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2019

Bachelor of Commerce Best Business Research Papers

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Original citation:

Rudolph, M. (2019). Social innovation in Morocco. *Bachelor of Commerce Best Business Research Papers*, 12, 104–119.

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ABSTRACT

The current global atmosphere surrounding the link between economic development and environmental degradation has become increasingly negative and has incited a societal push towards creating more socially and environmentally conscious products and processes. Social innovation and social enterprises fill the gap left between inefficient governments and underfunded non-profit organizations and NGOs. The largest of these gaps can be felt in developing economies and countries such as Morocco, whose unique cultural, political, and economic history stunts equitable and sustainable development. After introducing the theoretical concepts that frame this discussion on social innovation in Morocco, a PESTEL analysis will outline the varying factors that influence the current business landscape and highlight the most prominent obstacles facing social innovators and entrepreneurs. These tools will be utilized to analyze and understand the ecosystem of incubators and financiers who support SI in Morocco followed by two case studies of Go Energyless Solutions and HydroBarley, Moroccan companies led by women social entrepreneurs. The goal of this report is to contextualize the challenges facing the two enterprises and examine the methods by which they are approaching overcoming them. These case studies highlight the major themes that negatively influence the ability for social innovation to gain momentum in Morocco: scalability, adaptability to regions, insufficient financial backing, and weak partnership opportunities.

INTRODUCTION

In the current global socio-economic climate, there is a general understanding that many governments are unable to fully meet the needs of their people in an efficient and effective manner. In the gap left between governments, international organizations, and the non-profit and NGO sectors, there leaves an opening for businesses to fill the social and economic needs of the population. Where in the past businesses were centered on profit maximization and capital returns, there is now a push for more socially and sustainably centered corporations which benefit not only their core stakeholders but also the communities affected by the negative externalities of economic growth. Companies are emerging all over the world that are looking to tackle large social and environmental issues especially in developing countries and economies. Social Innovation (SI) is being utilized as a tool by many social enterprises to build sustainable solutions to social, environmental, and economic problems through revolutionizing means of production, creating human centered designed products and reimagining institutional systems.

As a developing economy, Morocco suffers from the negative effects of global climate change, political instability, and social inequalities which are inhibiting the economic progress of the country. There is space for social enterprises and SI to emerge as the primary drivers for social and economic progression, however the ecosystem necessary for them to thrive is still in its infancy. After introducing the theoretical concepts that will frame our discussion on social innovation in Morocco, a PESTEL analysis will outline the varying factors that influence the current business landscape and highlight the most prominent obstacles facing social innovators and entrepreneurs. These tools will be utilized to analyze and understand the ecosystem of incubators and financiers that support SI in Morocco followed by two case studies of Go Energyless Solutions and HydroBarley, Moroccan companies lead by women social entrepreneurs. This report aims to contextualize the challenges facing these two enterprises and analyze the methods which they are using to overcome their mutual challenges.

Social Innovation

Social Innovation, although not a new concept, lacks substantial academic research and an agreed upon definitive definition. This is due in part to its practice-led nature, where it is identified by each organizations' application and contribution to the concept rather than analysis through typical academic streams ("Social Innovation Theory and Research" [SITR], 2014). The most all-encompassing definition given by "the Theoretical, Empirical, and Policy Foundations for Building Social Innovation in Europe" (TIPSIE) identifies five criteria which characterize SI: new within its context, created with the intention of meeting a social need, put into practice, engages and mobilizes its beneficiaries, and transforms social relations (SITR, 2014). Social Innovation is often used alongside and sometimes synonymously with social entrepreneurship and corporate social responsibility (CSR), but is distinct in that it can apply to governmental regulations and international organizations processes rather than just within business contexts (SITR, 2014).

Literature and theoretical thought on SI falls into two perspectives: Individualistic and Structural (Cajaiba-Santana, 2013). The individualistic approach highlights the pursuit of social change by ambitious and inspired individuals looking to create change in their own communities. This is juxtaposed by the structural analysis which looks at how institutions and the contextualization of social issues shape the boundaries and outcomes of SI. Although, these two perspectives have shaped the majority of academic research on SI over the last two decades, there is a necessity for a more holistic approach to SI analysis which can convey the full complexities and intersectionality of the two perspectives (Cajaiba-Santana, 2013).

Human Centered Design

To create effective and truly revolutionary SI, social innovators must be able to design products that fully account for the needs and cultural context of their beneficiaries. Design thinking is an approach to human centered design perfected by IDEO, an international industrial design firm located in Palo Alto, CA, that aims to find solutions to product and process design by re-envisioning the problem-solving process to focus on people-based solutions (Brown & Wyatt, 2010). IDEO's method takes the typical analytical and rational approaches to problem-solving and incorporates human aspects of intuition and pattern recognition to develop solutions with functionality and simultaneously emotional meaning. These types of outcomes are social in nature and are achieved not through a sequential process but a cyclical system of overlapping 'spaces' rather than steps. IDEO defines three 'spaces' which are continuously influencing each other and are cycled through several times in the design thinking process: Inspiration, Ideation, and Implementation (Brown & Wyatt, 2010). These 'spaces' give room for the consideration of all possible causes and solutions that may have otherwise been overlooked. Social innovators utilize design thinking to build creative and visionary solutions to the most acute social, economic, and environmental problems which have been otherwise unresolved with common problem-solving techniques.

Shared Value Creation

The current global business mentality is experiencing a shift in the way that value creation is conceptualized and undertaken. For too long, businesses have created value for their customers and shareholders in a vacuum not accounting for the negative environmental and social externalities of capital gains. As society is realizing the consequences of thoughtless capitalistic growth, businesses are becoming synonymous with heartless, money hungry machines and are distrusted in the public eye. Michael Porter and Mark Kramer in their article on Creating Shared Value (CSV) have examined the positive link between successful businesses and strong communities (2015). They define the concept of shared value as "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates" (Porter & Kramer, 2015). This concept intertwines the economic and social ideas of value creation and

identify three ways in which companies can achieve this: “by reconceiving products and markets, redefining productivity in the value chain, and building supportive industry clusters at that company’s location” (Porter & Kramer, 2015). Shared Value creation goes beyond CSR as it shifts business models to be socially centered and recognizes that social costs can create higher economic and business costs when not addressed correctly. CSV is at the core of SI and social enterprises as they seek to develop business models which can maximize the profit and social impact of their innovations.

United Nation’s Sustainable Development Goals

In 2015, the United Nations Development Programme (UNDP) once again gathered leaders from 193 countries around the world to determine another 15-year plan in pursuit of sustainable economic development (The Sustainable Development Agenda [SDA], 2018). The previous Millennium Development Goals implemented in 2000 managed to cut the global poverty rate by half and the UNDP has the ambitious goal of eradicating poverty, empowering and educating the population, and alleviate the most pressing threats from global climate change by 2030 (SDA, 2018). The Sustainable Development Goals (SDGs) are 17 goals meant to promote the overall wellbeing of all global citizens through:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnerships for the Goal

These goals are being used as a framework for governments, NGOs, and many companies to measure their global impact and inspire better practices and innovation in the pursuit of sustainable development (SDA, 2018).

PESTEL ANALYSIS

Political

Morocco is characterized as a constitutional monarchy with ultimate authority being given to the King. Recent constitutional reform came in the wake of the Arab Spring in 2011 which jolted the monarchy to grant more civil liberties to its citizens and redistribute governmental power as a way of maintaining relative stability within the country. Despite these reformations Morocco remains plagued by political corruption, a weak democratic process, and little to no actual change in the governmental power distribution. In Transparency International’s index for Corruption Perceptions 2017, they rank Morocco 81st out of 180 countries analyzed and scores Morocco 40/100 (0 being most corrupt and 100 being cleanest) for corruption in the public sector (Transparency International.org,

2018). The Bertelsmann Stiftung Index rates Morocco lowest on the stability of its democratic institutions and the separation of power in the government due to the lack of functioning checks and balances (Transformation Atlas, 2018). The strong hold that the monarchy has over the social and economic systems in Morocco are not favorable for innovation to prosper, however, King Mohammad VI has stated that entrepreneurship and innovation make up “the twin values that are both stepping stones towards freedom, social mobility and prosperity...” (El Ghaib & Chaker, 2018). Assuming the monarchy continues to value the importance of innovation as a driver for social change, there could be strong backing for SI to flourish in Morocco in the future.

Economic

Morocco’s 2017 GDP was 109.1 Billion USD with a 4.1% annual GDP growth rate (World Bank, 2018). There is relative macro-economic stability and low inflation rate which make Morocco more favorable for business than the majority of other MENA countries. They, however, have a high unemployment rate at 10.3% of the population and an even higher rate in youth between 15-24 years of age at 26.5% (Santander, 2018). 62% of the population is under 29 years old making job creation a pressing issue for Moroccan youth (Teasley, 2012). Morocco also has the highest economic inequality ratio of the North African countries with a Gini Coefficient of 40.3%, meaning it has the largest gap between its richest and poorest citizens in comparison to its neighboring countries (Koundouno, 2018). SI has the potential to close these economic gaps and social entrepreneurship has the potential to fill the demand for job creation in Morocco.

Social

The most significant social issues affecting the population of Morocco are ineffective education, poor health care quality, and rural poverty. Morocco’s Human Development Index is 0.667 which ranks 123rd out of 189 countries based on life expectancy, level of and access to education, and overall standard of living (Human Development Index, 2018). It also ranked 119th out of 160 countries in the Gender Inequality Index in 2017 which shows the loss in human development due to inequalities between men and women (Human Development Index, 2018). 44% of the youth population is illiterate and are being failed by the education system in Morocco which, even when completed, does not properly prepare them for the job market (Teasley, 2012). 41% of the population of Morocco live in rural areas without a consistent income stream and without proper access to adequate health care (Zemouri, 2018). These factors all feed into the cycle of poverty that makes economic and social development in Morocco difficult to attain and provokes the necessity for SI.

Technological

According to the Africa Capacity Report Morocco ranked 1st in the science, technology, and innovation index. This index measured Morocco on the basis of policy, implementation, country level results, and capacity development outcomes in technology and innovation against the other countries in the African Union (AU) (El Masaiti, 2018). Morocco also benefits from one of the best infrastructures in Africa which gives it ample transportation options, communication channels, and logistical ease for companies (Oxford Business Group, 2017). Additionally, Morocco was the first country to set up a regulatory framework to nurture the expansion of the ICT sector in Africa. The most recent of these initiatives is Plan Maroc Numeric 2020 which aims to cut the digital divide by 50% while also educating and training 30,000 IT professionals. The Moroccan government has also established the Moroccan Digital Fund, which invests in start-up companies in a variety of technological fields including e-commerce, cybersecurity, and recently expanding to include green tech (Oxford Business Group, 2017). SI has a substantial technological structure to build upon and the opportunity to commercialize the expansion of technological innovation into underserved rural areas where its benefits have not yet reached.

Environmental

Morocco has several key environmental issues that influence the development of its people and the quality of life in the country. Major issues pertain to pollution of air, land, and water due to outdated regulation on industry, inefficient energy use, and an inadequate waste management system (Legacy International, 2016). Moroccans, especially in rural areas, are dependent on the agricultural and fishery industries for economic stability, however global climate change puts these sectors at risk and is causing fluctuations in the nation's economic health (US Aid, 2016). The most pressing of these issues is reduced crop yields due to drought, shorter growing seasons, migration of fish populations to cooler waters, and dilapidation of water quality. The Moroccan government, however, has placed an importance on renewable energy production and has the goal of producing 42% of its energy with renewable sources by 2020 (Zafar, 2017). This leaves room for SI to create sustainable solutions aiming to resolve these crucial environmental problems which intrinsically affect the social and economic resolution of Morocco.

Legal

Human Rights Watch identifies freedom of expression, assembly, and association as still having restrictions under Moroccan law which threaten civil liberties in the country (2018). Women were granted constitutional equality in 2011, however they can still experience prosecution when rape suits are not sustained and can face trial if they become pregnant outside of marriage (Human Rights Watch, 2018). Restricted human rights remain a hindrance for equal social development in Morocco and discourages foreign investment in the country. The 2011 constitutional reforms also granted the right to sustainable development to all citizens highlighting the current focus of the administration to enact policies designed to promote SI and social entrepreneurship (Legacy International, 2016). However, there presently lacks official legislation to boost innovation and high levels of bureaucratic obstacles hinder quickness and flexibility of social entrepreneurs to begin their businesses (El Ghaib & Chaker, 2018).

MOROCCAN SI ECOSYSTEM

Before analyzing the two social enterprises case studies in Morocco, it is critical to understand the ecosystem which fosters their development. The social innovation ecosystem in Morocco is still in its infancy stages and is establishing its methodology around stimulating youth and launching social enterprises. There are three layers of organizations within this ecosystem that can be grouped as inspirers, accelerators/incubators, and financiers (El Ghaib & Chaker, 2018).

The inspirers are companies which seek out and encourage young adults to pursue social entrepreneurship. The main partners at this level are The Moroccan Center for Innovation and Social Entrepreneurship (Moroccan CISE) and Enactus Morocco (EM). Moroccan CISE aims to alleviate all social challenges in Morocco through SI and social entrepreneurship (MCISE, 2018). They have created several initiatives to foster awareness and education about SI specifically through their high school engagement program Tamkeen. At the university level, EM acts as a platform for students to collaborate and create social enterprises. EM has enabled the other two women entrepreneurs, whose case studies will be discussed, by educating them on SI and nurturing their business ideas and development. EM is a non-profit organization currently headed by Maha Chief Ech and founded in 2003 as a subsidiary of the international non-profit organization Enactus (Enactus, 2017). EM has assisted in the development of over 20,000 students since its inception. Enactus' platform connects student and influences their business and leadership development through inspirational conferences, empowerment programs, motivational speeches, and competitions. All companies founded through Enactus must adhere to the "Triple Bottom Line" which requires them to formulate their business models around building economic wealth creation, human development, and environmental protection. Since 2015, they also require businesses to follow the UN's SDGs. Enactus Morocco is currently connected to 120 universities in Morocco and in 2017 helped over 5,000 students form teams and create

sustainable businesses (El Ghaib & Chaker, 2018). Both organizations act as a foundation for SI educational development in youth and stimulus for SI solutions in Morocco.

Additionally, EM and Moroccan CISE also act as the key incubators/accelerators in Morocco by providing training, mentoring, and capacity building at the pre-seed and seed stages of business development (El Ghaib & Chaker, 2018). EM launched an incubator project called EMPACT in 2015 with the help of the OCP Foundation. This program assists the progress of high impact projects and start-ups through funding, mentoring, and networking events to further leverage their businesses (Enactus, 2017). Their incubator provides the opportunity for teams to attain \$2,000 USD in grant money and up to \$15,000 USD in zero-interest loans and has been able to launch over 50 start-ups in the last two years. Similarly, Moroccan CISE launched an incubator program called DARE Inc. supported by the DROSOS Foundation. DARE Inc. provides initial funding of 3,000 USD to companies accepted into their incubator, as well as access to their four-month boot camp to stimulate the launch of SI projects (DARE Inc., 2018). They have since created over 20 companies, incubated 45 more, and created over 80 jobs. EMPACT and DARE Inc. are accompanied by Espace Bidaya and Cluster Solaire which combine to create the accelerator structure in the Moroccan SI ecosystem (El Ghaib & Chaker, 2018). All four organizations bolster the development of social enterprises attempting to tackle Morocco's largest socio-economic problems.

The third and final level of the ecosystem is the financiers who fund these start-ups through various types of investment capital including debt, equity, subsidies and/or honor loans (El Ghaib & Chaker, 2018). OCP Group and Caisse Centrale de Garantie (CCG) are the main financiers facilitating development. The OCP Group is a Moroccan phosphate company which in 2013 launched the OCP Entrepreneurship Network as a part of their CSR to help finance Moroccan entrepreneurs and have since been supporting many SI and social entrepreneurial initiatives (OCP Group, 2018). CCG is a public financial institution which was developed to share the financial risk with start-ups in Morocco and invest in the future of the country (CCG, 2017). All of these aforementioned organizations are relatively new to the SI field and are in the process of creating the most effective approaches for strengthening SI development in Morocco. The success and widespread impact of SI in Morocco will be intrinsically dependent on the cohesion and strength of this ecosystem.

CASE STUDIES

The information provided for the following case studies was gathered from surveys and phone interviews conducted with the two founders. All statistical data was provided by the founders as determined from their companies' personal research and calculations. The answers received in both surveys can be viewed in Appendix A and B of this report. The format of the surveys was adapted from the United Nation's Growing Inclusive Market's case study surveys and was provided by Professor Majid El Ghaib at ESCA Ecole de Management in Casablanca, Morocco.

GO ENERGYLESS SOLUTIONS

Go Energyless Solutions is a social enterprise aiming to generalize the use of energy saving products globally, beginning in the North African region. Raowia Lamhar is the CEO and co-founder of Go Energyless Solutions and started the company with the intent of alleviating a few key social issues related to environmental sustainability, job creation, and waste reduction. Go Energyless Solutions designs, manufactures, and markets sustainable products with a human centric design process which also drives their business model. The first product they developed is an all-natural, energy-less refrigerator called "Fresh it". 45% of people in the rural areas of Morocco do not have access to electricity, which causes over 80% of food to spoil in these communities without access to proper refrigeration. Their innovative, hand-crafted clay refrigerator requires no electricity, holds up to 8 kgs of product, and can keep produce, drinks, and temperature sensitive products, such as medicine, cool for up to 15 days.

Business Model

The core of Go Energyless Solution's business model is their value proposition to generalize the access of energy saving products globally. They achieve this by providing products like "Fresh it" in two versions to two key customer segments. A high-end version is marketed and sold to organic food and Lifestyle of Health and Sustainability (LOHAS) consumers for \$50. While a basic version is sold in rural communities to families with lower buying power and little to no access to electricity for \$22. The revenue model is that of "the rich compensate for the poor", which allows them to cover the costs of producing the products and provide "Fresh it" at a lower cost to rural consumers. To build trust and customer relationships with the people in the rural communities, Go Energyless Solutions employees local ambassadors to sell their products. For the LOHAS consumers they are currently selling online and are looking to sell in larger quantities in stores across the globe. To produce "Fresh it", they subcontract production to potters in Tameslouht, located in the Marrakech region, creating stable and high paying jobs for the local potters.

Impact

Go Energyless Solutions is in the process of reenergizing the clay industry in Morocco, by creating a demand for clay products year-round and disrupting the current manufacturing process and supply chain. 62% of potters in Morocco typically make \$300/per month during the summer months which then drops by almost half during the winter. Go Energyless Solutions has been able to create jobs for more than 10 potters and increase their annual income by 30%. They have sold over 1,200 refrigerators avoiding more than 4,800 toxicity problems, saving 24,000 Kgs of food, and preventing a 25% income cut due to food waste and energy consumption for more than 500 families in rural Morocco. As a company, they have been able to fundraise \$55,000 through Enactus' incubator.

SDGs

As a social enterprise, Go Energyless Solutions aims to tackle three main Sustainable Development Goals: Decent Work and Economic Growth, Sustainable Cities and Communities, and Responsible Consumption and Production. By creating sustainable products without energy waste and providing secure incomes to potters and local ambassadors, they are able to disassociate economic growth from environmental deterioration. The employment of local artisan potters also strengthens and protects the cultural and economic significance of pottery in Morocco ensuring the livelihood of the people and the progression of the craft. Their products sustainably increase the standard of living for families in rural communities, while radically changing the food preservation practices in developed economies.

Challenges

In the pursuit of social innovation, there are several challenges Go Energyless Solutions is struggling to overcome in relation to cultural barriers, financing, and scalability. The inaccessibility of the regions in which rural communities are located, the scattering of the population in these regions, and the difficulty to convince them to buy their products or trust the local ambassadors influence Go Energyless Solutions' ability to access new regions. They are approaching these challenges by setting a new model to rural areas where they provide easy payment options to their customers and will hold off delivering orders in certain regions until the number of units ordered exceeds twenty. They also realized a commonality throughout the communities where the people who are most trusted are typically a well-educated young man, the imam of a mosque, or a person from the local authorities. This makes it easier for them to identify the best candidates to approach as local ambassadors and who will be most effective in selling their products in these rural communities. They are also realizing that they are receiving more orders from abroad, specifically in France, than from Morocco and are struggling to distribute their products cost effectively in these areas in small quantities. In tackling the LOHAS consumer demand, they are in the process of contacting stores that would be willing to order more than 50 units at a time to drive down the costs of delivery.

HYDOBARLEY

HydroBarley is a limited liability company co-founded by Hanane Rifai, El Mahdi Caf, and Abdessamad Rifai. These three young entrepreneurs were concerned with the high price of fodder in the Moulay Driss Aghbal village, in the Rabat region of Morocco, that were forcing children to leave school and work in the pastures for their families. 80% of farmers in Morocco are experiencing the negative effects of global climate change affecting pasture scarcity and water availability which in turn leads to variation and increase in the price of fodder. The goal of HydroBarley at its inception was to create low cost green fodder for livestock farmers, so their children could return to school and continue pursuing an education. To do this, they decided to develop barley fodder using hydroponic technology which reduces the space and water needed to grow fodder thus cutting costs and allowing them to sell it at a cheaper price. The barley is produced on shelves that allow water to leak through the different levels.

When lack of funds was inhibiting their ability to expand into new regions, they decided to offer a variety of sheep feed by their green fodder allowing them to increase their profit margins. Morocco's diverse range of climates makes fodder production in each region drastically different depending on the season and rainfall variations, thus the demand for fodder is highly inconsistent. To provide a steadier revenue flow for themselves, HydroBarley intends to launch a line of hydroponic equipment units to farmers that allow them to grow their own green fodder cheaply. The farmers are then able to convert the small amount of land they have into vegetable plots and other higher value crops to increase their income and improve their quality of life.

Business Model

Based on HydroBarley's value proposition of providing low cost green fodder to rural farmers, they have developed a business model that is innovative in their customer relationships and cost structure. They develop deep personal relationships with the farmers, starting with individual case studies on each new client to tailor fit solutions to their agricultural challenges. They provide teaching and personalized follow-up consultations to ensure all the needs of the clients are being met and then assist the farmers' children in returning to school. By offering the tools and hydroponic production units to the farmers, they are able to lower the costs of producing the product themselves. HydroBarley also offers support for farmers wishing to develop new techniques on their small plots or monitor the status of their livestock through HydroBarley's veterinary partners. Their revenue structure is flexible and dependent on the individualized sales they negotiate with the farmers. They are currently in the process of partnering with different cooperatives to help them distribute their product more easily and make their products more broadly available to potential customers.

Impact

HydroBarley is currently able to produce 1 ton of barley fodder per day providing them with 199,000 Dirhams in revenue in 2017. Through their hydroponic growing techniques, they can reduce the amount of water used in fodder production by 1,500 times and protect biodiversity by reducing the superficies of lands typically used for fodder production by 4,000 times the traditional production techniques. HydroBarley has 10 permanent clients who use their hydroponic system and 170 clients purchasing barley fodder. As their client base has grown, they have been able to add two full time employees, one part-time employee, and five interns who are paid on their percent of contribution.

SDGs

HydroBarley's unique business model and product offering allows them to address six of the UN' Sustainable Development Goals: No Poverty, Zero Hunger, Quality Education, Clean Water and Sanitation, Climate Action, and Life on Land. Their innovative technology is a more sustainable solution to other forms of green fodder and gives them the ability combat climate change and the economic externalities that result from it and affect rural farming

communities. They have also been able to successfully send children back to school and increase the income levels of their families and subsequently their standard of living.

Challenges

Culturally there are a couple of barriers at play for HydroBarley to overcome as they progress. Farmers, especially those whose agricultural practices have been passed down over several generations, tend to be averse to change and are distrustful of new techniques. This is a barrier in each new market that HydroBarley attempts to enter and they must overcome this initial distrust in their products. To combat this, they started to feed sheep with their own fodder to showcase the value of their product and offering a week's worth of free fodder for the farmers to test with their livestock. They are also struggling to convince farmers that they can send their children back to school and the valuable investment it provides for the future of the family. They have decided to offer a 50% discount to farmers with children of school age on the condition they bring the children back to school. This cuts the opportunity costs of keeping the children in the pastures and incentivizes the farmers to continue their children's education.

As a business, HydroBarley is attempting to navigate the difficulties of creating products that respond to all the diverse needs of their clients and competing with the other existing products on the market. By creating in depth analyses on their customers and product development, they can provide custom offerings to a large range of livestock. However, to attain this level of analysis and product diversification quickly, they require more funding to allow them to scale their business and expand into new regions. Although they have been able to utilize the ecosystem of incubators and think tanks in Morocco, they are still struggling to attain the capital to increase production and thus cut the per unit costs of production which will allow them to increase profit margins and scale their business.

ANALYSIS OF MAJOR THEMES

Both companies face similar overarching obstacles that can be applied to all social enterprises aiming to make headway and gain momentum in Morocco. Their ability to scale, adapt to diverse regions, gain financing, and develop beneficial partnerships will determine the success and impact of their SI in Morocco. These factors are all linked to one another and can be helped or hindered depending on the strength of Morocco's institutions and the synergies of the SI ecosystem.

Go Energyless Solutions and HydroBarley have utilized human centered design thinking to create innovative products while placing CSV at the center of their business models. This alone, however, will not create sustained impact and disperse the benefits of their SI to the whole of Morocco. To spread their innovations and simultaneously maximize on their profit margins, they will need to find ways to gain investment from large multinational corporations and institutions while the Moroccan SI ecosystem is still in its infancy. There is also a need for strong partnerships with government, the NGO and non-profit sector, and international organizations to ensure that social and environmental issues are being approached holistically and all aspects of sustainable development can be covered effectively from varying perspectives. These partnerships also bolster the ability of social enterprises to scale-up their businesses. Scaling requires these businesses to adapt to the differing cultural and environmental climates throughout the unique regions in Morocco. This ability to transition and adapt SI and CSV business models will allow for expansion into the rest of Africa and globally. These factors will determine the successfulness of SI and sustainable development in Morocco with the potential to drastically change the current socio-economic and environmental state of the country.

CONCLUSION

Morocco, like many developing countries, has long felt the most difficult effects of irresponsible capitalistic growth causing vast social inequalities, high income disparities, and increased environmental degradation. These result in a cycle of poverty that is stunting Morocco's ability to create sustainable and equitable development. The complexities of interwoven cultural, political, and economic factors make approaching sustainable development difficult. However, through SI, an inspired generation of social entrepreneurs, and the UN's framework for sustainable development, there is hope that many of Morocco's social, environmental, and economic problems can be alleviated. Go Energyless Solutions, HydroBarley, and their founders mark the beginning of a wave of SI and social enterprises which will lead Morocco into a more sustainable and prosperous era contingent on their ability to overcome financing and scaling obstacles.

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Case Survey Summary for Go Energyless Solutions:

Element	Outline	Input Data
Title	The name of the company or business initiative: the core achievement of the business model	Go Energyless Solutions impacted the lives of over 600 families.
	<ul style="list-style-type: none"> Case Writer Country Sector Enterprise class 	Raowia Lamhar Morocco Energy & environment VSB
Summary	<p>Like an abstract, one page maximum. Should include information about:</p> <ul style="list-style-type: none"> What is the business in focus here? (Name, country, region, industry) What are the main achievements of the business model (What is the business? How has it grown? How many people have benefited and in what way?) <p>Optional. A quote from the case study that illustrates an important idea of the business model from the perspective of a stakeholder.</p>	<p>Go Energyless Solutions is a Moroccan-based company that aims to generalize access to energy saving products all over the world starting with Africa. Its first product is called “Fresh’it”, a cooler that can save food, medicine, and drinks for over 15 days and is designed to meet the needs of two specific segments:</p> <ul style="list-style-type: none"> Rural inhabitants who lack access to electricity or can’t afford to pay the electricity bill Organic food consumers who prefer to save their food in a natural way. <p>Go Energyless Solutions’ achievements:</p> <ul style="list-style-type: none"> Creating a clay industry by conceiving its manufacturing process and chain Creating jobs for more than 10 potters and increasing their annual income by 30% Sold more than 1200 refrigerators and by that: <ul style="list-style-type: none"> Avoided more than 4800 intoxication situations (by either medicines or food) Avoided more than 24,000 kg of food waste Avoided 25% income cut due to food waste for more than 500 families in rural and non-electrified areas Reduced energy consumption in over 500 households Fundraised over \$55,000
Business Model	<ul style="list-style-type: none"> What is the value proposition of the business? Who sells what to whom? What is the financial model? What objectives shall be achieved through the business (regarding the company, society and the environment)? How is value created and distributed? 	<p>Our value proposition is a 100% natural refrigerating system that needs no electricity to function. Fresh’it is sold in two versions:</p> <ul style="list-style-type: none"> A well designed one that costs \$50 to organic food consumers A basic version that costs \$22 sold to the rural inhabitants via local ambassadors hired to distribute the product locally. <p>Our gross margin is limited in the rural version but “rich people compensate what rural people should pay”.</p> <p>Our business model is based on customers’ needs, innovation and successful solutions.</p>
Business Model: Constraints	<ul style="list-style-type: none"> What are constraints in the market environment the company had to overcome (using the Matrix and noting other constraints beyond the 5 domains)? 	<ul style="list-style-type: none"> The main constraints that we’re trying to overcome in the rural market are: The inaccessibility of the regions where they live The population scattered in one region

	<ul style="list-style-type: none"> What other constraints, e.g. from within the organization or regarding the business capabilities, should be noted? 	<ul style="list-style-type: none"> The difficulty to convince them to buy, or for them to trust the local ambassadors <p>In the organic food market are:</p> <ul style="list-style-type: none"> The difficulty of supplying distributors who can only order a small quantity Receiving more orders from abroad (France) than from Morocco even if we're not targeting them.
Business Model: Solutions	<ul style="list-style-type: none"> How have these constraints been overcome (using the Matrix and noting other solutions beyond the 5 strategies)? 	Setting a new rural model (test ongoing) where we provide clients easy payment options, and not delivering until the regional order exceeds 20. We also changed our model of hiring the local ambassador –there are three persons usually trusted by the majority of the community: a well-educated young man, the imam of a mosque, or a person from the local authorities. For the organic food consumers, we're contacting stores that may order more than 50 units, especially in France.
Actors	<ul style="list-style-type: none"> Who are the actors that have shaped the business? (Include all, as well as 2-3 critical actors) What are the motivations/interests of these actors with regard to the business? (Why would they be interested in the business' success or failure? What do they want to get out of the business? What negative outcomes do they worry about?) Who are the actors who hinder the success of the business? What is their motivation? What is the effect on the business? 	Our business has always been a human centred one as we believe that only our beneficiaries, clients, employees, mentors, and founders could shape the way our business is seen and lived.

Case Survey Summary for HydroBarley:

Element	Outline	Input Data
Title	The name of the company or business initiative: the core achievement of the business model	Hydrobarley: Innovative low-cost production of Green Fodder through Hydroponics Systems
Key facts	<ul style="list-style-type: none"> Case Writer Country Sector Enterprise class 	<p>Morocco</p> <p>Agriculture</p> <p>SARL</p>
Summary	<p>Like an abstract, one page maximum. Should include information about:</p> <ul style="list-style-type: none"> What is the business in focus here? (Name, country, region, industry) What are the main achievements of the business model (What is the business? How has it grown? How many people have benefited and in what way?) 	<p>Daily life of 80% of small farmers becomes harder because of the climate changes directly affecting the variation and increasing the prices of fodder. Pastures and vegetable production have disappeared. Children are forced to work to get more money to buy food for their livestock and their families, We produce a new fodder using hydroponic technology, cheaper and very nutritive for cattle and we coach our farmers to convert their small lands to produce vegetables to help increase their incomes.</p> <p>Through the 2015 initiative of three co-founders we have succeeded to develop our own model of units of productions with the funds we collected through competitions and programs. This year we have 2 recruits from the first region</p>

		<p>working in the production and the commercialization of the fodder, serving 10 families and 100 customers buying sheep. Also to accompany 6 children going back to school. We now have new offers, and a strategy to impact more farmers and develop agriculture to insure food security for Africa first, and then the world.</p>
Guiding quote	Optional. A quote from the case study that illustrates an important idea of the business model from the perspective of a stakeholder.	The future of agriculture, to a better life for small farmers and their families.
Context: Regional and organizational setting	<ul style="list-style-type: none"> Where is the enterprise located (country, region, socio-economic characteristics, environment etc.) What is the organizational background of the business? (Parent company, founder etc.) 	<p>Hydrobarley is located in Moulay Driss Aghbal village, Rabat region Morocco</p> <p>Hydrobarley is a limited liability company with 3 co-founders.</p>
Context: History/ Development	How did the business model emerge and evolve over time? (include brief timeline)	<p>We started our business first to solve the issue we met in Moulay Driss Aghbal related to the high price of fodder that obliges children to leave schools and spend time in pasture. We started by selling fodder with low price to their parents with a convention to send their children to school and we accompany them to succeed in their studies.</p> <p>After 1 year we realized the issue of fodder is very big and very dependent on climate change. We tried to continue in new regions of Morocco with the same purpose but difficult because of the lack of funds.</p> <p>This year we decided to continue with our first model and launched a new offer to sell units of production for farmers, cooperatives and associations that want to produce their own fodder.</p>
Business Model	<ul style="list-style-type: none"> What is the value proposition of the business? Who sells what to whom? What is the financial model? What objectives shall be achieved through the business (regarding the company, society and the environment)? How is value created and distributed? 	<ul style="list-style-type: none"> We offer low cost green fodder and concrete solutions to farmer's daily issues. We sell green fodder to small farmers with a case study in advance to define the customer's need. Hydrobarley allows you to feed your livestock yourself, through the production unit setup with personalized support. Hydrobarley offers a varied range of sheep nourished by its green fodder and 100% natural for direct sourcing. We offer personalized support for farmers wishing to develop new techniques in their small plots or monitor the status of their livestock by our technicians or veterinary partners. Our financial model depends on sales and we adapt it to our clients and their needs. Our objectives are to reach 1000 clients all over Morocco, build about 10 units of production with a total capacity of 10 tonnes of fodder per day by the end of 2021 and impact 500 children by helping them going back to school and develop their futures. We want to build units of production and create jobs to have more impact in each village, and partnership with cooperatives to distribute our products and services easily.

Business Model: Constraints	<ul style="list-style-type: none"> • What are constraints in the market environment the company had to overcome (using the Matrix and noting other constraints beyond the 5 domains)? • What other constraints, e.g. from within the organization or regarding the business capabilities, should be noted? 	<ul style="list-style-type: none"> • Convincing costumers to buy a new product they have never seen before. • Letting them accept that they let their children go back to school and no pasture. • Developing our product to respond to all their need and compete with existing products. • How to scale and be in new regions, and get funds to develop quickly.
Business Model: Solutions	<p>How have these constraints been overcome (using the Matrix and noting other solutions beyond the 5 strategies)?</p>	<ul style="list-style-type: none"> • We started feeding sheep in our unit of production to showcase • One week free quantities of fodder for test • Offered 50% discount for farmers with children with a condition to send them back to school. • Working on product analysis and develop combinations to serve a large type of livestock • Developed new transportable units that sell for cooperatives, or build directly in some regions.
Actors	<ul style="list-style-type: none"> • Who are the actors that have shaped the business? (Include all, as well as 2-3 critical actors) • What are the motivations/interests of these actors with regard to the business? (Why would they be interested in the business' success or failure? What do they want to get out of the business? What negative outcomes do they worry about?) • Who are the actors who hinder the success of the business? What is their motivation? What is the effect on the business? • What role do these actors play within the business models? What resources and capabilities do they contribute? • What do they get out of the business? • How does the business manage the relationship with these actors? Is the relationship collaborative or transactional? Are there areas of disagreement and tension? • What did it take to get their support? What are the costs and benefits of coordination and governance? • What lessons has the business learnt in coordinating these actors? • Have any of these actors changed over time? If so, how? How will they change, if at all? 	<p>Enactus Morocco and Moroccan Center for Innovation and Social Entrepreneurship (MCISE). Through the program I learned the process of turning problems into opportunities and also within Empact accelerator that they have launched in partnership with OCP foundation we grow the business from prototype to a first unit within the funds.</p> <p>Dare INC incubator with MCISE helped us transform the project to a social company with funds to continue developing our business and increase our capacity. Both organizations helped us with a huge network which allowed us to be seen at international and national events.</p> <p>Their motivation is to increase the impact of the program they are launching to promote social entrepreneurship in Morocco and create real success stories that started from scratch in our country. And they are all the time afraid that we lose our motivation because of the obstacles we are facing every day, especially the lack of funds to grow.</p> <p>There are no actors who hinder our success except some individuals who hinder all type of success in the country.</p> <p>The two organizations connect us with mentors and experts to develop our business model and grow our business.</p> <p>We manage our relationships with those actors with reports and emails to inform them about our news and our achievements and also we fixe some objectives in time to measure the impact of our collaboration.</p> <p>With Enactus Morocco it cost to talk about the organization and contribute on increasing its impact on youth, and with Dare INC we pay 2% of our turnover for a period of 5 years with lots of facilities depending on our achievements.</p> <p>The lessons we have learned from the collaboration is that the key to success is to be surrounded by the right people.</p> <p>These organizations changed over time to grow with us and our specific needs in each step of the journey.</p>
Results	<ul style="list-style-type: none"> • What is the size of the business (measured, for example, by number of employees, annual revenues, number of customers, market share, 	<ul style="list-style-type: none"> • Capacity of production 1 tonne per day • Turnover in 2017: 198 740 Dirhams • 2 full time employers, 1 part time, 5 internship students paid on % of their contribution.

	<p>number of suppliers or distributors, etc.)?</p> <ul style="list-style-type: none"> • What are the economic results experienced by the actors involved? (e.g. income growth, wealth creation, tax revenues, etc.) • How is the business projected to grow? Where will it find the necessary capital? Does the model have the ability to scale up and replicate (and thus improve its results)? Has it been or can it be replicated by others? • What are the economic returns for the core enterprise and for other stakeholders? • What are the social results of the business? (e.g. health, education, poverty reduction, access to essential services, access to/control of key assets, empowerment, gender equality etc.) • What are the results of the business for the environment (e.g. reduced carbon emissions, biodiversity protection, sustainable use of natural resources, rehabilitation of degraded ecosystems, etc.)? • What are other indirect impacts that the business had (perhaps unintended), such as impact on public policy, how communities function, etc.? 	<ul style="list-style-type: none"> • 10 permanent clients for green fodder, 170 clients for sheep • Our projection is to launch our new model of mobile units to be sold for individuals and cooperatives. Also we are going to build big units in new regions, especially the south of Morocco where the need is huge. For necessary capital we are looking for loan or investment. With 2 new offers we will be able to scale easily and increase our impact in the right funding resources. • The scale of our business model will help increase the number of employees and the capacity of production. The impact will help families in rural areas to increase income and develop the futures of their children. • Our business works to help children going back to school and accompany them on their studies instead of spending time in pasture. We offer training for farmers to help increase incomes and use their resources. • Our business is 100% eco-friendly because it helps reduce the amount of water used in fodder production by 1500 times, protect biodiversity by reducing the superficies of lands dedicated to fodder production by 4000 times and convert them to crop production. Using green feed for cows reduces their gas emission by 25%. • Our business is based on a balanced model to generate profit while creating a great social and environmental impact. We sell fodder to farmers with an appropriate price with some discount for the ounce who has children in age of solarisation without entering on our costs. • Our other indirect impacts is that we are reducing the risks related to health for meat consumers.
<p>Conclusion</p>	<ul style="list-style-type: none"> • What future opportunities and challenges is the enterprise likely to face? • How is the business expected to develop in the future? • What can be changed to improve the business' social and environmental impact? • What are the main insights from this case study? 	<ul style="list-style-type: none"> • Scaling and entering new markets outside Morocco • Developing new products to answer the needs in each new market • Working to develop our offers and products to reach more farmers and adapted to the needs • Develop our network to be sure that our social impact will be more important in our customer's lives • Reduce the amount of water in irrigation and transform our production to automatic and independent units