco have the urgency to participate and to contribute to their region’s development. Besides, if supported, rural women can through empowering partnerships, create their own jobs (Saidi 1993). In this vein, this paper introduces the concept of social and solidarity-based entrepreneurship, which is defined as the desire to employ an economic performance for the advancement of the common interest.

LITERATURE REVIEW

Migration of Rural Women

Factors leading to migration have been studied for a long time, but in an isolated manner, in accordance with Sauvy (1971) and Barbier et al. (1981). This study aims at offering a novel outlook to the thematic and, more specifically, to the migration of rural women, as formerly underlined.

Rurality can be defined according to multiple approaches. Rurality could be defined as “everything which is not urban” or, in sociological terms, based on “socio-cultural criteria related to social relationships, the value system, lifestyle or consumption patterns”. Finally, it can be defined in economic terms as “areas where economic activities are little diversified and where agricultural activity is dominant in terms of its share of jobs and income” (Mediterra 2008).

In rural areas, poverty goes beyond income; consequently, social exclusion is a concept that effectively captures the “multidimensionality of poverty” (Bertolini 2019). In effect, various dimensions are to be taken into consideration such as economic development, infrastructure and the “distribution of the population on the territory” (Bertolini 2019). Rural areas go hand-in-hand with multiple risks of social exclusion, most notably linked to economic growth, territorial gaps, access to basic services, employability and women’s condition (Bertolini 2019). Rural women “still often lack access to infrastructure and productive resources” (Danziger 2009). Such constraints lead to their exclusion from “waged employment and struggle to access to healthcare” (Danziger 2009).

Indeed, migration is still rooted in the “lack of decent jobs in rural areas and the unattractiveness of low-productivity agriculture” (FAO 2003). Rural women may choose rural-to-rural migration, rural-to-urban migration or rural-to-international migration (Danziger

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2009). Rural migration is a “complex phenomenon” and “a key component of rural livelihoods, by which households aim to diversify their income sources and, thus, escape poverty and food insecurity” (FAO 2003).

The decision to migrate is “... often caused by fundamental concerns about poverty and done in an attempt to ensure household survival by maximizing and diversifying the household income through remittances” (Danziger 2009). It should be highlighted that economic considerations, the desire or will to improve one’s conditions of living and that of one’s family that stayed in the village, have been pointed out by Brody (2006) in his study of the case of Thailand and by Stark and Taylor (1989). However, when rural women opt for migration, they often land in the domestic and care sector. It is to be pointed out that “... domestic and care workers often work in jobs that are segregated at the margins of society... often exposed to many human rights abuses” (Danziger 2009). Therefore, women migrants from rural to urban areas oftentimes face significant hardships. It is not the liberty of movement of rural women that is called into question here. The project delves into pathways to accompany rural women to be agents of development in their communities of origin. The agency of rural women is vital in addressing the ability of towns to manage the “influx of new populations” (Mediterra 2008). Consequently, it becomes necessary in rural areas to “embark on diversification of economic activities” in order to push for “economic integration of populations excluded from agriculture” (Mediterra 2008).

Traditional Know-How and Economic Independence

To offer “decent living conditions” within “fragile rural areas”, it is necessary to act for “stimulating entrepreneurship or the social economy in rural areas” (Lacirignola 2017). Economic independence could be sought through innovation that needs to “explore other paths which, for more remote regions could involve development of the social economy or the community economy to combat poverty” (Mediterra 2008). In effect, it is key to developing “participatory initiatives based on dialogue and co-development” to “lift young and rural populations out of their threefold marginalization: geographic, economic, and social” (Lacirignola 2017).

As affirmed by Bill Drayton, founder of Ashoka, “whenever society is stuck or has an opportunity to seize a new opportunity, it needs an entrepreneur to see the opportunity and then to turn that vision into a realistic idea and then a reality and then, indeed, the new pattern all across society. We need such entrepreneurial leadership at least as much in education and human rights as we do in communications and hotels” (Abu-Saifan 2012). Indeed, community members ought to be more proactive and contribute to making change happen, with regards to the existing opportunities or assets.

Thus, in the framework of this paper, it is key to uncovering new areas of opportunity for the targeted population. It is to be underlined that opportunity designates “...the chance to meet a market need (or interest or want) through a creative combination of resources to deliver superior value” (A. Ardichvili et al. 2003). Also, it is to be noted that “...what may later be called

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an “opportunity” may appear as an “imprecisely-defined market need, or un- or under-employed resources or capabilities” (A. Ardichvili et al. 2003).

In this sense, multiple cards for local economic development are “rarely played”, including “the diversity of agriculture and production, the wealth of “humanised” and natural landscapes, the climate, the existence of a varied cultural and historical heritage, an often highly developed crafts sector, knowledge and know-how” (Mediterra 2008). These resources constitute illustrations of existing opportunities or assets that can be valorized, in order to create novel opportunities for rural women and their communities. Nevertheless, creating such opportunities requires fostering an entrepreneurial spirit within the target community.

An entrepreneurial spirit implies constant search for change, responding to it and exploiting it as an opportunity to create value (Dees 2001). With regards to opportunity recognition, it includes three processes “(1) sensing or perceiving market needs and/or underemployed resources, (2) recognizing or discovering a “fit” between particular market needs and specified resources, and (3) creating a new “fit” between heretofore separate needs and resources in the form of a business concept” (A. Ardichvili et al. 2003). Respectively, these processes are “perception, discovery, and creation” (A. Ardichvili et al. 2003).

Moreover, entrepreneurs do not necessarily cause change; they exploit “opportunities that change (in technology, consumer preferences, social norms, etc.) creates” (Dees 2001). Indeed, “the key is not always in a new idea per se, but in providing the resources to translate ordinary good practice into ultimate success” (Light 2006). Indeed, being an entrepreneur is not just about “starting a business” and the term “has a rich history and a much more significant meaning” (Dees 2001). The term entrepreneurs “came to be used to identify the venture some individuals who stimulated economic progress by finding new and better ways of doing things.” (Dees 2001).

Additionally, four entrepreneurial strategies could be identified, “... being first with the most, hitting them where they are not finding and occupying a specialized niche, and changing the economic characteristics of a product, market or industry. Entrepreneurs may use one or more of the four strategies and the strategies, like the windows of opportunity, overlap” (Drucker 2014).

Amongst the major questions raised by the project is the necessity to reflect on pathways to address the existing maladjustment between the resources available for rural women and their outputs or products. In accordance with Kirzner, maladjustment “... occurs when a set of resources available to an entrepreneur is being used to produce units of a product A when the same resources could be used to produce units of product B, which will fetch a higher price because it delivers greater value to customers. Therefore, the available resources are underutilized” (A. Ardichvili et al. 2003).

Entrepreneurship aims to maximize profit through “an exceptional set of activities” (Abu-Saifan 2012) that includes addressing any existing maladjustment through the valorization processes to be undertaken. In the case of the targeted population, multiple areas of progress have been identified. Maladjustment could be decreased by acting on different

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areas, including processes of transmission and valorization of traditional know-how and identification of market needs. Thus, it is essential to define what is meant by valorization, in the framework of this project.

Valorization Approach

Following the general concept of entrepreneurship described above, the conceptual valorization of rural women's traditional know-how involves not only the per se products, but also their marketing process, to generate real added value in favor of the rural women "producers".

During our fieldwork, we have repeatedly identified two factors highlighted by the majority of the rural women we met, whether they managed to value their products or not.

These two factors, able to condition the valorization of rural women's traditional know-how, were also reported by civil society stakeholders, officials and the Mohammed V Foundation for Solidarity:

- Role of intermediaries ;
- Existence or absence of robust networks supporting the initiatives of the rural women.

These two factors, which can be found in the literature on the interrelationships between the market, the hierarchical / dominance structures, and the mechanisms of cooperation, refer to different theoretical corpus:

- Transaction cost theory (Williamson 1975, 1976);
- Agency theory (Jensen and Meckling 1976);
- Techno-economic networks concept (Callon 1991; Akrich, Callon and Latour 2006).

Transaction and Agency Costs

Holt et al. (2000) argue that, without the development of trust and informal relationships, without learning mechanisms, the likely benefits of any alliance are minimized. Coudert-Saderne and Leyronas (1996) specify that the evolution and development of a common business project are included in the terms of relational / behavioral learning, which appears as the principle of coordination of a relationship where information sharing creates the renewal of collective learning by, in turn, becoming "convention", namely "a set of information coherent between them and intended to make compatible the actors' behavior" (Favereau 1989). Ring and Van de Ven (1992, 1994) emphasize the complementarity between informal and formal relationships by emphasizing that social ties, which are largely based on trust, are conditioned by underlying legal systems and a clear assignment of roles and responsibilities of each member of a relationship group. In addition, these authors highlight the dynamic aspect of governance structures, where informal contracts would compensate for formal mechanisms as trust develops between co-operative parties. It can, thus, be argued that

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the absolute control and steering means are necessary at the beginning of a joint project and tend, in a regular evolution, to fade along the progress of the latter. Similarly, Poppo and Zenger (2002), unlike Macauley (1963), Larson (1992), Gulati (1995), Uzzi (1997) and others, stipulate that extra-contractual links can replace formal contracts and show the complementarity of the formal and informal mechanisms involved in joint projects. In addition, such as Ring and Van de Ven (1994) and Frankel et al. (1996), they highlight the importance of formal contractual links in the upstream phases of a relationship.

From these different points of view, we argue that the ideal management of transactional relationships, whether disintermediated or not, requires both extra-contractual and informal mechanisms and contractual processes.

In any type of association, the partners must define the target objectives and develop new knowledge to reach them. Preventing risks is no longer enough. It is necessary to ensure the success of the joint relationship by facilitating learning and skills development. The efficiency of a complementary network operation must, therefore, be ensured on two levels.

The first specifically concerns access to partners' skills and refers to effective coordination of actions and decisions within the identified chain of actors, whilst the second refers to the creation of common knowledge and collective learning.

However, this construction cannot pass through contractual mechanisms alone. Whilst the success of an end-to-end transactional relationship requires the coordination of various skills, it also requires the development of learning effects and the creation of collective knowledge, on two levels. At the organizational level, partners will have to develop routines to improve the efficiency of the cooperation process through "organizational" learning. Then, at the technological level, the partners, if they wish to create a new technical knowledge, will have to implement "technological" learning processes, in order to achieve a common innovation for the different involved members.

All in all, the essential challenge of complementary "alliances" is to foster the emergence of organizational and technological learning processes. As a result, contractual mechanisms can only play a minor role because the learning processes cannot be decided or organized contractually. Moreover, if technical coordination is an essential stake of complementary associations, the risk of opportunism resulting from the limited rationality (Simon 1976) of the economic agents which pushes them to not respect a contract, if that allows them to improve their situation (Williamson 1975), is not absent and can represent a serious obstacle to the realization of a sustainable joint business endeavor. As Alchian and Woodward (1988) suggest, opportunism is expressed not only because of the unobservability of certain benefits, but also because of the indeterminacy that exists over the surplus sharing (Goldberg 1976, Klein et al. 1978) generated by cooperation. Indeed, a multi-stakeholder relationship refers to a "production" group and free-rider problems, or what still corresponds to what the agency theory - theory seeking to design institutional arrangements between a principal and his agent with a potential divergent viewpoint (Jensen and Meckling 1976, Brousseau 1989) - identifies as moral hazard, takes on all their importance. In fact, as the behaviors are not perfectly observable, the "contracting" parties can seek to obtain the most possible benefits

from their association, whilst agreeing to offer minimal effort, which is detrimental to any joint production (free-rider problem; Milgrom and Roberts 1997). When the cooperation surplus is not individualizable and clearly attributable to each of the partners, a conflict of interest may arise over its sharing. One of the parties may, in particular, benefit from the balance of power in his favor in order to appropriate a portion of the surplus that should accrue to the others, namely to capture a greater part of the benefits in relation to the work provided. This is the “hold-up” phenomenon, portrayed by Goldberg (1976), then Alchian and Woodward (1988).

It should be noted that these free-rider problems (Williamson 1975; Brousseau 1989; Brousseau 1993) have been resoundingly indicated by a large number of rural women with traditional skills, who have encountered the predatory behavior of intermediaries, without being able to benefit from any kind of protection. An application of intellectual property law must be duly considered, to take into account the particular case of the land (“*terroir*”) products originating from authentic traditional know-how.

Usefulness of the techno-economic networks

No single individual holds the key to developing a successful product, from ideation to the end customer. Associations, translations and interactions between diverse people are needed. Beyond the strengths and weaknesses of reticular links (Granovetter 1983), Callon (1991) models the effervescence of associations, translations and interactions between people by the concept of techno-economic network (TEN), which is a coordinated set of heterogeneous individuals collectively involved in the design, development, production and distribution-diffusion of goods that can give rise to a market transaction.

In other words, the techno-economic networks, at the basis of social, incremental, or any other kind of innovations, are made up of various spaces in which networks of persons (Callon 1989) form and combine to progressively shape the creation context.

The fieldwork observations have allowed us, by adaptation, to join the theoretical conceptual corpus of Gaillard (1997) by identifying four areas of mobilization: the market mobilization space, the organizational mobilization space, the space of technical mobilization, and the space of collaborative mobilization (Gaillard 1997).

- **The market mobilization space:** it is defined by individuals who constitute and will constitute, in the future, the commercial space in which the output of the traditional know-how of rural women can be diffused. These include users, sellers, and competitors. The market mobilization space is therefore made up of a set of market players and operating rules that are gradually being set up.
- **The organizational mobilization space:** it is made up of all the organizational structure members of an artifact project. It is a question of identifying the stakeholders’ network within the structure constituted around the activities related to the products originating from the traditional know-how of the rural women in order to be able to advance it and help it, but also to slow down and disrupt it. It should be emphasized that this mobilization space of mobilization is not only built around people, but is also

rooted in culture, habits and history. These immaterial elements are to be taken into account and are at the origin of constraints, uncertainties and risks that influence the process of any project.

- **The space of technical mobilization:** it is determined by events that, over the years and centuries, have consolidated the traditional know-how of rural women. Sociological analysis and anthropological intelligence allow one to clarify the configuration of this space.
- **The space of collaborative mobilization:** it is made up of all the stakeholders who participated in the development activity of a given product. These individuals make a contribution that the core members of a project cannot assume themselves. They are partners who possess a particular skill, know-how or a specific tool, or even a capacity to industrialize the “handicraft” product. They are also trading partners who, having a particular position in a market, help to understand it and may be involved in marketing the product. It is therefore important to understand the interests that these partners may have with respect to the activity being addressed, in particular to circumvent potential obstacles.

By starting up and taking inspiration from the TENs concept, where intermediation activities take place to understand how the different mobilization spaces, described above, are put into contact, we show the need to set up multifunctional groups that respond to precise characteristics: physical co-localization of the core members at the origin of the produced item, construction of a real collaboration between the various stakeholders intervening during the development and commercialization phase of a given artifact, emergence of a group identity “cemented” around an adequate organizational structure coordinated by an appropriate project manager and helped by individuals with informal roles such as “champions” and “gatekeepers”.

Also, for the composition of such a team, a certain basic consensus is essential. Any incompatibility between the members as to their fundamental interests and values or as to their perception of objectives should be avoided. It is also desirable that they do not differ too much in their cognitive, interpersonal, and organizational styles (Hakanson and Lorange 1991; Rojot and Bergmann 1995; Bailey *et al.* 1998). In this framework, Gyenes (1991) defines the right partner as the one who possesses skills, resources and needs that are complementary to oneself. In reality, the choice of partners is an important issue because it influences the nature of the collaboration, which has an impact on the quality of products and their commercialization.

Finally, based on the investigation field observations, we have tried to formalize the importance of the network regarding the successful launch of a product and its market penetration strategy, particularly for a traditional artifact conceived in rural areas that are more or less isolated.

The aforementioned factors (intermediaries and network) lead this research to reflect upon a new intrinsic “formalization” of a general process through cross-disciplinary lenses.

METHODOLOGY

Data Gathering

The Systems Approach (Sterman 2000; Forrester 2013), in the framework of this research, is rooted in a thorough review of the literature and targeted field work research (mainly semi-structured interviews) to develop a more nuanced and comprehensive understanding of such a complex phenomenon. It is to be underlined that input from multiple actors is essential. Indeed, different institutions were targeted as key resources such as: The Mohammed V Foundation for Solidarity (through its program targeting women), women cooperatives and rural associations mastering traditional know-know, state actors, such as the Office of Development and Cooperation (ODCO) and associations of civil society, such as the Moroccan Center for Innovation and Social Entrepreneurship (MCISE).

In addition, the semi-structured interviews targeted actors engaged in the sector of social and solidarity-based economy, in addition to women, who are already part of small-scale revenue-generating activities. In the framework of these interviews, the questions have addressed entrepreneurial pathways, local social networks, in addition to external perceptions and well-being. The final part of the interview allocated time for a flexible discussion with the populations on the needs they wish to express and constraints or difficulties they encounter. It is to be emphasized that the conducted field work led to determining the potential causes, which became the key variables of the systems model.

Model Structure

This part of the research activities focusses on identifying the system complexity behind the migration phenomenon.

With roots in holism (1920s) to the general systems theory in the 1940s and cybernetics in the 1950s, systems thinking tells “why” a system works the way it does, which yields understanding.

It is to be underlined that, the literature review and the field work, which have been conducted throughout the different phases of the project, have highlighted that economic considerations are one of multiple key factors, leading women to migration. However, the causes of migration have often been described in isolation (Sauvy 1971; Barbier et al. 1981).

Thus, the systems approach (Sterman 2000; Forrester 2013) is a relevant tool of analysis to offer a more comprehensive and global representation of the various factors pushing our target population to migrate.

In our case, systems thinking allows one to link all the identified causes together, whilst creating reinforcing and balancing loops, that show the complexity of migration as a non-linear phenomenon that is meant to be modelled, in order to understand the deep foundations of the mechanism pushing women to leave their community.

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The simple “cause-effect” relationship, taken in silos, gives little power to alter the course of events, because any system, like the one behind the migration phenomenon, behaves in ways that make it challenging for people to fully anticipate and understand the long-term consequences of their decisions. In this framework, focussing on “internal structure” enhances the possibilities of changes, thanks to dealing with the underlying source of the systems process, not merely trying to manipulate events. Moreover, by comprehending the “internal structure”, we can easily highlight the fact that simple rules can compose the solution seeds of the migration phenomenon, without necessarily resorting to complex mechanisms. Indeed, according to Sull and Eisenhardt (2016), “meeting complexity with complexity can create more confusion than it resolves”.

Furthermore, “many persons discount the potential utility of social systems models on the assumption that we lack adequate data on which to base the model. They believe that the first step must be extensive collecting of statistical data. It is exactly the opposite: A model should come first” (Forrester 2013).

In this context, the basis of model building has to overcome any restricted classification of intellectual discipline to include a multitude of factors that could influence the solutions sought. “We must feel free to enclose all the facets that we consider essential to a verbal description of the migration phenomenon whether they belong to technical, legal, managerial, economic, psychological, organizational, monetary, or historical field” (Forrester 2013).

According to Forrester (2013), a model should have the following characteristics:

- “Be able to describe any statement of cause-effect relationships that we may wish to include.
- Be simple in mathematical nature.
- Be extendable to large numbers of variables.
- Be able to handle continuous interactions.
- Be closely synonymous in nomenclature at least to economic and social terminology.” (Forrester 2013)

“Those requirements can be met through a model structure containing four essential features:

- **Levels:** They are the present values of variables that have resulted from the accumulated difference between inflows and outflows.
- **Flow rates:** The rates of flow are determined by the levels of the system and reciprocally.
- **Decision functions:** They are the statements of policy that determine how the available information about levels leads to the decisions. A decision function may appear as a simple equation that characterizes a flow in response to the condition of one or two levels or may be described by a sequence of computations that progresses through the evaluation of a number of intermediate concepts.

- **Information about the levels as a basis for decisions.**” (Forrester 2013)

Moreover, multiple interconnected networks, based on the simple model structure depicted above, could be required to represent a social activity, such as the modelling of the complex migration phenomenon.

Product Fundamentals and Positioning

Dealing with the migration phenomenon requires understanding the fundamental causes that push rural women with traditional know-how to leave their communities. Various fieldworks helped us to better absorb this reality where the economic component is obvious.

The systems model, defined and highlighted in this research, provides a perfect insight regarding the dynamics of migration and highlights the aspect of operationally valuing the traditional know-how of rural women through their products, which must be better thought out and positioned in the market.

Case Studies

The case study allows the researcher “to understand the behavioural conditions through the actor’s perspective” (Zainal 2007). In effect, a case study “enables the researcher to closely examine the data within a specific context (Zainal 2007). It is to be pointed out that “detailed qualitative accounts often produced in case studies not only help to explore or describe the data in real-life environment, but also help explain the complexities of real-life situations which may not be captured through experimental or survey design” (Zainal 2007).

In the framework of the fieldwork conducted at the MCISE in Rabat, this paper presents two case studies of successful, entrepreneurial stories. The two featured cases are: (A) Shem’s for Lighting and (B) CookIt.

A. Shem’s for Lighting

Shem’s for Lighting is a social enterprise founded in 2016, in the framework of the ENACTUS program, that aims at the designing, producing and marketing of solar and ecological lamps for the inhabitants of regions suffering from a lack of a sustainable light source (Startup Info 2017).

In October 2019, Shem’s for Lighting participated in the first edition of the incubation program ‘Orange Corners Morocco’ and won the first prize: 30.000 euros.

For the co-founders of Shem’s for Lighting, their products stand out because they developed a “multifunctional product that offers the user several uses”. It should be pointed out that the company started by offering a product called “Shems Qendil” (SHEMS Qendil

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Range), which consists of an electronic part (a mini solar panel connected with a battery via a regulator) and a support part (LEDs, a panel battery and a control board).

“Shem’s for Lighting” has initially focussed on the market of Mejjat (Grand Atlas, 104 km of Marrakech). The long-term vision of “Shem’s for Lighting” is to reach the wider African market. With this in mind, Shem’s for Lighting has equipped more than 250 fishermen in Safi with its product “Shems Bahar”.

It should be emphasized that Shem’s for Lighting has multiple international partners such as ENPACT – LITER OF LIGHT, OCP Foundation, Unilever Maghreb, FABLAB Casablanca, and ENACTUS Morocco.

Shem’s for Lighting generates revenue through the distribution and sales of their products, including the “Lux Decorative Product” (SHEMS LUXE range), based on Moroccan clay and solar energy (readily available in the market).

B. CookIt

Founded in 2017, at the age of 21 by Othmane Benhlima, CookIt’s key product is an isotherm bag which allows individuals to pursue a slow cooking process of meals. It also allows heat conservation for a duration of five hours for meals, desserts and drinks. It is necessary to precook each meal for fifteen minutes, before using the CookIt isotherm bag, which maintains the cooking process. It should be noted that Othmane Benhlima drew upon an ancestral cooking technique, in Moroccan society.

At the same time, the idea of CookIt emerged in the first place to help rural women in remote and cold areas, in the process of cooking their family meals. In emerging countries, each year, families use up to two tons of wood for cooking purposes. Such a figure contributes massively to deforestation and smoke inhalation, thus causing chronic respiratory problems. Every year, about two million people die of these illnesses, including children, below the age of five. As for the use of butane gas, it causes hundreds of fatal burns. In effect, Othmane Benhlima observed the multiple difficulties and constraints faced by rural women in Morocco.

CookIt develops multiple products. The first range of products targets urban customers. And the second range targets rural beneficiaries. The second product range is priced accordingly. It has been explained by Othmane Benhlima, during our interview at MCISE, that the products targeting women in rural and remote areas are sold at a loss, whilst the products targeting urban markets are sold at around three to four hundred dirhams.

It should be pointed out that CookIt has multiple institutional partners, including ENACTUS, Ford Motor Company Fund, OCP Foundation, OCP Entrepreneurship Network, and MCISE.

Finally, an important and positive point of the CookIt case study is that the project promoter has made a strong effort to accurately identify the needs of traditional rural women, which were a perfect guide for defining the fundamentals of his forthcoming product.

CookIt and Shem's for Lighting have defined their product based on fieldwork conducted, to identify the needs of users. This fieldwork has resulted in a declination of the products for better strategic positioning. In addition, the network theory, discussed earlier in this research, is also present in the Shem's for Lighting case study, in particular through the multitude of partners that constituted the many elements required for the successful commercialization of the product.

Products Fundamentals

Defining the hallmarks of a really necessary product and correctly positioning the so-considered product are essential steps for the valorization and successful commercialization of any item.

In fact, nowadays with an exacerbated concurrence, it is essential to pay heed to the wishes of product users. Assessing customer needs is a subtle process; even those companies with highly structured processes in place to gauge customer needs do not always thrive.

In fact, products have key dimensions of manufacturing quality such as performance, features, reliability, conformance, durability, serviceability, and aesthetics, but two major characteristics need to be considered according to Iansiti and Stein (2005):

- The “degree of newness of the product” to an entity, such as a community or, for instance, a group of rural women: “The more a given project involves issues that are new, the more critical is relying on outside information (from consultations with experts to focus groups with customers) to determine user needs and product specifications” (Iansiti and Stein 2005).
- The “degree of newness of the product to the market”: “When a product is new to market, fewer existing users will be able to comprehend its potential, and they may find it difficult to visualize or verbalize how they might use it” (Iansiti and Stein 2005). In this case, project members should focus on understanding the customer's needs and environment by flexible means such as personal interviews with customers and observations of users in action.

In this framework, once the data collection has been completed, the information needs to be interpreted by removing duplicates and clarifying ambiguous statements. Prioritization of customer needs is one of the most important steps. Consequently, two basic types of information may be gathered to rank user needs, namely the relative importance and the degree of importance (Iansiti and Stein 2005).

- “The relative importance of user needs can be assessed through the ordering made by the customers themselves who remain the ultimate judge and may serve as the best decision makers in this process” (Iansiti and Stein 2005).
- “The degree of importance refers to how pleased customers would be if a product has a certain feature or how angry they would be if it did not. The Kano model (Kano et al. 1984) is useful for uncovering this information by recognizing that the degree of

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fulfillment of a customer requirement doesn't always correlate with the level of customer satisfaction" (Iansiti and Stein 2005).

The Kano model defines "five evocative labels to characterize customer needs: must have, linear satisfier, delighter, indifferent, and reverse" (Iansiti and Stein 2005).

- "Must Have: These attributes are taken for granted when fulfilled but result in dissatisfaction when not fulfilled.
- Linear Satisfier: These attributes result in satisfaction when fulfilled and dissatisfaction when not fulfilled. These are attributes for which entities compete.
- Delighter: These attributes provide satisfaction when achieved fully, but do not cause dissatisfaction when not fulfilled. These are attributes that are not normally expected.
- Indifferent Quality Element: These attributes refer to aspects that are neither good nor bad. They don't result in either customer satisfaction or customer dissatisfaction.
- Reverse Quality Element: These attributes refer to a high degree of achievement resulting in dissatisfaction and to the fact that not all customers are alike." (Wikipedia – <https://en.wikipedia.org/wiki/Kano>)

Once customer needs are understood, they may be converted into product features, technical specifications and product attributes (size, weight, appearance, ergonomics...).

In our specific case, this process should be explained, experimented and heavily taught to rural women with traditional know-how, in order to help them define a new generation of products capable of satisfying the end user and leading to massive sales.

Products Positioning

Once the product fundamentals are duly defined, it is necessary to be able to fruitfully position the product.

It is advisable, therefore, to firstly define the strategy to be put in place, whilst avoiding the usual pitfalls. For this, we propose using the Delta Model of Hax (2010). This remains the most complete theory for creating value in comparison with the Porter, the Resource-Based View of the firm (Petaraf 1993; Ghemawat 1991), and the Blue Ocean (Kim and Mauborgne 2015) frameworks.

In fact, the prevailing view has generally been to define the goal of strategy as achieving sustainable competitive advantage (Porter 1980; Porter 1985) mainly through differentiation versus low cost or differentiation and low-cost strategies at best, "but this is a mindset likely to cause severe problems" (Hax 2010).

The originality of the Delta Model is to really take into account the essence of strategy, in order to be able to achieve the required customer bonding, treating every customer differently to create value. The importance of customer segmentation and customer value proposition is, therefore, vital.

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Eight principles characterize the Delta Model and need to be followed, generating a change in the entrepreneurial mindset from rivalry to cooperation, from standardized products to integrated and customized offerings, and from playing a solo game to developing multiple relationships and interconnections within the targeted value chain.

Those principles or Haxioms (Hax 2010) at the basis of eight strategic positions (Figure 1) are as follows:

- Principle 1: The Center of Strategy is the Customer.
- Principle 2: You don't win by beating the competition; you win by achieving customer bonding.
- Principle 3: Strategy is not war; it is love.
- Principle 4: A product-centric mentality is constraining; open your mindset to include the customers, the suppliers and the complementors as your key constituencies (Extended Enterprise).
- Principle 5: Try to understand your customer deeply. Strategy is done one customer at a time.
- Principle 6: Commodities only exist in the minds of the inept.
- Principle 7: The foundations of strategy are twofold:
 - Customer segmentation and customer value proposition;
 - The firm as a bundle of competencies.
- Principle 8: Reject the two « Truisms »:
 - « The customer is always right. »
 - « I know the customer needs and know how to satisfy them. »
 - We are dealing with customer solutions. Their identification and satisfaction can only be done by working jointly with the customers” (Hax 2010).

The challenge here remains to correctly position the products originating from the traditional know-how of rural women, in order to anticipate a successful commercialization - whatever the carrying structure of the project (cooperative, association, or other). The use of the Delta Model framework makes it possible to evolve the positioning of the product to market towards truly value-generating strategies, reaching the Total Customer Solutions strategic position whilst seeking opportunities for the System Lock-In one.

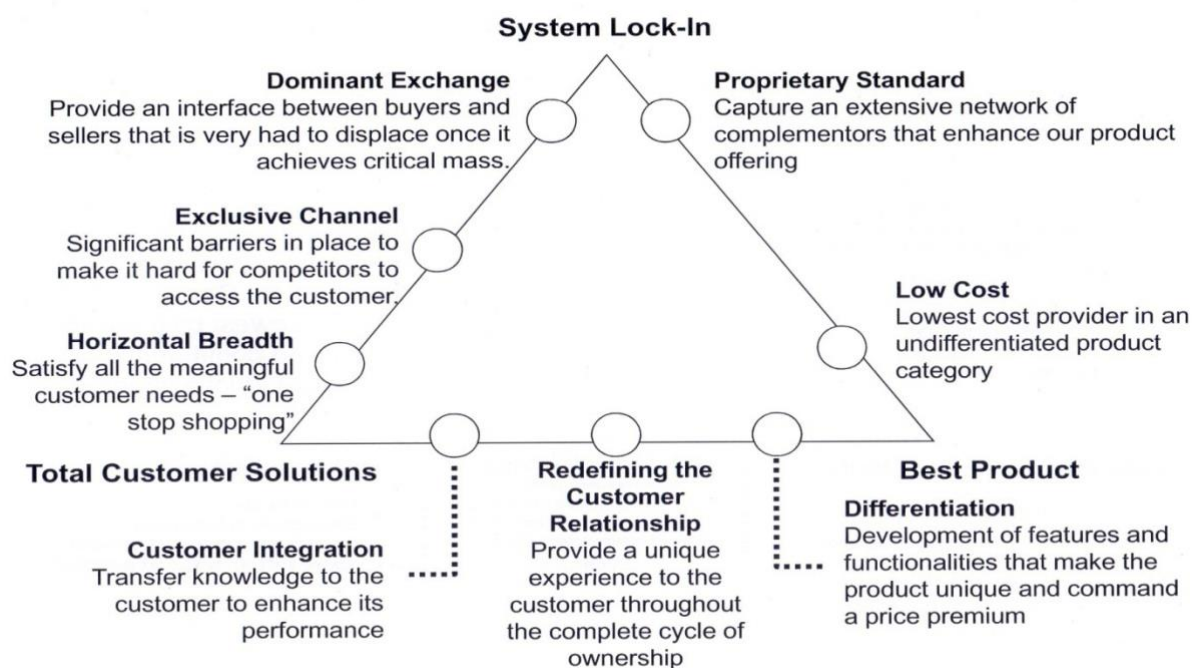


Figure 1: Eight Strategic Positions of the Delta Model Framework (Hax and Wilde II 2003; Hax 2010)

DATA COLLECTION AND MODELLING

Structure of the Interviews and Sample

A. Structure of the Interviews

For this project, the qualitative approach has been adopted throughout the data collection, for investigation of the research questions raised. The qualitative approach has led the research team to conduct, on the one hand, semi-structured interviews and, on the other hand, case studies to address the main research questions. Qualitative research interviews are “attempts to understand the world from the subjects’ point of view, to unfold the meaning of people’s experiences, to uncover their lived world prior to scientific explanations” (DeJonckheere and Vaughn 2019).

In effect, interviewing is “the most common format of data collection in qualitative research” (Jamsheed 2014). The research project has delved into multiple studied questions, through different forms of interviews, ranging from semi-structured interviews to unstructured interviews. The semi-structured interviews have provided rich data for the project.

The semi-structured interviews are “... those in-depth interviews where the respondents have to answer preset open-ended questions” (Jamsheed 2014). Semi-structured interviews are “guided by a list of topics or questions with follow-up questions, probes and comments” (DeJonckheere and Vaughn 2019). The semi-structured interviews contribute to gathering “information from key informants who have personal experiences, attitudes, perceptions and beliefs related to the topic of interest” (DeJonckheere and Vaughn 2019).

As for the unstructured interviews, they resemble “a conversation more than an interview” (Jamsheed 2014). Also, they can be considered as “controlled conversations”, to the extent they are “skewed towards the interests of the interviewer” (Jamsheed 2014).

B. Presentation of the Different Fields

The Fez-Meknes Region was selected as the main field of study for the project. The authors’ geographic proximity to the region was a key factor in the field of choice.

However, it should be pointed out that the Fez-Meknes field has been confronted by other fields, most notably through the research led in Rabat and the investigations led in the MCISE and the Mohammed V Foundation. These steps have allowed the research team to go beyond the local or regional scope and to build an understanding of the larger national scope.

Multiple fields have been investigated throughout the research process in the Fez-Meknes Region.

The first exploratory research activity was conducted at the ODCO Fez Office. The ODCO Fez Office was a starting point, to the extent it allowed the research team to draw an overall picture of the cooperatives in Morocco in general and within the Fez-Meknes Region in particular. Secondly, the research team has investigated a cooperative in the city of Sefrou, in “a post-creation stage”, in the sector of “traditional hand-made Moroccan buttons”. Thirdly, the field research has led the project to investigate more cooperatives, in “a vanishing stage”, most notably in the field of “medicinal and aromatic plants”. The fourth research activity has researched a “pre-cooperative” structure, in the form of an association within the Tissoufa area, near the city of Ifrane. The fifth research activity has led the research team to meet with multiple groups of rural women in “Ain Louh” and “Zaouiate Sidi Abdesslam”, who are beneficiaries of accompaniment programs by the Al Akhawayn Azrou Center for Community Development. Some of these rural women, who represent a sample of our target population, are either interested in joining a cooperative or have already undergone work within a cooperative. The sixth field investigated the MCISE, which is a unique accompaniment structure for “entrepreneurs to be” in Rabat. Finally, the research team visited the Mohammed V Foundation and investigated the work accomplished by such an institution, targeting rural Moroccan women in the Fez-Meknes Region and at the national level. Investigating the Mohammed V Foundation has led the project to uncover a unique form of accompaniment for rural women entrepreneurs, which goes beyond the post-creation of the cooperative stage.

Following the different meetings and declarations, the project has uncovered a redundancy or a repetition of the same issues and concepts at the actors’ level (rural women),

at civil society level (e.g., the MCISE) and at the Mohammed V Foundation. The Mohammed V Foundation provides a general framework, with multiple “chiefs of projects” throughout the Moroccan territory.

Empirical Data

Specification of Migration Variables

Based on the conducted field work and thorough literature review, multiple variables have been identified with regards to migration root causes and valorization processes of rural women with traditional know-how.

a. Accessibility (road network, means of transportation)

Informal transportation is dominant in the rural and sub-urban areas. In the absence of public transportation, informal transportation is almost the only alternative. Therefore, rural communities oftentimes might consider that they are disconnected and far away from urban centers or from multiples facilities including administrative centers, schools, and healthcare facilities.

b. Difficulty of access to basic and administrative services (drinkable water, electricity...)

Rural and remote areas suffer from infrastructure-related problems, which include difficulties of access to basic and administrative services. Concerning administrative services, it should be pointed out that inhabitants of rural communities might need to travel to the closest urban center in order to complete administrative procedures. As for access to basic amenities, such as drinkable water and electricity, Morocco has surely made notable progress as far as granting access to such amenities for populations living in rural areas. However, such an issue remains a critical thematic.

c. Difficulty of access to quality-based education or so perceived

Families in rural areas might consider that the urban setting offers better chances for their children to get a quality-based education. Indeed, the dominant perception is that children in urban areas have better opportunities than children in rural areas, as far as education is concerned. First of all, schools in rural areas are underequipped and lack convenient facilities to offer good schooling conditions to children living rurally. Moreover, children in rural areas often have to walk, bike or seek informal forms of transportation to reach their schools.

d. Difficulty of access to healthcare

Regarding healthcare, rural communities have access to the most basic forms of healthcare in proximity to their homes. If they wish to have access to healthcare facilities for serious illnesses or for an advanced check-up, rural inhabitants would need to travel to the closest public hospital, located in their commune or region. Being far from healthcare facilities might cause multiple regrettable issues, such as: maternal and newborn deaths, undiagnosed illnesses or their inadequate treatment, and lack of appropriate follow-up on the health conditions of children and the elderly.

e. Looking for citadinity

Citadinity can be defined as “an individual form of a relation to the city, while “urbanity” points to a link with both a metropolitan/urban scale and a community” (Piermay 2005). Citadinity also “informs the social identity of the city dweller – this identity being defined as a social construct, including both personal consciousness and a collective belonging through, for instance, a common language” (Piermay 2005).

f. Dominance of the patriarchal power

Patriarchy is a term that has “a double meaning: “the rule of men” and the “rule of the father”. Its literal meaning is the “rule of the father” and its original use was to describe a specific type of male-dominated family – the large household of the *patriarch* which included women, junior men, children, slaves and domestic servants all under the rule of the dominant male (Rubin 1975; Engles, 1977)” (Omvedt 1986). The concept of patriarchy, conceived as a domination and exploitation system (Delphy, 1998) has led to analysis of the social and political place of women, whilst pinpointing the privileged position of men and the benefits that they get, in the public space and in the private or family sphere” (Le Talec 2016).

g. Acculturation effects

Acculturation occurs “... when people subsume intrinsic or overt traits of a foreign culture into their own cultural systems, usually a result from prolonged contact with the cultural group that is different from one’s own” (Tan and Burgess 2018).

h. Social structures

Structures refer to “...a set of relations between elements that has some measure of coherence and stability. It is, then a concept with a heavy load of abstraction, a concept that we could, in principle apply to any parcel of reality where we perceive a certain order” (Juan and Requena 2007).

i. Social Capital in the City

Besides, social capital is “... the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. The membership in a group provides each of its members with the backing of the collectivity owned capital, a credential which entitles them to credit” (Wiesinger 2007).

In this research, Social Capital in the City designates the multiple existing links between potential women migrants and communities or individuals, who have already settled within the city or the urban setting. The existence of such links might facilitate the settlement and venue of women migrants into the city. It should be highlighted that through research led by Hew (2003), Beynon (2004) and Fan (2004), the social network present in the city, or abroad, is one of the major factors encouraging migration and influencing the decision to leave.

j. Trust in the official organizational system in place

Throughout the conducted fieldwork, it has been noted that there is a lack of trust in the official organizational system in situ, to the extent that the target population might stay at the pre-creation phase of the valorization initiative. The lack of trust might prevent rural women in possession of traditional know-how from evolving from the identified pre-creation stage to the creation stage. In addition, the lack of trust might also be at play during the post-creation stage. As already pointed out, trust is an essential factor which, if non-existent or lacking, might impede valorization processes.

k. Trust between women and network potential

Throughout the conducted fieldwork, in the framework of the research project, it has been observed in multiple instances that trust between women is lacking, in failed cases of valorization initiatives. Trust is the cornerstone of collaboration within in the form of the valorization process. Furthermore, trust is essential to build a network. If trust is non-existent and no efforts are being deployed for building it within groups of women involved in traditional know-how valorization processes, any project is headed towards failure. Also, they might be impeded by diverging efforts of rural women engaged in these processes.

l. Level of Interactions /Encounter between “Stabilized” Rural Women and their communities

The level of interactions, or encounter, between “stabilized” rural women and their communities is a key factor that needs to be defined, to the extent that it influences the emigration rate.

The higher the level of interactions, or encounter, between “stabilized” rural women and their communities, the less likely “rural women susceptible to migrate” are to leave their communities. Interactions and encounter between the aforementioned populations might lead, through dialogue and exchange, to searching for pathways of progress and building win-win collaborations.

m. Fraction of Valorization versus Rate of Valorization

The rate of valorization concerns a product or a traditional know-how whereas the fraction of valorization is relative to the global valorization potential of the target or beneficiary population. The global fraction of valorization is not necessarily inferred from the traditional know-how. It is linked to human capital and not to market needs or demand. However, the rate of valorization is an aggregate of both human capital and market needs and demand.

n. Emancipation

Emancipation, or empowerment, could be defined as “Empowerment is an inclusive process of encouraging, enabling and developing the capability for self-sufficiency, self-dependence, self-assertion and autonomy of the marginalised and disempowered groups (like women) or community (...) through consciousness-raising, pro-active participation in public life and mobilisation for right entitlements” (Sharma 2017).

Additionally, multiple dimensions of autonomy could be emphasized as “... control over female sexuality and fertility; the social moulding of motherhood; division of labour between the sexes; access to and control over labour, property, knowledge and power positions; inter-relationships among women, cooperation and organization; gender ideology, that is, women’s self-image (and self-respect) and (...) the freedom and possibility to take part in all forms of social interaction” (Sharma 2017).

o. Valorization of Real Traditional Know-How

Traditional know-how valorization is a process leading product with potential valorizable know-how to be commercialized on the market. Valorizing traditional know-how is a transformative process, to the extent that the traditional know-how is a precious but raw input. The output of a genuine traditional know-how valorization process is a product which protects the traditional know-how, serves the interests of rural women and succeeds in designing an end-product, for which there is significant demand.

p. « Real Holistic » Accompaniment

Real holistic accompaniment designates accompaniment through the various phases of the process leading to the creation of an initiative that seeks to valorize traditional know-how. In effect, an holistic accompaniment follows the idea of a valorization initiative from its very inception to its cementing. Multiple mechanisms could be integrated in such an holistic accompaniment including: training, counselling and coaching.

q. Potential versus Frequency of Holistic Accompaniment

By potential of holistic accompaniment, the model seeks to evaluate the rate of success of the holistic accompaniment; whereas frequency here is a concept that raises the question of how often an holistic accompaniment takes place. In other words, this variable calls for attention to the instances of holistic accompaniment.

r. Emigration Rate

Emigration rate refers to the estimate rate of rural women susceptible to migration, that ends up with them leaving their communities of origin to settle in a Moroccan city or within a foreign country. Emigration rate is a key indicator for measuring the rate of effective migration of the target population. In other words, the emigration rate evaluates the propensity of the target population to leave their communities.

Entrepreneurial Mindset

The entrepreneurial mindset is at the heart of the various processes uncovered through the conducted fieldwork. In effect, three major processes have been identified, through the various fields: the (A) “Traditional Process”, the (B) “Networks Process”, and the (C) Process grounded in “Innovation and Design Thinking”.

A- The Traditional Process

The first identified process can be designated as the traditional process. Such a process has been identified, most notably, through field work conducted at the ODCO Fez Office and at the Mohammed V Foundation. However, it should be noted that few distinctions are visible within these two cases, although they can be classified as traditional processes.

In the case of the ODCO, the process is defined to include three steps: pre-creation, creation and post-creation. First of all, there should be an idea held by a group of women (individuals) of coming together to create a project. Then, these individuals, who are the project or idea holders get in touch with the ODCO. The idea or project holders are oftentimes accompanied by an association, which then becomes a “cooperative”. It should be emphasized

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here that the ODCO is in charge of the financial and administrative aspects, related to the creation of cooperatives. As for the technical aspects, they are handled by the concerned ministerial departments (e.g., the Ministry of Agriculture or the Ministry of Craftsmanship) considering the nature of the output products within the valorization processes. It should be stressed that, with regards to the limits of the means or resources at its disposition, the ODCO makes the necessary trips to meet the project holders, once the group which is to form the “cooperative to be” has been identified. Such an outreach was described throughout the fieldwork conducted as a “punctual sensitization” through the different stages of the creation of the cooperative.

With regards to the Mohammed V Foundation, this was created in 1999. The Foundation collects funds from different companies. Hundreds of Moroccan companies finance the Foundation. The collected funds are redistributed through projects to the needy population. The Foundation does not intervene in a direct way vis-à-vis the populations. The Foundation selects the best active associations in specific domains to support them through the accomplishment of their activities. The major axes of intervention of the Mohammed V Foundation are the humanitarian axis, the social axis and the economic axis. Within the economic axis, the Foundation is a major actor in the traditional know-how valorization processes, though the “Program for Integration through Economic Activities” (Programme d’insertion par les activités économiques). This program was launched in 2017 to support individuals and cooperatives. Selection is based on three criteria: first, the social aspect is prominent, to the extent the populations in need are the target population; second, the entrepreneurial profile is essential and the project holder needs to have a qualifying background; and third, the project needs to target an existing need or, in other words, it would have to address a market need. In 2017, about 167 initiatives were selected. In 2018, 365 initiatives and in 2019, around 625. It should be noted that the Mohammed V Foundation has evaluated the survival rate to 94%. Furthermore, the Mohammed V Foundation has developed a partnership with MAROC PME to insure the accompaniment of the selected initiatives for a period of two years. The Foundation has multiple training centers in urban and rural areas. Another notable initiative by the Mohammed V Foundation is the Solidary Market of Casablanca, which is a remarkable platform for cooperatives across Morocco to sell their output products. Nonetheless, it is to be noted that the price is oftentimes an obstacle. The price is perceived by buyers as being too high. Thus, potential clients can be discouraged by the price set by the cooperatives for their output products.

Additionally, the process in place within the Mohammed V Foundation seems to combine multiple dimensions that are present in the various identified processes. The Foundation also features a number of interesting facets that need to be pointed out. Whilst the Foundation seems to adopt “a charity-based” approach for the support of rural women in order to develop cooperatives and to valorize traditional local know-how, such support does not end at the creation phase. The Mohammed V Foundation supports rural women and cooperatives from the pre-creation phase through to the post creation phase of the cooperatives. In the case of the Mohammed V Foundation and the classic “traditional process”, the learning curve within the innovation and design thinking process is incomplete.

Based on the conducted investigations, the aforementioned described processes are characterized by multiple flaws and do not have a significant “added value”. Indeed, the “failure rate” through the traditional processes is significant, as observed particularly in Ain Louh and Zaouiate Sidi Abdesslam. The traditional process is rooted in what can be termed a “charity-based” philosophy or orientation. Consequently, a form of dependency is built and sustained, through the traditional process. The previously described process does not contribute to building essential qualities for the development of the entrepreneurial mindset, such as: independence, initiative and creativity.

B- The “Networks” Process

The second identified process is the “Networks Process”. The appellation “Networks Process” has been coined in order to designate a success ingredient that has been uncovered during the conducted field work, most notably in the city of Sefrou and in the Tissoufa region. The “Networks Process” can be defined as a process rooted in the prevalence or centrality of the role played by networks (family, personal or international) for the success of cooperatives. Networks contribute to the success of cooperatives in many ways, such as: developing the entrepreneurial spirit and customizing products that will be marketed.

The “Networks Process” has also been identified in the Tissoufa region, through the prevalence of “tribal links” amongst the members of the Tissoufa Association (the pre-cooperative structure). Traditions and customs, in the form of the “Jamâa”, are a key characteristic in the Tissoufa community. The “Jamâa” can be assimilated to a “Community of the Wise” (communauté des sages) or a legitimate, democratic, and representative decision-making organ within a community, which is still attached to the local/regional traditions. Furthermore, it is a key decision-making institution within the Tissoufa community (or tribe). It is comprised of male representatives of the tribe (or community). Such a traditional institution participates in decision making and problem solving within communities or tribes. The leader or head of the Jamâa is often the senior member amongst the various members. At the same time, local/regional traditions and customs rule the “Jamâa”. As a traditional institution, the Jamâa has always strived to adopt a democratic mode of functioning by installing dialogue (or the Islamic principle of “shûra”) throughout the various “meeting sessions” which are organised. Examples of issues tackled by the “Jamâa” include: marriage, conflicts, issues or problems within the community and borders of the tribe. About thirteen families are represented within the Tissoufa Jamâa. Indeed, the Jamâa, as a legitimate institution within Tissoufa, has played an important role in the development of the Tissoufa Association. For instance, the Jamâa influences the choice of the president of the Tissoufa Association and participates in key decision-making processes within the structure.

It should be noted that the Tissoufa Association is the product of a “multi-actor partnership” (Figure 2). It nurtures ties with multiple cooperatives: “Al-Ittihad”, “Kounouz Al-Atlas”, and “Assafae”. Each one of the aforementioned cooperatives specializes in a defined set of products (couscous, essential oils and aromatic and/or medicinal plants). Besides this, it

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should be highlighted that the Tissoufa Association is supported by the governmental program (or initiative) INDH (National Initiative for Human Development).

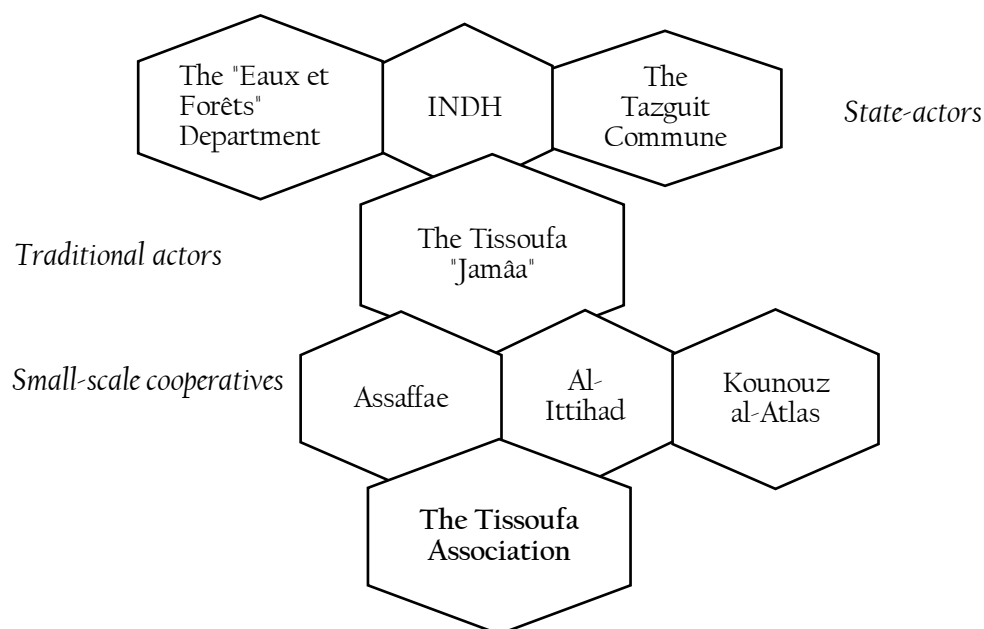


Figure 2: The Tissoufa Association: A Multi-Actor Partnership

In addition, the President of the Tizguit Commune (*Dayet Aoua*) plays a leading role, as far as supporting the motives, ideas and initiatives which have given birth to the Tissoufa Association. Moreover, the interviewee pointed out that INDH and “*Eaux et Forêts*” Department are key partners, who granted the land to the Tissoufa Association in order to install the “kiosks” (selling spots). These “kiosks”, for instance, allow the women weavers of Tissoufa to sell their products punctually. The Tissoufa Association helped the women weavers to the extent that it has developed cooperation with multiple actors.

For valorization, the Tissoufa Association is a key institution for the women weavers of the region. It functions as an intermediate structure to reach the potential client(s) or market(s). The traditional structure of the society in Tissoufa is “protective” of women and only allows them to work, to the extent that they do so in the framework of the association. The women weavers are represented by the *Jamâa*.

The spokesperson and the President of the Tissoufa Association have explained that they would like to witness the transformation of the Tissoufa Association into a cooperative (Figure 3). The cooperative framework would allow the members to benefit from the “profit” dimension, which is not concomitant with the “association framework”. The association is a

non-profit structure, whilst the cooperative might allow the Tissoufa women weavers to have access to the national market and beyond.

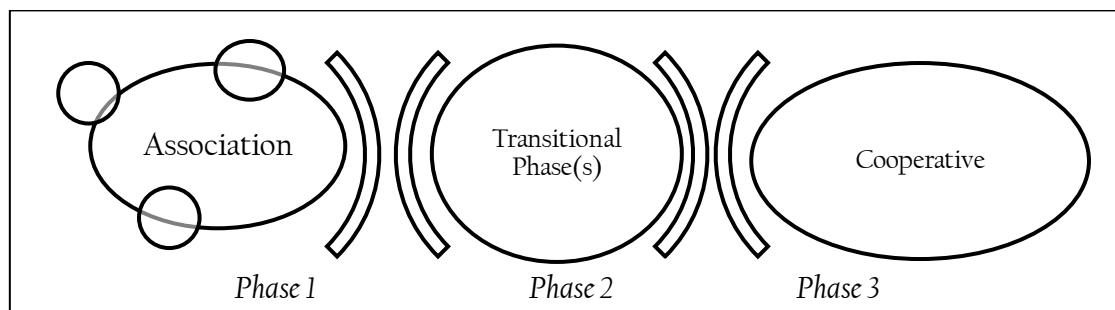


Figure 3: From the Association to the Cooperative

For the time being, the Association is in charge of the “commercialization” whilst the women produce (the benefits go to the association, which then redistributes the profits).

However, the benefits are considered to be insufficient currently. The cooperative framework could solve such an issue, in accordance with the interviewee. In accordance with the spokesperson of the association, the cooperative would allow the Tissoufa community members to target the international market.

The interviewee has explained that it is important to support the women weavers so that they can earn their living in a decent way, which would allow them to meet their needs, to send their children to schools etc. If women weavers are empowered in such a way, they would have “material” stability and wouldn’t feel compelled to migrate.

C- Process Grounded in “Innovation and Design Thinking”

The third identified process is a process grounded in innovation and design thinking: the MCISE. In the case of the MCISE, a unique ascending learning curve has been identified. The MCISE adopts a unique model, to the extent that the structure starts by providing a space to meet-up, exchange and discuss for individuals coming from diverse backgrounds (The Dare Space). This first “trust-building” step is followed by the emergence of small groups sharing common visions, interests or goals. Afterwards, these groups are accompanied by the MCISE into creative thinking and brainstorming processes leading to “design thinking and innovation”. Such an initial accompaniment is essential in order to allow “entrepreneurs to be”, to voice and foment potential project ideas, based on identified needs (*Cf. Case Studies: CookIt and Shem’s for Lighting*).

Towards a New Entrepreneurial Process

This new entrepreneurial process aims to reap the benefits of each of the three identified processes described above, whilst eliminating the noted disadvantages.

An initial remark would be to instill the principles of ideation to the accompanied populations, whilst giving them enough time for their project to mature from the preliminary idea to its commercialization. The duration of active support is estimated at one to two years, depending on the project.

In fact, the actions of a few days to a few weeks, as currently practiced in many cases, mostly fail and undermine the confidence of the participants and their acquaintances, particularly through a negative word of mouth emanating from the official programs that are in place.

The proposed process (Figure 4) of a total duration of one year to two years distinguishes between the 3 phases that are usually encountered in an entrepreneurial project, as itemized:

- **The pre-creation phase:** In this phase, the first step is to bring potential entrepreneurs with, in certain cases, complementary know-how that can lead to innovation, to get to know one another and to continue exchange beyond their future project, initiating a kind of networking. This is a phase where brainwriting (Thompson 2013) and questioning (initiation to creativity independent of any assistance) are essential for entrepreneurship and innovation (Dyer et al. 2009).

More than 50 years ago, Peter Drucker described the power of provocative questions. “The important and difficult job is never to find the right answers, it is to find the right question,” he wrote. To question effectively, innovative entrepreneurs do the following: Ask “Why?” and “Why not?” and “What if?”. By questioning, the objective remains to imagine opposites and embrace constraints for out-of-the box insights that will compose the inputs of the expected project/product” (Dyer et al. 2009).

The pre-creation phase is essential because it opens up the field of possibilities. Throughout this phase, potential valorization initiatives or project holders can discuss, debate and confront their ideas. Such a phase is quintessential to the extent that it puts in practice creativity and reflects upon ways to create opportunity, based on the assets available to rural women. One of the main questions to be raised through the pre-creation phase is how to valorize existing resources and know-how, in order to create opportunities for the would-be entrepreneurs and their communities? The pre-creation phase can be rich, to the extent that the participants in the initial sessions of discussion, act proactively to develop trust.

- **The creation phase:** Equipped with the inputs highlighted during the pre-creation phase and beyond the classical actions of accompaniment, organizational structuring and “theoretical” and experimental training, the objective is to deeply think about the hallmarks of the product in the making and its positioning. The use of the Kano model and the Delta

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Model, presented above, is highly recommended in this phase and those models can be validly integrated - beyond the approach of design thinking - within integral methodologies, such as the Radical Innovation Design (Yannou 2018) that emphasizes different sub-processes to scrupulously follow for a successful commercialization of the future product:

- “Knowledge design: Able to identify and collect deep knowledge through contacting experts, reading, experimenting, analyzing, and understanding.
- Problem design: This is about setting the problem to be solved for a successful product widely accepted by end-users.
- Solution design, namely the problem solving.
- Business design: We can extensively use the Delta Model in this sub-process” (Yannou 2018).

The solidarity aspect is a key ingredient through the creation phase. Accompaniment at the creation stage should develop the existing bonds and solidarity between the different project holders. Indeed, it has been observed through the fieldwork that solidarity within valorization initiatives leads de facto to a higher success rate, whilst a lack of solidarity amongst the members of valorization initiatives oftentimes leads to failure.

- **The post-creation phase:** The post-creation phase needs to go hand-in-hand with active accompaniment of the new entrepreneurs. Rural women engaged in traditional know-how valorization initiatives ought to be accompanied by structures and/or individuals with expertise and experience. Rural women entrepreneurs could, for instance, benefit from additional specific training. It would be essential for these women to have dedicated structures or individuals, who would follow-up on the constraints and opportunities they face, in order to maximize the rates of success of their initiatives. It should be noted here that the concept of genuine holistic accompaniment is quintessential, to the extent that it designates accompaniment from the idea stage to materialization into a marketable output. Rural women entrepreneurs could be accompanied through this phase to perfecting new output products. Such accompaniment must also encourage the entrepreneurs to listen to market needs and to be constantly looking for new opportunities and fostering existing ones.

More specifically, the figure below exposes the various components of the different phases of the entrepreneurial process, coined in this research.

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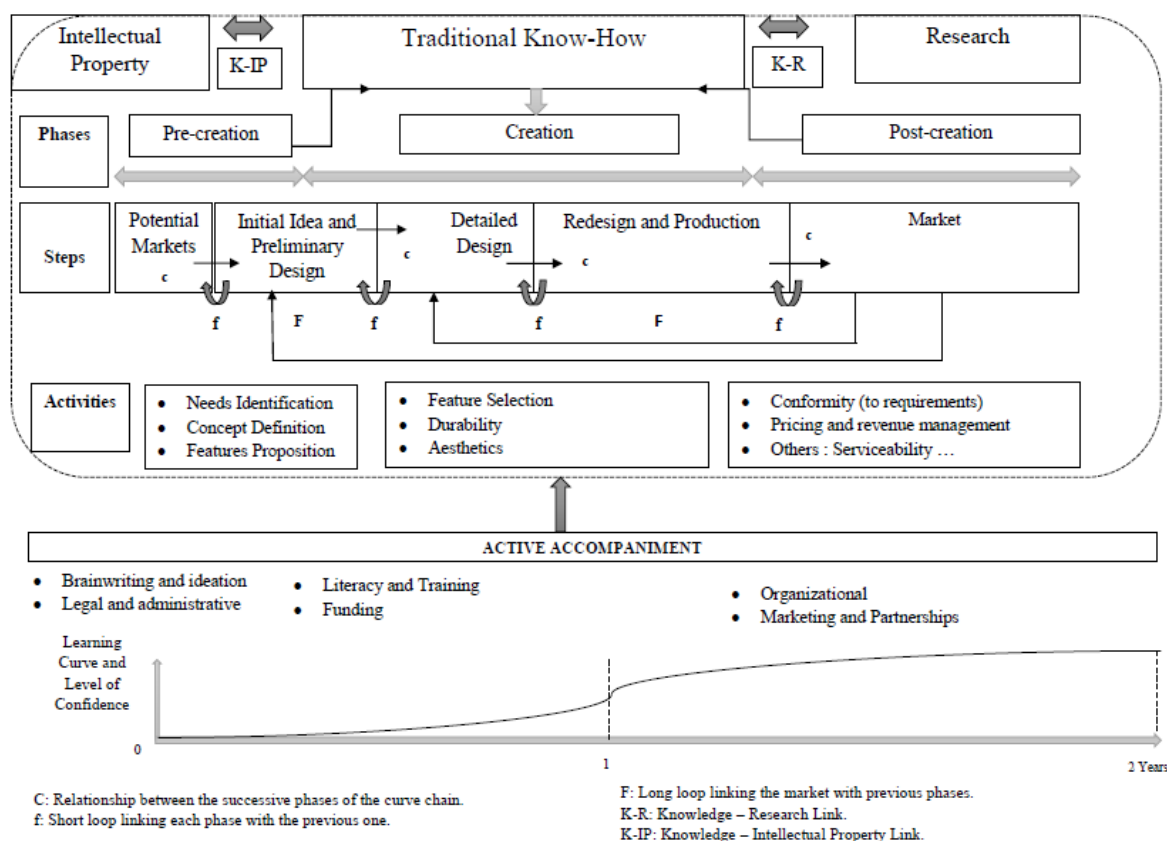


Figure 4: A New Entrepreneurial Process

Systems Modelling

Based on the literature review on migration causes and on the fieldwork that allowed us to define the variables conditioning the migration act of rural women with traditional know-how, we propose a model (Figure 5) founded on the fundamentals of systems thinking, as explained in this article (§ 3.2).

It should be noted that the selected variables fulfill the rules of exhaustivity (§4.2.1), cohesion and non-redundancy (Roy 1985; Louafa and Perret 2008) which are able to correctly model the migratory phenomenon of rural women.

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The various highlighted loops in Figure 5 bear witness to opposing phenomena which are, for some, migration push factors, for others pull factors. The degrees of severity of the various emphasized links and loops are particularly informative regarding the extent of the actions that should be carried out to positively settle women who are susceptible to migration.

In this context, the proposed systems model underlines the “know-how, valorization and entrepreneurship” tier, as the foundation of the first actions aimed at accompanying and qualifying rural women to improve the quality of their lives within their community of origin. Considering the vulnerability of rural women and the harsh conditions throughout the migration routes, they might choose to blossom in their own communities.

Indeed, beyond any kind of accompaniment, organizational legal forms and various structures within the social and solidarity economy, we propose trying to translate the nature of the link existing between the valorization of products originating from the traditional know-how of rural women and their propensity to remain in their community.

A nested systems model (Figure 6 and Appendix) was, therefore, developed from field observations and a theoretical corpus, using the Bass (1969) classical diffusion model that calculates the rate of adoption of a product as a proxy for its market acceptability and its valorization.

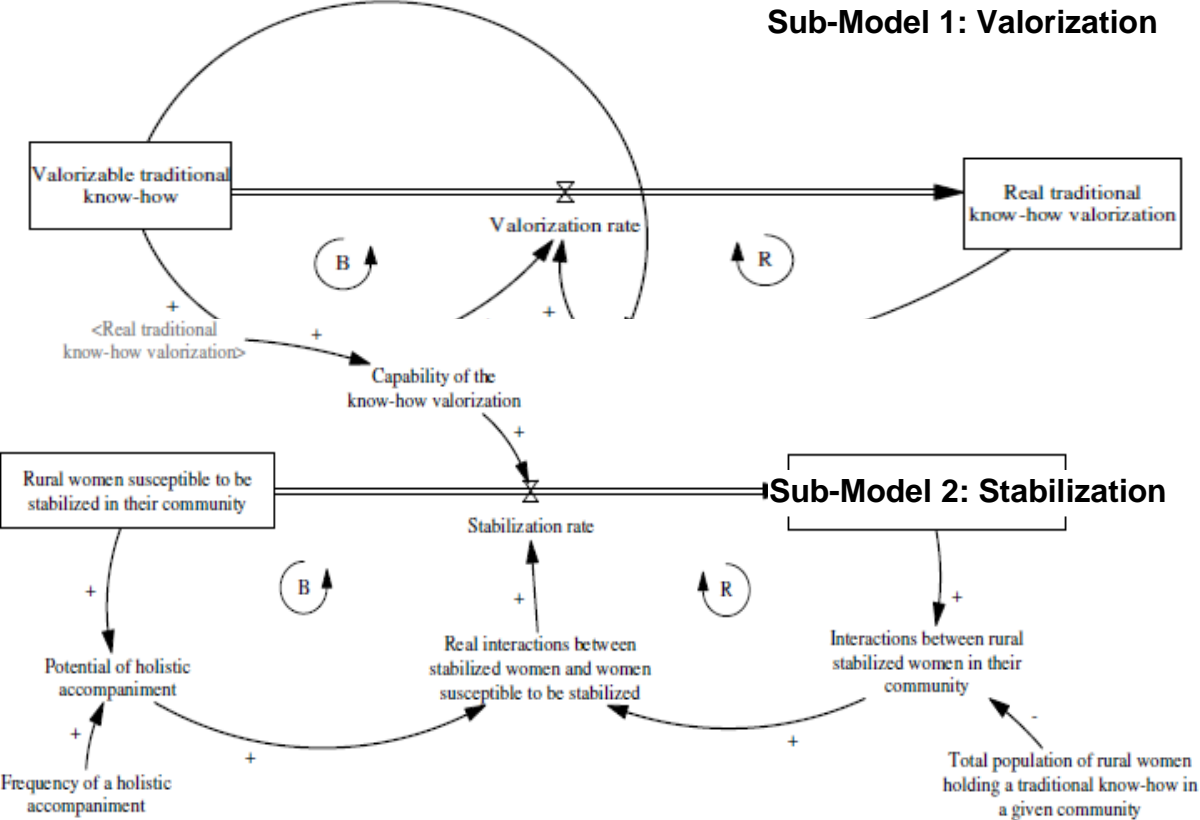


Figure 6: Products' Valorization and of Rural Moroccan Women

Analysis and Interpretation

The systems model, presented in Figure 6, conceptually illustrates our observations from the field and results from the literature relating to the impact of outputs valorization generated by rural Moroccan women on the positive sedentation of these same potential migrant women to stay in their communities, in order to thrive and actively participate in the well-being of their homes.

The outputs valorization concept is based on the diffusion potential of these “artifacts” that Bass's innovation and imitation coefficients translate respectively through the adoption-innovation and imitation-contagion effects highlighted in the first sub-model of Figure 6.

The values of the innovation and imitation coefficients were deduced from the results of a meta-analysis of 213 applications of the initial Bass diffusion model (Sultan *et al.* 1990) that was enriched with data from complementary banks (Lilien *et al.* 2000) and case studies, whose characteristics are close to the expected diffusion context of products originating from traditional know-how.

In addition, to achieve the dissemination and, thus, the valorization of a given product, it is necessary to recall the underlying importance of the respective phases regarding the identification of the product fundamentals and its positioning, which has been highlighted through the new entrepreneurial process, presented above. This is based on the various theoretical corpus treated in this research within the literature review and the methodology, via the network and disintermediation concepts and the use of Kano and Hax (the Delta Model) models that should equip any project promoter willing to undertake.

Based on these inputs underlying our nested modelling, presented in Figure 6, we used the Vensim PLE (2007) tool to simulate the behavior of the proposed model.

Figures 7 & 8 below show the results of the simulation.

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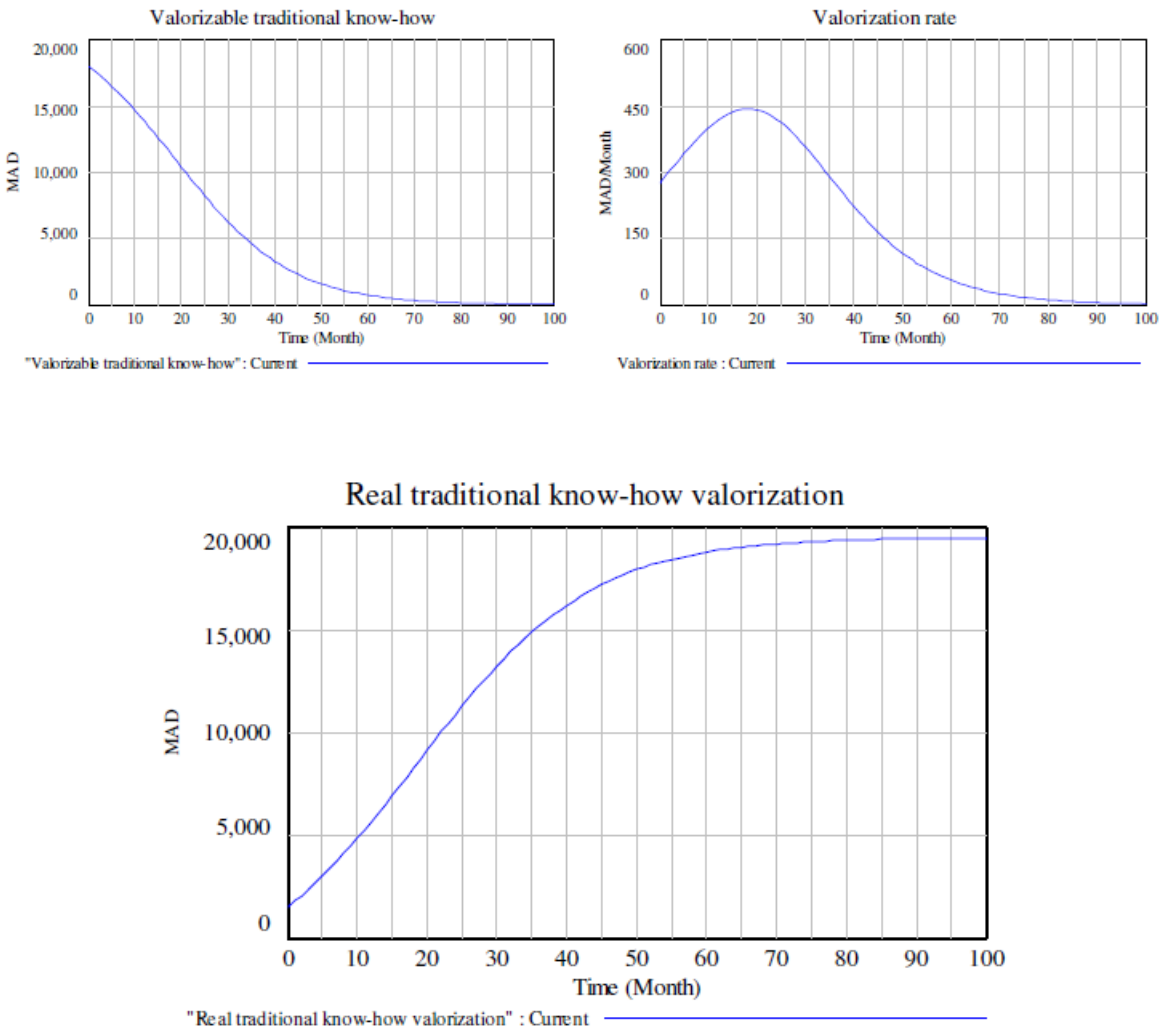


Figure 7: Temporal profile of traditional know-how valorization

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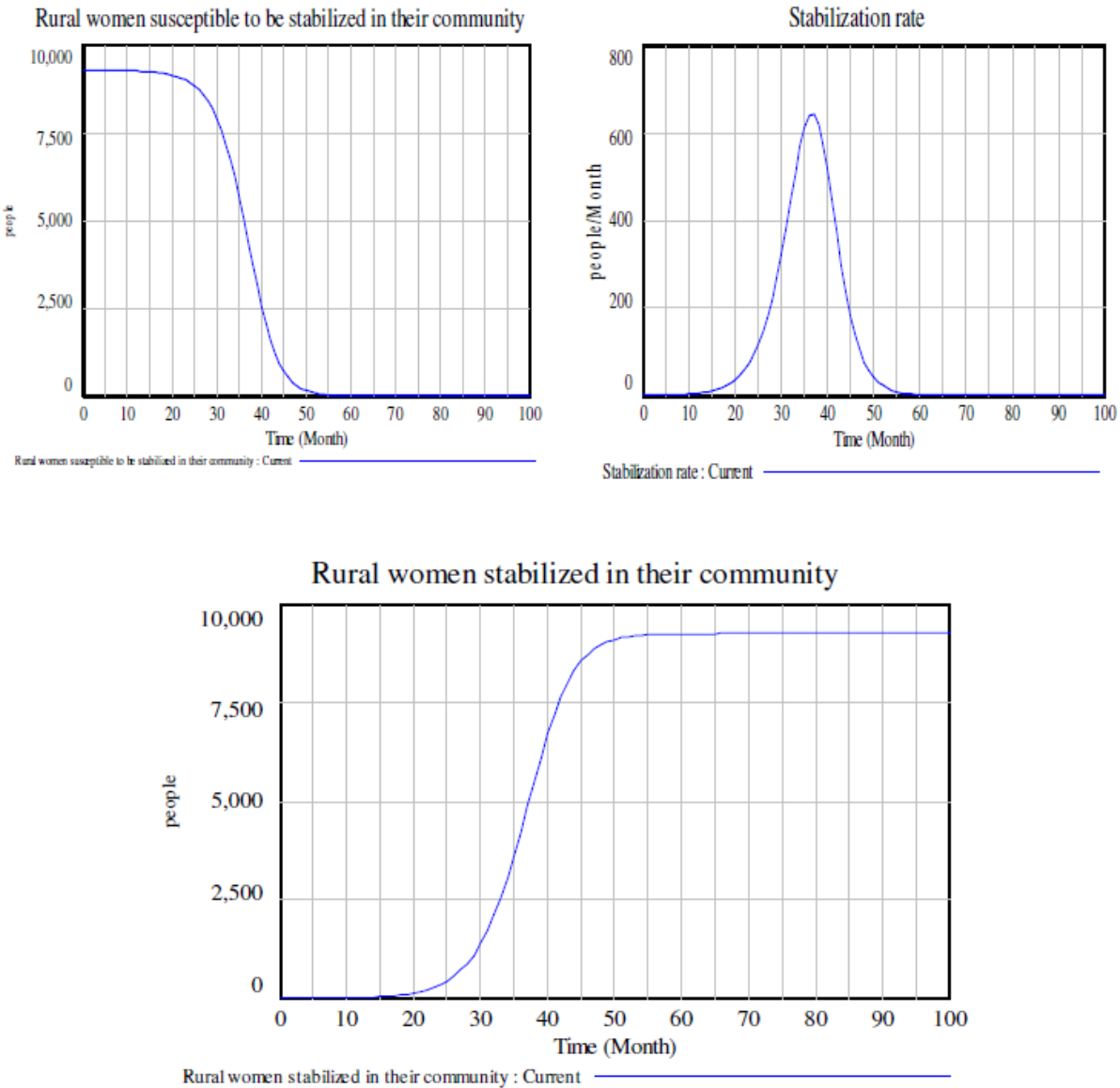


Figure 8: Temporal Profile of Rural Women Stabilized in their Community

Finally, the results of Figures 6 and 7 clearly confirm a cause-and-effect relationship in time between valuing the know-how of rural women and stabilizing them in their community, contributing, therefore, to curbing the emigration phenomenon in the case, as we have seen in this research, of an effective and equitable valorization in favor of the rural producer woman.

A sensitivity analysis, varying the value of certain parameters one by one, such as the “frequency of holistic accompaniment”, the “accompaniment rate”, and the “total population of rural women holding traditional know-how in a given community” initially approximately determined, informs the same trend as in Figures 6 and 7 at the level of the final variable that is the “rural women stabilized in their community” (Figures 8, 9 and 10), which strengthens our conclusion that is stated, as follows:

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The valorization of rural Moroccan women’s traditional know-how, allowing them to benefit from a decent regular minimum income (a minimal threshold of MAD 1’500 per month and per woman, was retained in this research following the statements gathered in the field. The net revenue of MAD 1’500 per month corresponds to the guaranteed Moroccan minimum wage - SMAG - for the agricultural sector.) constitutes an emigration decelerating factor, encouraging a rural Moroccan woman to remain within her community.

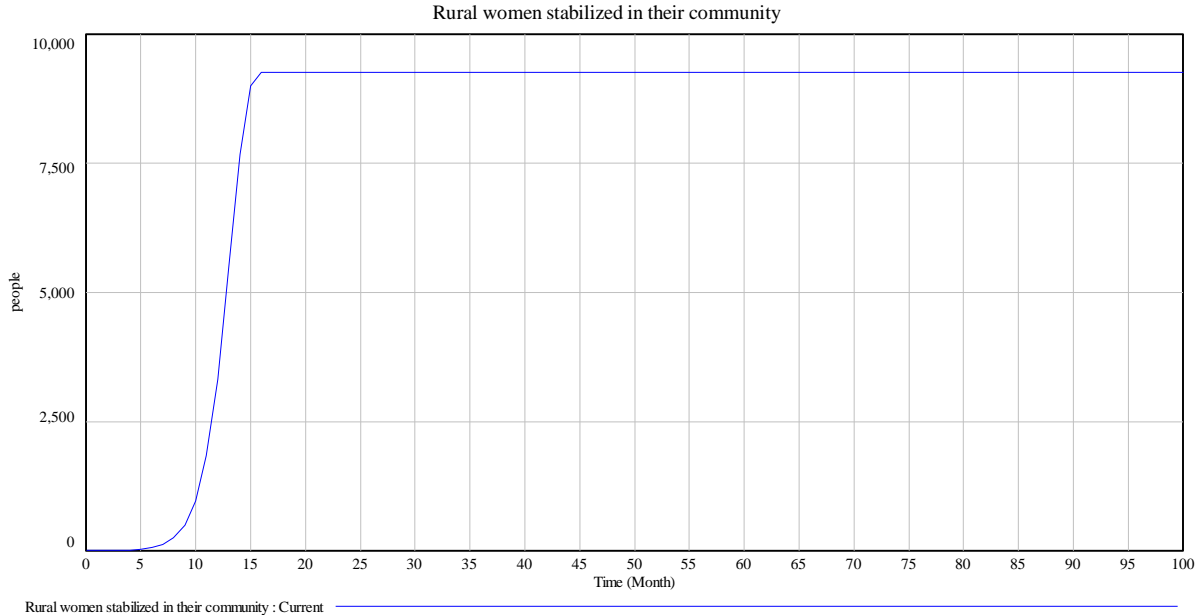
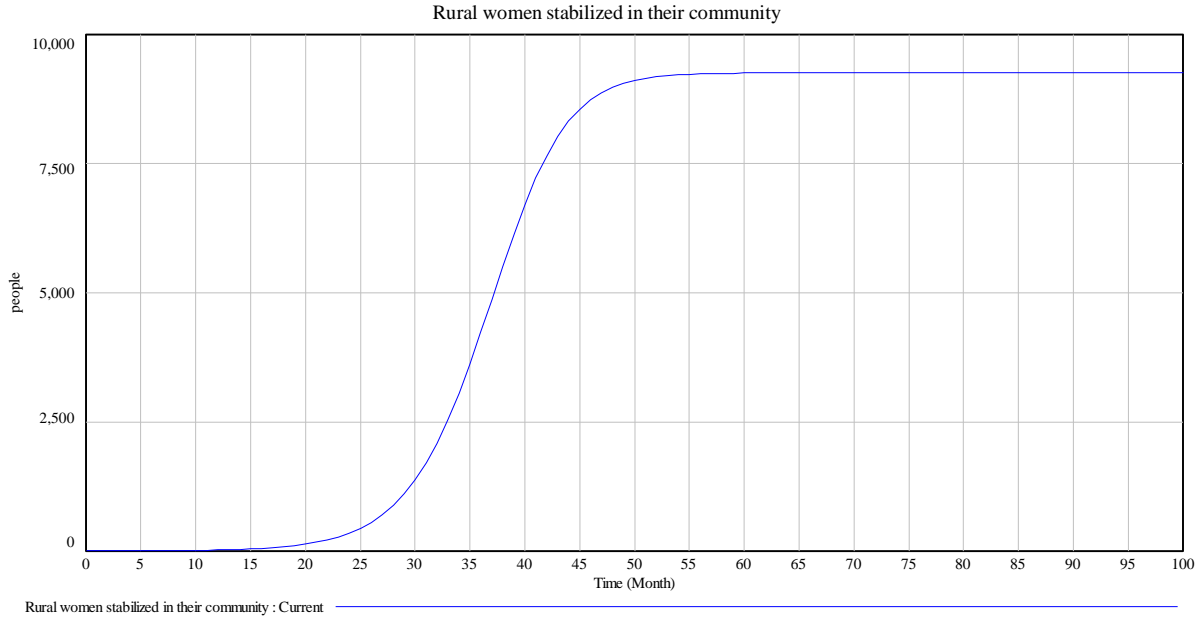


Figure 9: Effect on the “rural women stabilized in their community” variable following the variation of the “frequency of holistic accompaniment” parameter



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Figure 10: Effect on the “rural women stabilized in their community” variable following the variation of the “**accompaniment rate**” parameter

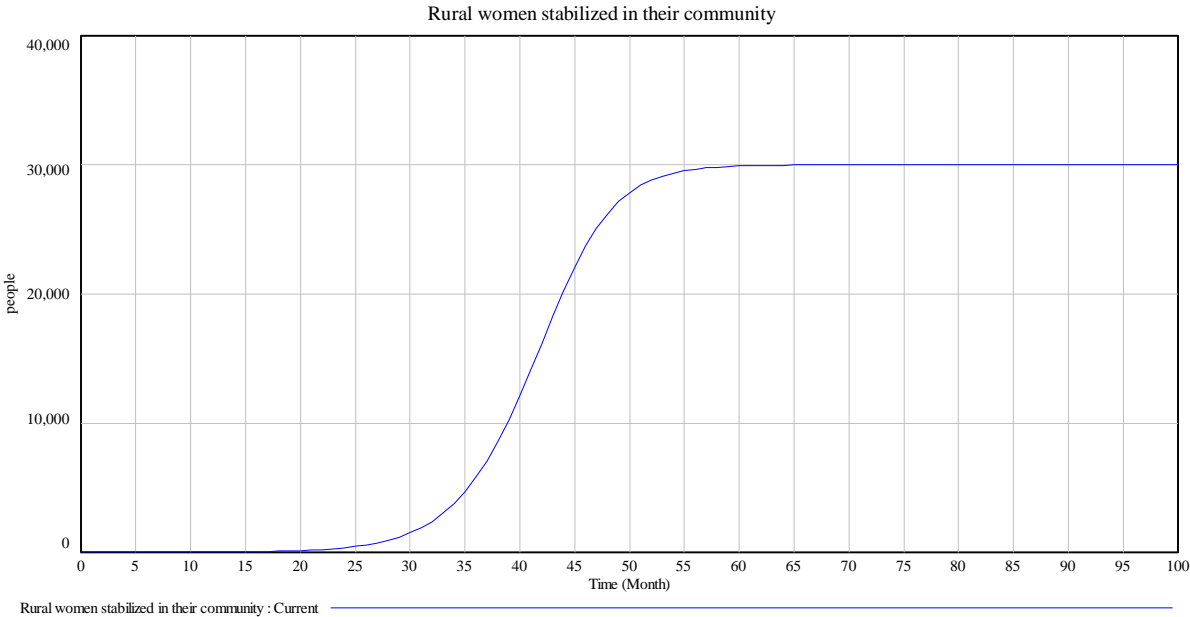


Figure 11: Effect on the “rural women stabilized in their community” variable following the variation of the “**total population of rural women holding traditional know-how in a given community**” parameter

To conclude, it should be emphasized that this article deals with the specific case of a rural Moroccan woman, in the sense that the undertaken fieldwork has exclusively concerned Morocco.

Nevertheless, the developed model is aspatial and deserves to be verified in other geographical contexts.

LEGAL PERSPECTIVES

Based on the various field observations made, the modelling and the analysis carried out, a certain number of insights, which can be developed in a specific paper, could be made known - at least at national level.

Amongst these insights, it will be essential and might be fruitful to appeal to the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, which should help to legally protect the traditional know-how of rural Moroccan women.

In fact, in virtue of the aforementioned UNESCO Convention, the State Parties must, as affirmed by Article 11 (paragraph b) of the Convention, “*identify and define the various elements of intangible cultural heritage present in its territory*” (their territories). Also, in

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accordance with the Convention (Article 12 paragraph a), each State Party “*shall draw-up, in a manner geared to its own situation, one or more inventories of the intangible cultural heritage present in its territory*”.

Furthermore, it is to be underlined that, according to Article 15, State Parties “*shall endeavour to ensure the widest possible participation of communities, groups and, where appropriate, individuals that create, maintain and transmit such heritage, and to involve them actively in its management*”. Making an inventory of traditional know-how and communicating the results of the patent offices, facilitates research associated with the topic and might prevent illicit appropriation of derivate products. In effect, an important principle in the international system of patents is that of novelty (one of the conditions for obtaining a patent). Dishonest people or organizations might attempt to obtain a patent relative to traditional know-how of local populations. These populations rarely diffuse their know-how in media that is accessible to the patent offices.

A notable example is that of confidential access granted to the patent offices by the numeric library of traditional know-how created in India. In 2002, multiple journals focussed on traditional know-how. These initiatives have contributed to the defensive protection of traditional know-how in India.

Traditional know-how databases could be used for research and development ends and they can contribute to sensitizing and reinforcing know-how, knowledge, innovation, and creativity of local communities and third parties.

It is important to note that copyright relating to documentation of associated traditional know-how/traditional know-how belongs to those who document it and are in charge of making inventories of it, such as documentation, but not to those who retain traditional know-how. Therefore, the resulting legal situation implies that holders of traditional know-how are not the ones who retain the rights over the content and could be prevented from their capacity to exert control. Nonetheless, it is to be underlined that copyright has a limited impact and does only cover a particular expression related to documentation.

Thus, copyright is not the most appropriate legal form and should not be considered as the ideal protection mechanism to be systematically pursued by local populations, although it can be a complementary measure for protecting a traditional know-how. Negotiations are currently being held by the World Intellectual Property Organization (WIPO) in order to define an international, common and positive legal framework labelled as “*sui generis*”, which could confer maximum protection.

Furthermore, the Nagoya Protocol is another legal instrument which could inspire, as well efforts to develop a new legal framework to protect derivate products from traditional know-how valorization processes by rural women.

In effect, the Nagoya Protocol offers an international framework reaffirming the necessity of a prior consent by suppliers. Besides this, the Protocol has distinguished the applicable regimes from the exchanges of tangible goods (resources) and products that derivate from intangible heritage.

Regarding Morocco, it fully recognizes the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage and a specific law is being prepared for the

implementation of the Nagoya Protocol. The legislator can, in this framework, valuably exploit the main principles of the Nagoya Protocol to amend various laws that are directly or indirectly related to the valorization of traditional know-how, including the law 112.12 on cooperatives.

CONCLUSION

Our research seeks to tackle migration and traditional know-how from a different angle, through adopting an interdisciplinary approach to studying the questions raised and highlighted in this work.

The system dynamics theory is used to model the relationships between valorization of traditional products of rural women and the improvement in their living conditions. Indeed, valorization can potentially lead to rural Moroccan women staying in their communities.

The research allows help to “formalize” a general process which defines the traditional know-how valorization ecosystem of the target population (rural Moroccan women) and to accompany them through this new process for better results and a sustainable enhancement of their living conditions.

In conclusion, in the framework of the new entrepreneurial process, various insights can be issued on the solidary and associative, legal and administrative aspects, as well as on literacy and training, marketing of products, finance of business initiatives and on the development of effective partnerships, for an inclusive economy where the rural Moroccan woman is fully considered.

Indeed, beyond gender equality, which remains a sine qua non for reducing poverty and, consequently, the rural exodus, the objective is to be able to sustainably respond to the expressed or intentional needs of the rural Moroccan women to realize their economic potential and thus improve their standard of living.

To do this, multiple programs should be designed based on a genuine integration strategy aimed to:

- Reconfigure the role of public administration so that the regulatory and administrative environment be more favorable to rural women;
- Develop human resources to increase competitiveness, create technological capacities and master the management of wealth by rural women themselves;
- Strengthen local, regional, and national capabilities in terms of policy and self-help among rural Moroccan women.

FURTHER WORKS

A natural and direct development of the present study is to deal with a specific category of products, derived from the traditional know-how of rural women and to appreciate, with accuracy, its valorization potential and its effects on the migratory flows of the countryside towards the cities and vice versa, to the extent that the phenomenon of returning to rural areas can be observed. A systems model, capable of quantitatively evaluating monopolized market share, will be developed from a basic logit formulation in which the attractiveness of the preselected category of products depends on various factors. The relative importance of each factor will be determined by sensitivity parameters.

Future studies should be theoretically and empirically ramified and embedded in the role of leadership in promoting female rural cooperatives, to help fight gender inequality and female poverty in Morocco. In so doing, researchers should combine both sociology and anthropology to better understand business dynamics and the human mechanisms involved in cooperatives, in order to better contribute to female empowerment.

Another study that could be of paramount importance for future researchers is to investigate and ferret out how Moroccan universities can become entrepreneurial and play participatory and contributory roles in rural development, through female cooperatives that call upon the participation of public and private stakeholders - be they national or international - and involvement of scientific fields, such as biology, engineering, medicine, architecture and humanities to consolidate and maximize production.

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REFERENCES

1. Abu-Saifan, S. (2012). Social Entrepreneurship: Definition and Boundaries. *Technology innovation management review*, 2(2).
2. Alchian, A. A., & Woodward, S. (1988). The Firm Is Dead; Long Live the Firm, a Review of Oliver E. Williamson's the economic institutions of capitalism. - *Journal of Economic Literature*, 26, 65-79.
3. Ardichvili, A., Cardozo, R., & Ray, S. (2003). A Theory of Entrepreneurial Opportunity Identification and Development. *Journal of Business Venturing*, 18(1), 105-123.
4. Ardoino, J. (1993). L'approche multiréférentielle (plurielle) des situations éducatives et formatives. *Pratiques de formation*, (25-26), 15-34.
5. Bailey, W. J., Masson, R., & Raeside, R. (1998). Choosing Successful Technology Development Partners: A Best-practice Model. *International Journal of Technology Management*, 15(1-2), 124-138.
6. Barbier, J. C., Courade, G., & Gubry, P. (1978). L'exode rural au Cameroun (No. 11). Office national de la recherche scientifique et technique, Institut des sciences humaines, Centre géographique national.
7. Bass, F. M. (1969). A New Product Growth for Model Consumer Durables. *Management science*, 15(5), 215-227.
8. Bastian, B. L., Sidani, Y. M., & El Amine, Y. (2018). Women Entrepreneurship in The Middle East and North Africa: A review of knowledge areas and research gaps. *Gender in Management: An International Journal*, 33(1), 14-29.
9. Bernardi, F., González, J. J., & Requena, M. (2007). The Sociology of Social Structure. *Twenty-First Century Sociology: A Reference Handbook*.
10. Berriane, M., Michon, G., Skounti, A., Moizo, B., Romagny, B., & Tebbaa, O. (2015). Les « patrimoines ruraux » au Maroc : Un nouveau produit des mobilités contemporaines? *GéoDév. ma*, 3.
11. Bertolini, P. (2019). Overview of Income and Non-Income Rural Poverty in Developed Countries. Expert Group Meeting on Eradicating Rural Poverty to Implement the 2030 Agenda for Sustainable Development. United Nations Economic Commission for Africa. Addis Ababa. 27 February – 1 March 2019.
<https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2019/03/bertolini-Overview-rural-poverty-developed-countries-1.pdf>.

12. Brousseau, E. (1989). L'approche néo-institutionnelle des coûts de transaction. *Revue française d'économie*, 4(4), 123-166.
13. Brousseau, E. (1993). Les théories des contrats : une revue. *Revue d'économie politique*, 103(1), 1-82.
14. Brydon, L., & Chant, S. H. (1989). *Women in the Third World: Gender issues in Rural and Urban Areas*. Rutgers University Press.
15. Callon, M. (1989). *La science et ses réseaux : genèse et circulation des faits scientifiques*. Paris: Éditions La Découverte.
16. Callon, M. (1991). *Réseaux Technico-Economiques et Irréversibilités*. - dans R. Boyer, B. Chavance et O. Godard (eds.), *Les figures de l'Irréversibilité en Economie*. Paris : Editions de l'Ecole des Hautes Etudes en Sciences Sociales.
17. Callon, M., Laredo, P., & Rabeharisoa, V. (1991). *Des instruments pour la gestion et l'évaluation des programmes technologiques : le cas de l'AFME. L'évaluation économique de la recherche et du changement technique*, Presses du CNRS, Paris.
18. CookIt. *CookIt C'est Quoi?*. <https://www.cookit.ma/cest-quoi-cookit/#etapes>.
19. Coudert-Saderne, I., & Leyronas, C. (1996). « *L'Apprentissage Relationnel comme Élément de Genèse et de Dynamique de l'Organisation en Réseau* ». Cahier de l'ERFI n°9, Université de Montpellier 1.
20. Danziger, N. (2009). "Rural Women and Migration". IOM Fact Sheet.
21. De Haas, H., & Van Rooij, A. (2010). Migration as Emancipation? The Impact of Internal and International Migration on the Position of Women Left Behind in Rural Morocco. *Oxford development studies*, 38(1), 43-62.
22. Dees, J. G. (2001). The Meaning of "Social Entrepreneurship." Centre for the Advancement of Social Entrepreneurship.
23. DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured Interviewing in Primary Care Research: A Balance of Relationship and Rigour. *Family Medicine and Community Health*, 7(2).
24. Drucker, P. (2014). *Innovation and entrepreneurship*. Routledge.
25. Dyer, J.H., Gregersen, H.B., & Christensen, C.M. (2009). The Innovator's DNA. *Harvard Business Review*, December 2009.
26. Enactus Morocco. *Projet: Eco-Heat*. <https://www.enactus-morocco.org/projets/heat-up/>.
27. FAO (2003), The « Gestion de Terroirs » Approach. In Cleary, Dervla, et al. "People-centered Approaches: A Brief Literature Review and Comparison of Types." LSP

Working Paper (FAO).

URL: <http://www.fao.org/docrep/006/ad682e/ad682e00.htm#Contents> .

28. Favereau, O. (1989). Organisation et marché. *Revue française d'économie*, 4(1), 65-96.
29. Forrester, J.W. (2013). *Industrial Dynamics*, Martino Publishing, Mansfield.
30. Frankel, R., Schmitz Whipple, J., & Frayer, D. J. (1996). Formal Versus Informal Contracts: Achieving Alliance Success. *International Journal of Physical Distribution & Logistics Management*, 26 (3), 47-63.
31. Gaillard, J. M. (1997). *Marketing et Gestion de la recherche et développement. Economica*.
32. Ghemawat, P. (1991). *Commitment: The Dynamic of Strategy*. Free Press.
33. Goldberg, V. P. (1976). Toward an Expanded Economic Theory of Contract. *Journal of Economic Issues*, 10(1), 45-61.
34. Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1, 201-233.
35. Gulati, R. (1995). Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. *Academy of Management Journal*, 38(1), 85-112.
36. Gyenes, L.A. (1991). Build the Foundation for a Successful Joint Venture. *Journal of Business Strategy*, 12(6), 27-32.
37. Hakanson, L. & Lorange, P. (1991). *R&D Based Co-operative Ventures*. In L.G. Matsson & B. Styme (eds.), *Corporate and Industry Strategies for Europe*. Amsterdam : North-Holland.
38. Hamimaz, R. (2009). Le développement des produits du terroir au Maroc : quelques préalables. *Options méditerranéennes, Série-A*, 89, 271-279.
39. Hax, A.C., & Wilde II, D.L. (2003). The Delta Model: A New Framework of Strategy. *Journal of Strategic Management Education*, 1(1).
40. Hax, A.C. (2010). *The Delta Model. Reinventing your Business Strategy*. Springer.
41. Holt, G. D., Love, P. E., & Li, H. (2000). The Learning Organisation: Toward a Paradigm for Mutually Beneficial Strategic Construction Alliances. *International Journal of Project Management*, 18(6), 415-421.
42. Iansiti, M. & Stein, E. (2005). *Understanding User Needs*. Harvard Business School Publishing.
43. Jamshed, S. (2014). Qualitative Research Method-Interviewing and Observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87.

44. Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
45. Kano, N., Seraku, N., Fumio Takahashi, F., & Shinichi Tsuji, S. (1984). *Attractive Quality and Must-be Quality*. *Journal of the Japanese Society for Quality Control (in Japanese)*. 14(2), 39-48.
46. Kim, W.C. & Mauborgne, R. (2015). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Harvard Business Press.
47. Klein, B., Crawford, R. G., & Alchian, A. A. (1978). Vertical Integration, Appropriable Rents, and the Competitive Contracting Process. *The Journal of Law and Economics*, 21(2), 297-326.
48. L'Economiste. Shems for lighting: La startup sociale gagne le jackpot. 26.10.2019. <https://www.leconomiste.com/article/1051797-shems-lighting-la-startup-sociale-gagne-le-jackpot>.
49. Lacirignola, C. (2017). Rural Migration: Agriculture and Inclusive Development for a Resilient Mediterranean. *IEMed Mediterranean Yearbook*.
50. Larson, A. (1992). Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships. *Administrative Science Quarterly*, 37(1), 76-104.
51. Lenzerini, F. (2011). Intangible cultural heritage: The living culture of peoples. *European Journal of International Law*, 22(1), 101-120.
52. Light, P. C. (2006). Reshaping Social Entrepreneurship. *Stanford Social Innovation Review*, 4(3), 47-51.
53. Lilien, G.L., Rangaswamy, A., & Van Den Bulte, C. (2000). *Diffusion Models: Managerial Applications and Software*. in V. Mahajan, E. Muller et Y. Wind (ed.), *New-Product Diffusion Models*. Boston: Kluwer Academic Publishers.
54. Macauley, S. (1963). Non-contractual Relations in Business: A Preliminary Study, *American Sociological Review* 28 (55), 55-69.
55. Mediterra (2008). *The Future of Agriculture and Food in the Mediterranean Countries/International Centre for Advanced Mediterranean Agronomic Studies*. – Paris: Presses de Sciences Po, 2008.
56. Mejjati Alami, R. (2006). Femmes et marché du travail au Maroc. *L'Année du Maghreb*, (I), 287-301.
57. Milgrom, P., & Roberts, J. (1997). *Economie, Organisation et Management*. Grenoble/Bruxelles : Presses Universitaires de Grenoble/De Boeck et Larcier.

58. Morse, K. (2003). Argan Oil: A Moroccan Flavour Rediscovered. *Gastronomica*, 3(4), 68-70.
59. Omvedt, G. (1986). "Patriarchy": The Analysis of Women's Oppression. *Insurgent Sociologist*, 13(3), 30-50.
60. Perret, F.-L. & Louafa T. (2008). *Créativité et innovation : l'intelligence collective au service du management de projet*. Presses Polytechniques et Universitaires Romandes.
61. Petaraf, MA. The Cornerstones of Competitive Advantage: A Resource-Based View, *Strategic Management Journal*, Vol 14(3), 179-192.
62. Piermay, J.L. Review of Gervais-Lambony, P. (2003). *Territoires Citadins : Quatre Villes Africaines*, Paris : Belin.
63. Poppo, L., & Zenger, T. *Do Formal Contracts and Relational Governance Function as Substitutes or Complements?* *Strategic Management Journal*, 2002, 23, 707-725.
64. Porter, M.E. (1980). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. Free Press.
65. Porter, M.E. (1985). *Competitive Advantage. Creating and Sustaining Superior Performance*. Free Press.
66. Ring, P. S., & Van de Ven, A. H. (1992). Structuring Cooperative Relationships between Organizations. *Strategic Management Journal*, 13(7), 483-498.
67. Ring, P. S., & Van de Ven, A. H. (1994). Developmental Processes of Cooperative Interorganizational Relationships. *Academy of Management Review*, 19(1), 90-118.
68. Rogers, B. (2005). *The Domestication of Women: Discrimination in Developing Societies*. Routledge.
69. Rojot, J., & Bergmann, A. (1995). *Comportement et Organisation*. Paris : Vuibert.
70. Roy, B. (1985). *Méthodologie multicritère d'aide à la décision*. Economica.
71. Saidi, S. (1993). Genre et économie : la participation des femmes à la vie économique. *Féminin-masculin : la marche vers l'égalité au Maroc*, 2003, 149-192.
72. Sauvy, A. (1971). *L'exode rural, suivi de deux études sur les migrations*. Population (édition française), 519-524.
73. Sharma, S. (2017). The Dynamics of Women's Empowerment: A Critical Appraisal. *Social change*, 47(3), 387-405.
74. Simon, H. A. (1976). From Substantive to Procedural Rationality. In 25 years of economic theory (pp. 65-86). Springer, Boston, MA.
75. Skalli, L. H. (2001). Women and Poverty in Morocco: The Many Faces of Social Exclusion. *Feminist Review*, 69(1), 73-89.

76. Smith, L., & Natsuko A. (2008). *Intangible Heritage*. Routledge.
77. Stark, O. (1991). *The Migration of Labor*. Cambridge, Mass.: Basil Blackwell.
78. Stark, O., & Taylor, J. E. (1989). Relative Deprivation and International Migration. *Demography*, 26(1), 1-14.
79. Startup.info. "Shems for lighting: promotion of solar and ecological lamps". <https://startup.info/shemsforlighting/>
80. Sterman, J. (2000) *Business Dynamics: Systems Thinking and Modelling for a Complex World*. Boston: Irwin/McGraw-Hill.
81. Strum, S., Callon M., Latour, & B. Lakrich, M. (2006). *Sociologie de la traduction : textes fondateurs*. Paris, Mines ParisTech, les Presses, Sciences sociales.
82. Sultan, F., Farley, J. U., & Lehmann, D. R. (1990). A Meta-analysis of Applications of Diffusion Models. *Journal of Marketing Research*, 27(1), 70-77.
83. Talec, L. (2016). *Des Men's Studies aux Masculinity Studies : du patriarcat à la pluralité des masculinités*. Sociologies.
84. Tan, Y. W., & Burgess, G. H. (2018). Multidimensional Effects of Acculturation at the Construct or Index Level of Seven Broad Neuropsychological Skills. *Culture and Brain*, 1-19.
85. Thompson, L. (2013). *Creative Conspiracy: The New Rules of Breakthrough Collaboration*. Harvard Business Review Press.
86. Uzzi, B. (1997). *Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness*. *Administrative Science Quarterly*, 42, 35-67.
87. Vecco, M. (2010). A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, 11(3), 321-324.
88. Vensim PLE/Ventana Systems (2007). *Vensim®: User's Guide (Version 5)*.
89. Wiesinger, G. (2007). The Importance of Social Capital in Rural Development, Networking and Decision-Making in Rural Areas. *Journal of Alpine Research | Revue de géographie alpine*, (95-4), 43-56.
90. Wikipedia. <https://en.wikipedia.org/wiki/Kano> (retrieved on December 1st, 2019).
91. Williamson, O. E. (1975). *Markets and Hierarchies*. New York: Free Press.
92. Yannou, B. (2018). *La méthodologie Radical Innovation Design® (en bref, positionnement pour les experts de l'innovation)*. [Rapport de recherche] CentraleSupélec. hal-01683434.
93. Zaazaa, L., Mohammed, I., & Lage, M. (2016, November). Contribution to the Study of Historical Introduction About Saffron (*Crocus Sativus L.*) Culture in Morocco. In *Fifth*

International Symposium on Saffron Biology and Technology: Advances in Biology, Technologies, Uses and Market 1184 (185-188).

94. Zainal, Z. (2007). Case Study as a Research Method. *Jurnal Kemanusiaan*, 5(1).

Appendix

1. Accompaniment rate=0.11

Units: Dmnl

This value can be modified in a sensitivity analysis.

2. "Capability of the know-how valorization"=IF THEN ELSE("Real traditional know-how valorization">0, 0.05, 0)

Units: Dmnl

3. FINAL TIME = 100

Units: Month

The final time for the simulation.

4. Frequency of a holistic accompaniment=5.5556

Units: people/people/Month

This value can be modified in a sensitivity analysis.

5. Global rural women in their community=9260

Units: people

9260 is the retained value for an average Moroccan tribal community. This value can be modified in a sensitivity analysis.

6. INITIAL TIME = 0

Units: Month

The initial time for the simulation.

**7. Interactions between rural stabilized women in their community=
Rural women stabilized in their community/Global rural women in their
community**

Units: Dmnl

8. Market penetration efficiency=0.01

Units: Dmnl/Month

This parameter refers to the Bass innovation coefficient.

9. Potential of holistic accompaniment=

Rural women susceptible to be stabilized in their community*Frequency of a holistic accompaniment

Units: people/Month

10. Real external valorization=

Market penetration efficiency*"Valorizable traditional know-how"

Units: MAD/Month

11. Real interactions between stabilized women and women susceptible to be stabilized

=Potential of holistic accompaniment*Interactions between rural stabilized women in their community

Units: people/Month

12. Real internal valorization=(Valorization fraction*Accompaniment rate*"Real traditional know-how valorization"*"Valorizable traditional know-how")/Total valorization potential

Units: MAD/Month

13. "Real traditional know-how valorization"= INTEG (Valorization rate,1500)

Units: MAD

1500 MAD is the average retained revenue per month and per person.

This value is subject to modifications.

14. Rural women stabilized in their community= INTEG (Stabilization rate,1)

Units: people

15. Rural women susceptible to be stabilized in their community= INTEG (-Stabilization rate,Global rural women in their community-Rural women stabilized in their community)

Units: people

16. SAVEPER = TIME STEP

Units: Month [0,?]

The frequency with which output is stored.

17. Stabilization rate=Real interactions between stabilized women and women susceptible to be stabilized

***"Capability of the know-how valorization"**

Units: people/Month

18. TIME STEP = 1

Units: Month [0,?]

The time step for the simulation.

19. Total valorization potential=9260

Units: MAD

This value is subject to modifications.

20. "Valorizable traditional know-how" = INTEG (-Valorization rate, 18000)

Units: MAD

18000 MAD is equal to a constant revenue of 1500 MAD/month times 12 months/year.

This value is subject to modifications.

21. Valorization fraction = 0.3

Units: Dmnl/Month

This parameter refers to the Bass imitation coefficient.

22. Valorization rate = Real external valorization + Real internal valorization

Units: MAD/Month

ABOUT EMNES



The Euro-Mediterranean Network for Economic Studies (EMNES) is a network of research institutions and think tanks working on socio-economics policy in the Euro-Mediterranean. EMNES is coordinated by the Euro-Mediterranean Economists Association (EMEA).

The research conducted by EMNES Researchers, Associates and Fellows aims to design sound and innovative socio-economic models that are inclusive, sustainable and employment creative, to devise new models for regional integration and to provide policy recommendations towards this goal.

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- Governance, institutions and institutional reforms;
- Macroeconomic policies and employment creation;
- Private sector, micro, small and medium –sized enterprises development, entrepreneurship and social business;
- Digital economy;
- Healthcare policy;
- Human capital development, education, innovation, skill mismatch and migration;
- Labor markets, employment and employability;
- Finance, financial inclusion and the real economy;
- Sustainable development;
- Regional integration;
- Euro-Mediterranean economic partnership;
- Scenarios analysis and foresight.

EMNES performs **research activities**, disseminated through series of internal and external publications (studies, working papers, policy papers, policy-graphics and books) and the organization of **annual conferences**, and **policy workshop meetings and online webinars** to bring together leading researchers, policy makers and representatives of the civil society to discuss and debate optimal policies for the future of the region.

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