“Why are we going to Green microfinance in Tunisia?”

| AUTHORS       | Lobna Abid  
|               | Sana Kacem  |
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The aim of this paper is to shed light on the challenges that microfinance and the sustainability of its institutions (MFIs) can face when dealing with financial crisis and the alleviation of global poverty. Apart from its economic and social effects, microfinance has come to respond to increasing demands and take the environmental aspect into account, hence, the appearance of green microfinance. The pivotal role of the latter is to foster economic growth and investment through increasing the quality of the environment and the social inclusion. In this context, Tunisia has shown interest in the introduction of a new regulation that facilitates the allocation of green micro-credits. In order to combat poverty and reduce unemployment, ecological credits have been granted by the ENDA Tamweel microfinance institution. The ultimate goal of this study is to present the tendency of this new financing mechanism in Tunisia to achieve sustainable environmental development.

Why Are We Going to Green Microfinance in Tunisia?

INTRODUCTION

In recent years, faced with the difficulty of obtaining bank loans, qualified local finance initiatives are being made at work. In fact, these initiatives guarantee funds or equity investments, particularly for target people who are excluded from the banking system, which allows them to create their own employment through the establishment of “social” loans (Amouroux, 2003; Guérin & Servet, 2005). In the absence of real guarantees, this financial strategy is mainly based on a certain aspect of solidarity, always with a particular focus on the improvement of the environment.

In this respect, the dynamics of microfinance consists of reinforcing social links in terms of constructing alternative forms of economy that have nothing to do with computation, i.e., charging interest, but are rather based on the concept of donation and counter donation.

These alternative forms of economy are also susceptible to be profitable and supportive (Armendáriz & Morduch, 2005; Servet, 2006; Yunus, 2008). In addition to the financial and social challenges of this approach, there has recently been growing demands to make the environmental aspect into account (Araya & Christen, 2004; Green Microfinance, 2007; Van Elteren, 2007; FMO, 2008; Hall et al., 2008; Schuie & Pater, 2008; Rippey, 2009; Huybrechts et al., 2015a).

Nowadays, the shift from a development perspective, as a double-edged strategy (social and economic), to the incorporation of the environmental aspect in microfinance has indicated the need of using...
a triple performance in the field of finance at large (economic, social and environmental). This implies focusing on activities ascertaining sustainable environmental development, which is also technically termed the "green microfinance".

Tunisia, among other developing countries, has also shown interest and concern in this development approach through the implementation of financial associations. These associations have occupied a key position in Tunisia because of the important role they play in promoting the values of development and solidarity, and in the realization of citizenship's values.

In 2012, there were nearly 450 environmental associations in Tunisia. Therefore, this paper aims to develop a reflection on a more significant role for microfinance in Tunisia as an instrument adopted mainly to promote environmental sustainability.

Thus, the current study is made up of two main parts. The first part is concerned with identifying the ground on which the green microfinance has emerged. The second one focuses on displaying the Tunisian experience in green microfinance through the ENDA Tamweel Association.

1. THEORETICAL BASIS

1.1. The emergence of green microfinance

Market failures and numerous crises, notably the economic and financial crisis of 2008, marked the first decade of the new millennium. These crises seriously undermine the ability to ensure prosperity in the world and to achieve the millennium development goals relating to the alleviation of extreme poverty. Similarly, such crises, threatening social stability, are coupled with the persistent social problems of unemployment, socio-economic insecurity and health problems.

Most economic strategies relating to development and growth have facilitated the rapid accumulation of physical, financial and human capital at the cost of excessive depletion and degradation of natural capital, i.e. natural resources and ecosystems.

But, at the same time, the existence of an alternative new economic paradigm (i.e. the environmental bottom line) manifests itself with a growing insistence on the fact that material wealth is inevitably not accompanied by an increase in environmental risks, scarcity of resources and social disparities.

The main goal of transition to a green economy is to foster economic growth and investment by improving the quality of the environment and enhancing social inclusion. To reach this end, it is essential to create favorable conditions for public and private investments that incorporate environmental criteria and strengthen the market infrastructure.

One of the first economic studies that linked this approach to capital-based sustainable development with a green economy was the 'Blueprint for a Green Economy' (Pearce et al., 1989). These authors argued that since today's economies tend to deplete natural capital for growth, sustainable development is unachievable.

Institutional investors, banks and insurance companies are increasingly interested in acquiring portfolios that minimize environmental, social and governance risks by capitalizing on new green technologies. Thus, the green economy is part of a logic aiming to establish a new trajectory of sustained and socially inclusive growth. This trajectory is mainly based on the preservation of the environment and the effective natural and human resources management. The success of such a long-term process will depend on the efforts of public, private and civil society stakeholders. According to the United Nations Environment Program (UNEP, 2010), "the green economy is an economy that generates an improvement in human well-being and social justice by significantly reducing environmental risks and ecological scarcities".

As an approach aiming to achieve sustainable economic growth, the green economy attempts to increase the level of productivity and alleviate...
poverty and unemployment. To reach this end, the green economy seeks to enhance the efficient use of natural resources and increase, for instance, green house gas emissions in farther areas.

It is noteworthy that several countries, particularly African ones, have pursued the strategies of green economy in recent years. In fact, the emergence of the green economy was due to the remarkable environmental degradation, the reduction of natural resources and the climatic change affecting food security, health and the energy transition. Proponents of the green economy assert that this type of economy has become a necessity, rather than a choice, that serves the attainment of sustainable economic growth and prosperity.

On this basis, the financial sector has recently taken into account climate change’s activities that are mainly based on environmental services. In this context, microfinance institutions (MFIs) have shown interest in this area and asserted that they must target a triple objective results, i.e. a triple bottom line zooming at financial, social and environmental development (Araya & Christen, 2004; Rippey, 2009). The “green microfinance” is a new concept that has emerged to include the principles of sustainable development into all its operations and promotes activities favoring the environmental dimension (Green Microfinance, 2007).

Thus, microfinance is a new form of funding, which is consistent with the definition of sustainable development proposed by Bruntland’s (1987) commission: the development that meets the present needs taking into account the ability of future generations to meet their own needs. This commission was charged by the United Nations to address the problem of “accelerated degradation of the environment”. Since the last decades, economic growth was based on the exploitation of natural resources.

Therefore, the link between microfinance and the concern for sustainable development can be represented by the financing of green activities (organic production, agroforestry, ecotourism, waste recycling and installation of renewable energy equipment). It also seeks to limit the environmental impact of customers’ activities by excluding certain types of credits. MFIs are interested in engaging in environmental management. To do so, different motives have been identified, namely the need for the legitimization, the strengthening of competitiveness and social responsibility. Allet (2014, 2015) has shown that the motive of social responsibility plays an eminent role in motivation. This can be attained through competitiveness in a lesser degree of legitimacy.

In fact, what has raised the interest and commitment of MFIs in the global environment is the fact that MFI’s decisions must follow one of the already cited motivations through the adoption of a specific green microfinance strategy, i.e. the environmental bottom line.

In this sphere, it is noteworthy that 210 MFIs offered green microcredits to their clients in 2014. Besides, 377 MFIs adopted environmental risk management practices, and 443 MFIs allocated prominent importance to the environment at large. This explains the extent to which the amount and number of green credits depend on regional specificity. For example, in Latin America and the Caribbean, credits are allocated in favor of the rural practices improvement with respect to the environmental development. Similarly, in Sub-Saharan Africa, green credits are intended for renewable energies to meet customers’ demands to overcome energy poverty and/or climate vulnerability.

Today, access to energy is the most preferred sector. For instance, Grameen Shakti (GS), implying “rural energy”, is one of the Grameen Bank’s most ambitious projects. It offers financial services on favorable terms so that rural people can access photovoltaic kits at a reasonable price. Despite the growth of this dynamic, the actual granting of green credits has remained limited.

In what follows, based on the experience of ENDA Tamweel in Tunisia, we will focus on identifying the green economy and the evolution of green credits.

1.2. Green economy in Tunisia: case of ENDA

Tunisia has set a short-term goal of integrating green jobs into the new national employment strategy during 2014–2017. According to a study conducted by the Millenium Institute in 2012, a green investment of 2% of GDP over 5 years could
generate 300,000 direct jobs in distinct fields, representing more than 9% of total employment. In this sense, the Tunisian government admits that the green economy must develop as part of a multidimensional integrated vision that takes into account its limited natural resources, potential for sustainable job creation, the improved competitiveness and the added value of industries, the reduction of territorial disparities, and poverty.

However, the green economy in Tunisia has remained in its infancy stage, since the government adopted a very conservative economic policy figured out in lacking evaluation, monitoring and supervision of investments. Nevertheless, it has undergone a certain evolution, which reflects that it has become a necessity that needs to be used worldwide.

In this context, the country needs a more innovative and competitive industrial policy that integrates the principles of sustainable development, which responds to new challenges (unemployment, exclusion, inequality, poverty, depletion of natural capital and global warming) and which promotes the emergence of socially responsible and environmentally friendly businesses. Therefore, in an attempt to encourage private initiative, particularly of SMEs, the national strategy of the green economy (2014–2020) will also have to meet the needs in terms of skills development, innovation, and access to finance and technologies.

This strategy identifies nine key green economy challenges, including sustainable consumption and production, sustainable management of natural resources, balanced regional development, capacity building for climate change adaptation, promotion of both energy efficiency and renewable energy, and the improvement of quality of life, social equity and knowledge.

This type of economy in Tunisia manifests itself through several axes, namely the Tunisian solar plan. This first axis was launched in 2009 through a Mediterranean solar plan. It aims to provide Tunisia with a capacity of 1,000 megawatts of renewable energy in 2016 and plans to reach 4,700 megawatts in 2030. The Tunisian solar plan has improved the share of renewable energy in the total electricity production, which represents 16% in 2016 and aims to attain 40% in 2030. This improvement is expected to have an effect on the reduction of the amount of carbon dioxide. The second axis is that of wind energy project that has provided a low installed power. For instance, STEG exploits only 190 megawatts (MW) in Bizerte and 55 MW in Sidi Daoud, while other projects are still in the process of development. A third axis focuses on solar energy through the creation of an industrial sector of 500 companies. Hydropower in Tunisia represents another axis, which is slow to operate despite a good infrastructure in hydraulics. The Control of Water Resources Management is another project that consists of reusing treated wastewater and saving water and protecting the environment through the creation of wastewater treatment plants (98 stations in 2007), expanding green spaces (from 4.4 m² in 1994 to 14.65 m² in 2007) and establishing air quality monitoring networks. Organic agriculture is another axis of the green economy where Tunisia was ranked 2nd producer in Africa as it exploited 335,000 hectares (ha) of certified organic crops in 2009 and the 4th largest producer of organic olive oil in the world, accounting for 44% of the country’s agricultural exports.

One last area that Tunisia has shown interest in is waste management, which has become a sustainable environmental priority. This axis represents an economic opportunity that promotes green jobs, as well as substantial gains for private investors. For fifteen years, Tunisia has set up a system of microcredit through the creation of development associations (DA). Parallel to this structure, ENDA Interarabe, an international organization, was developed. This financial organization has entirely been committed to support micro-entrepreneurs through financial and non-financial services, such as collective trainings, individual coaching, etc. In fact, because the Tunisian government insists on the fact that collecting deposits has not been legally authorized for non-banking institutions, ENDA attempted to appear as a financially autonomous organization in 2003, as its operating revenues covered its expenses from 2000 until 2014.

At the end of 2015 and following the approval of the new microfinance law in 2011, ENDA decided to establish a microfinance company, named ENDA Tamweel. This microfinance company consists of 79 credit agencies.
Thus, as part of an evaluation mission, ENDA Tamweel received the MicroRate international rating agency (leading rating agency in the field of microfinance) for the assessment of its social, economic and financial performance during 2016. For its financial performance, ENDA was awarded the rating of $\alpha$ and was rated 5 stars for its social performance.

Its purpose is to promote the economic and social inclusion of the vulnerable population and to contribute to the economic and social development of the country.

Ranked as one amongst the international agencies specialized in microfinance, ENDA has received several national and international awards recognizing its pioneering role in microfinance.

Therefore, ranked as the 2nd largest microfinance institution in the world in terms of social performance, ENDA is also the first certified institution in terms of the protection of its clients in the MENA region. On this basis, the overall rating of MicroRate not only confirms the successful completion of ENDA's activities, but also crowns the institution's determination to maintain the perfect balance between its social and economic mission to keep on serving its customers.

### Table 1. ENDA’s distribution of credits

<table>
<thead>
<tr>
<th>Type of financial product</th>
<th>Number of allocated credits in 2015</th>
<th>%</th>
<th>Number of allocated credits in 2016</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solfa</td>
<td>77,050</td>
<td>28</td>
<td>58,900</td>
<td>19.7</td>
</tr>
<tr>
<td>Mawalni</td>
<td>89,550</td>
<td>33</td>
<td>102,150</td>
<td>34</td>
</tr>
<tr>
<td>Mūčhiya</td>
<td>34,600</td>
<td>13</td>
<td>32,900</td>
<td>11</td>
</tr>
<tr>
<td>Mawssem</td>
<td>42,600</td>
<td>15</td>
<td>54,000</td>
<td>18</td>
</tr>
<tr>
<td>Bidayya</td>
<td>4,750</td>
<td>2</td>
<td>3,110</td>
<td>1</td>
</tr>
<tr>
<td>Eco-Pnxt</td>
<td>55</td>
<td>0</td>
<td>235</td>
<td>0.07</td>
</tr>
<tr>
<td>Forsa</td>
<td>75</td>
<td>0</td>
<td>630</td>
<td>0.2</td>
</tr>
<tr>
<td>Darna</td>
<td>9,820</td>
<td>4</td>
<td>11,000</td>
<td>4</td>
</tr>
<tr>
<td>Tealim</td>
<td>12,500</td>
<td>5</td>
<td>33,000</td>
<td>11</td>
</tr>
<tr>
<td>Ardhi</td>
<td>0</td>
<td>0</td>
<td>425</td>
<td>0.14</td>
</tr>
<tr>
<td>Mazaati</td>
<td>0</td>
<td>0</td>
<td>120</td>
<td>0.04</td>
</tr>
<tr>
<td>Machrouü³i</td>
<td>0</td>
<td>0</td>
<td>1,904</td>
<td>0.65</td>
</tr>
<tr>
<td>Moassassti</td>
<td>0</td>
<td>0</td>
<td>406</td>
<td>0.13</td>
</tr>
<tr>
<td>Bideya +</td>
<td>0</td>
<td>0</td>
<td>166</td>
<td>0.05</td>
</tr>
<tr>
<td>Bideyatî</td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>0.02</td>
</tr>
<tr>
<td>Total</td>
<td>271,000</td>
<td>100</td>
<td>299,000</td>
<td>100</td>
</tr>
</tbody>
</table>

The highest percentage of loans granted by this institution concerns mainly the financing of micro-entrepreneurs (33%), while the financing of home activities represents a rate of 28% in 2015. During this period, green credits ecological loans devoted to collectors (Berbecha) and recyclable collection centers represent 0% in 2015.

In order to manage a set of activities that are related to the environment and to implement energy efficiency measures, as well as resources, ENDA...
has put at work a system that takes into account environmental management. Besides, at the end of 2015, an increase in the environmental awareness led ENDA to grant customers “green credit” products aimed at recycling, as well as developing waste. These credits are intended for ragpickers, known as “Berbecha”, and for centers of recyclable materials collection.

These beneficiaries receive preferential rates, as well as targeted support services. However, the benefits of ENDA are not limited to the mere granting of funding. Rather, the institution also cooperates with other actors of civil society to formalize the business of Berbecha and to ensure the safety and social security of agents working in this field.

This type of green credit, also termed as ecological loan or Berbecha, has remained in its infancy stage, since only 280 customers in 2015 have benefited from this credit with an outstanding amount of 750,000 dinars (over 350 loans). However, the number of granted green credits in 2016, now known as “Raskhala”, is 235 with an outstanding of 505,000 dinars.

Considering credits allocated to clients in terms of their level of education, the ENDA financial statistics indicate the existence of four main categories of applicants. Those who have not completed their primary education occupied the predominant position (52%), while those who have a secondary level attained the rate of 29%. However, those who are illiterate and those who are graduates represent 16% and 3% of the total applicants, respectively.

When women are empowered to work and start their own businesses (through access to finance, education, employment), their families also have a better quality of life, because most women spend most of their time, their efforts and income to their family.

Through the agreement of this type of credit, ENDA Tamweel is committed to reducing its environmental footprint in its daily activities by encouraging good practices among its customers and employees through awareness campaigns. The institution does not finance harmful activities to the environment and promotes respectful micro-enterprises through the design of new products with a positive environmental impact (reduction of energy expenditure, improvement of sanitary conditions, access to green technologies, etc.).

In terms of gender, what illustrates the fact that this distribution is dominated by male clients is that 60% of male applicants in 2015 have benefited from this type of credit in comparison to female beneficiaries (40%). In 2016, more than half of ENDA's clients are devoted to women (64%), implying ENDA Tamweel’s commitment to women’s entrepreneurship process. This is why ENDA Tamweel strives to ensure that its products and services are accessible and particularly relevant to women. In fact, when women are empowered to work and start their own businesses (through access to finance, education, employment), their families also have a better quality of life, because most women spend most of their time, their efforts and income to their family.

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CONCLUSION

The green economy in Tunisia has witnessed a significant progress and has occupied an increasingly important place at the national level. For better developing this structure, major investment effort is needed, though it is undoubtedly expensive, especially in terms of infrastructure and new technologies.
In fact, the importance of the green microfinance stems from the fact that it is taken as an interesting tool that serves to combat regional disparities and reduce youth unemployment. Therefore, green employment concerns tasks that reduce the consumption of energy, raw materials and natural resources. It also minimizes the negative effects of solid or liquid waste resulting from the increased standard of living of Tunisian citizens who are influenced by a strong urbanization (67.3%). Although this work provides insights about green microfinance in Tunisia and the role played by ENDA in granting ecological credit, it has remained subject to certain limitations. Indeed, there is lack of both real statistical measures and a widespread information relating to this theme. This implies that it seems difficult to know exactly the extent to which it contributes to job creation and production improvement in Tunisia.

REFERENCES