
Promotion of Green Entrepreneurship and Grassroots Ecological and Social Innovations in Lebanon

White Paper



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Executive Summary

This white paper reflects the views and experiences of green entrepreneurs, civil society actors and support providing organizations on the challenges, opportunities and strategies for the promotion of green entrepreneurship and grassroots ecological and social innovations in Lebanon. The content is based on individual interviews conducted with 30 key stakeholders and the outcomes of a national synergy workshop held in Beirut in October 2015. The paper is produced by the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) within the framework of the EU-funded SwitchMed programme, an initiative that aims to facilitate the shift towards sustainable consumption and production (SCP) in the Southern Mediterranean Region.

Green entrepreneurship and innovative grassroots ecological and social initiatives appear to be on the rise in Lebanon. This increase is attributed to social and environmental crisis and challenges, which provide a wide array of opportunities for innovation and entrepreneurship.¹ The availability of incentive funding and technical support is also recognized as an opportunity, in addition to the prevalence of an entrepreneurship mentality and business know-how among the youth. Cross-cutting contextual, legal, financial and technical challenges faced by green entrepreneurs and grassroots ecological and social initiatives include insufficient political will for sustainable solutions, red tape and bureaucracy, difficult access to funding and information, and insufficient implementation of environmental regulations.

Green entrepreneurs share common reasons for starting a green enterprise, namely passion, environmental consciousness, technical knowledge and the need to fill an existing market gap. The increased interest of CSR (corporate social responsibility) programmes in environmental issues is also indicated as an opportunity, in addition to the mutual support that exists within Beirut's vibrant community of creative makers. Green entrepreneurs rely primarily on personal investments and loans to fund their businesses. Other sources of funding include revenues generated from service provision to clients, competition grants, crowdfunding and donations. Financial resources are deemed crucial for economic resilience, and for research and development. Access to finance and financial sustainability are nevertheless considered complicated by the majority of the consulted entrepreneurs. Other limiting factors include the lack of regulatory and financial incentives, low public awareness, technical limitations, competition and working with a volatile market.

Grassroots eco and social innovations all emerge from the need of a group of individuals to tackle environmental and social challenges, and contribute to the sustainable development of their community. Technical knowledge is either available from the start or acquired through trial and error. An NGO legal status is considered to give better access to funding, but access to large grants is more challenging. Challenges raised by civil society actors also include political instability, which impedes the issuance of new laws, time availability of volunteers, organizational management and lack of official public support, in addition to insufficient communication and competition among NGOs.

¹ Social and environmental crisis and challenges have been also exacerbated by the increase of the population due to the high amount of Syrian refugees received in Lebanon.

Strategies and Recommendations for the promotion of green entrepreneurship and ecological & social innovation

The following recommendations have been developed based on the suggestions of key stakeholders during the synergy workshop and individual interviews.

Strategic Recommendations and Actions:

Develop a comprehensive strategy towards the establishment of an integrated ecosystem for the promotion of green entrepreneurship and ecological and social innovation in Lebanon. This includes the provision of a comprehensive chain of services to support new and existing initiatives, networking, advocacy and lobbying activities, and the increase of public awareness through mass-media campaigns, community-service programmes and environmental education in schools and universities, and in-house awareness trainings in private companies.

To Policy Makers:

Provide an enabling legal framework for green entrepreneurship and grassroots eco and social innovations through the following:

- Strengthen the enforcement of environmental legislation
- Apply “the polluter pays principle” and issue a Directive for Environmental commitment
- Promote the donation of food surpluses by restaurants through public regulations
- Encourage CSR through legal instruments and use CSR programs to support grassroots social and eco innovations and green entrepreneurship
- Promote Lebanese innovation by allocating public funding for research and development
- Review fossil fuel subsidies, remove customs on highly taxed green raw input materials, and encourage green initiatives, by offering government financial support, subsidies or tax reduction
- Create a special legal status for green companies, with tax breaks and incentives through a social-green business or social-green entrepreneurship law
- Promote local green products and protect farmers with incentives for sustainable agricultural production
- Collect, analyse and disseminate market data and statistics.

To Private and Public Financial Actors:

Improve access to affordable financing:

- Enhance and increase BDL’s programmes aimed to accelerate green entrepreneurship
- Provide more subsidies and flexible and fair funding mechanisms
- Create financial platforms regrouping a pool of private impact investors who consider a blended return on investment, including social and environmental impacts
- Launch large grant programmes that encourage different organizations or groups to come together and work on large collaborative initiatives related to eco-innovation.

To Technical Support Providers:

- Better assess the specific needs of the different green entrepreneurs and grassroots eco and social initiatives
- Set-up incubators, accelerators and innovation hubs for green entrepreneurs, including a possible virtual incubation programme, with the involvement of the private and public sectors
- Provide capacity-building and training, legal, financial and non-financial services not only to start, but also to develop projects until actual execution
- Create large scale networking events at national and international levels
- Promote collaborative action and exchange among the initiators of ecological and social initiatives and synergy between civil society actors and green entrepreneurs, for an exchange of complementary skills and knowledge
- Increase awareness of funding opportunities
- Support existing small and micro green enterprises and engage in close cooperation and partnership with existing national organizations dealing with green enterprises.

1 Introduction and Definitions

This white paper reflects the views and experiences of green entrepreneurs, civil society actors and support providing organizations on the challenges, opportunities and strategies for the promotion of green entrepreneurship and grassroots ecological and social innovations in Lebanon. The content is based on individual interviews conducted with 30 key stakeholders between October 2015 and January 2016, and the outcomes of a national synergy workshop that took place in November 2015.² Interviewees and workshop participants included, in fairly equal proportions, green entrepreneurs, civil society actors and support providing organizations³. For details, please refer to Annex 1, for the list of individuals and institutions interviewed, and Annex 2, for the list of synergy workshop participants. The white paper concludes with a set of strategic recommendations provided by key stakeholders for the further promotion of green entrepreneurship and grassroots eco and social innovations in Lebanon.

This paper is produced by the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) within the framework of the SwitchMed programme, financed by the European Union (EU). The SwitchMed initiative (<http://www.switchmed.eu>) is a regional programme that aims to facilitate the shift towards sustainable consumption and production (SCP) in the Southern Mediterranean Region, including Lebanon. SwitchMed is collaboratively coordinated by the EU, the United Nations Industrial Development Organisations (UNIDO), the United Nations Environment Programme Mediterranean Action Plan (UN Environment/MAP), its Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) and the UN Environment Economy Division. SwitchMed activities include a training and support programme targeting green entrepreneurs and CSOs eco-innovation initiatives. The National Focal Point in Lebanon for these activities is the Ministry of Environment.

² The national synergy workshop “Green Entrepreneurs and Civil Society Organizations: change agents towards sustainable lifestyles” was organized by SCP/RAC in Beirut, Lebanon, on the 17th of November 2015. <https://www.switchmed.eu/en/news/news-1/first-synergy-workshop-in-lebanon>

³ Support providers include governmental bodies, public institutions, private actors and international organizations supporting entrepreneurship and CSOs, impact investors, universities and research institutes.

Whom are we talking about?

Green entrepreneurs are individuals that market innovative business solutions to respond to an environmental challenge.

Green entrepreneurship can be defined as a way of developing business solutions to environmental challenges that are innovative, economically viable and socially empowering.

Green entrepreneurs consider environmental, economic and social axes in their core business, provide innovative solutions to the way goods and services are produced and consumed, and propose business models that contribute to the greening of the economy.

Their green businesses are designed to take on environmental and social challenges.

Green entrepreneurs take advantage of new opportunities presented by productive, sharing and circular economies.

The innovative economic models of green entrepreneurs create environmental and social value.

Green entrepreneurs and grassroots initiatives for ecological and social innovations can be a part of the solution to environmental and social challenges in the Mediterranean region. This White Paper sets forth an overview these actors and the ecosystem they are creating in Lebanon, as well as details about their accomplishments and their calls to action.

SwitchMed supports green entrepreneurs and changemakers by introducing ecological and social innovations in the region through trainings, technical assistance and networking. On the following page are three examples of initiatives in Lebanon that have benefitted from SwitchMed.

Local grassroots initiatives for ecological and social innovations represent a new collective response from civil society to environmental challenges.

These include initiatives or innovative projects that address sustainable consumption and production and which are based on ecological and social innovations.

They provide a new way for citizens, consumers or producers to organize collectively to resolve environmental and social challenges that they are facing.

The activities, above all, address the community of the people driving the initiative, or seek to include the members of the community in the organization.

Coming from civil society, projects are collective and function in a democratic manner.



The Switcher – Bassatin Baanoub: a self-sufficient organic farm 60 km from Beirut

What was once a hillside of ‘uncultivable’ land is now a lush green farm producing extra virgin olive oil, wild thyme, sumac, honey, fruits and vegetables. This is the story of Bassatin Baanoub, an organic farm founded by Yasmina and Jean-Pierre. They first worked to protect and enhance Bassatin Baanoub’s biodiversity and then turned their attention to positioning the area as an eco-tourism destination. The farm now produces fruits and vegetables, provides a home for bees, goats and sheep, and its founders are looking ahead to the future with plans to construct guestrooms to enable visitors to linger and enjoy the natural beauty of the site. As a result of their efforts, Yasmina and Jean-Pierre have reestablished the farm’s historical pivotal role in the local economy by intertwining tourism and agriculture.

Learn more about Bassatin Baanoub at <http://www.theswitchers.eu/en/switchers/can-ancient-farms-key-healthy-future>.



Green entrepreneur – Nour Kays: upcycled designer handbags

A graduate of SwitchMed’s green entrepreneurship training programme, Nour Kays is a Lebanese designer and green entrepreneur on a mission to change the way we perceive and use “waste” materials. She collects and repurposes used plastic carrier bags into a new material that she uses to create a collection of fashionable, eco-friendly and handmade bags, pouches, and accessories. Her products – marketed under the brand NK by Nour Kays – are quickly gaining fans not necessarily because they are ecological, but because they are beautiful, useful, and each of the unique bags tell a story. Ms Kays is currently participating in the SwitchMed incubation programme for green startups.

Learn more about NK by Nour Kays at <http://www.theswitchers.eu/en/switchers/upcycled-designer-handbags-beirut>.



Eco-innovative civil society initiative – The Bus Map Project: increasing visibility of public transport to support an active bus community

The Bus Map Project is helping to reduce traffic and pollution in Lebanon by encouraging people to discover the country’s existing public bus and van transit systems. Recognizing that public transportation in the country was poorly understood by many people, the project’s founders – Chadi Faraj and Jad Baaklini – set out to change perceptions about this underutilised transit option. The project is mapping bus routes and detailing schedules using data gathered directly from transit users. This information is being used to build the first open, collective data set of the entire bus system in Lebanon. The project – which is currently being incubated in the SwitchMed Programme – aims to build bridges between riders, service providers and local authorities.

Learn more about The Bus Map Project at <http://busmap.me/>.

2 Green Entrepreneurship and Grassroots Eco and Social Innovations in Lebanon

2.1 Opportunities and Challenges for Green Entrepreneurs

2.1.1 Triggering Factors for Green Entrepreneurship

Interviews were conducted with ten (10) green entrepreneurs working in Lebanon. Green sectors of activity included waste management, sustainable fashion, design, renewable energy, organic food and beverage, sustainable courier services and sustainability consulting.

The interviewed entrepreneurs shared similar **reasons for starting a green enterprise**, namely **passion, environmental consciousness, technical knowledge** and the need to fill an existing market gap. **Market availability** was recognized as an opportunity factor for green entrepreneurs involved in waste management services, courier services, and sustainability consulting. The **increased interest of CSR programmes in environmental issues**, following the waste crisis, was considered as an additional encouraging factor for one respondent. Green entrepreneurs also valued the **mutual support** that exists **within Beirut's vibrant community of creative makers** working in cultural, design, and entertainment projects, despite the difficulties and the limited resources available. Incentives to start a green enterprise also included access to finance and technical support, notably by winning a competition or applying for a loan.

Green Entrepreneurship and Reverse Migration

At least five of the green entrepreneurs that were interviewed are Lebanese returnees who have decided to return to Lebanon and establish their own business, after accumulating years of experience and savings in a foreign country. A respondent considered that the financial risk of starting a business in Lebanon is comparatively lower than in more developed countries, because the cost of investment is relatively low, in the absence of a requirement for detailed plans, or for the completion of strict quality requirements to obtain permits.

2.1.2 Funding and Access to Finance - an opportunity for some, a challenge for most

All interviewed green entrepreneurs relied on personal investments to fund their businesses, particularly at start phase. **Half of the respondents rely on loans**, notably from Kafalat⁴. **Revenues generated from the provision of green services**

⁴ Kafalat is a Lebanese financial company that assists SMEs and innovative start-ups in the economic sectors of industry, agriculture, tourism, traditional crafts and high technology to access commercial bank funding. <http://kafalat.com.lb/>

also contribute to funding the business. One entrepreneur works on a full-time basis in another job to ensure sufficient income to cover business expenditures, in addition to relying on **crowdfunding and donations**. Business planning and funding have enabled entrepreneurs to acquire the space and equipment needed to develop their projects.

Financial resources are deemed **crucial for economic resilience** during bad years, **and for research and development**, to release new products and ensure continuation in the market. **Access to finance is nevertheless considered complicated**. **Furthermore, paying back a loan puts financial pressure on green entrepreneurs** that are **in the starting phase** of their business. Respondents explained that **the prevailing difficult economic situation in Lebanon is exacerbating already existing financial constraints**.

2.1.3 Limiting Factors

Low public awareness and lack of interest in green solutions. Most interviewed key stakeholders stressed on the general lack of public awareness about the importance of social and ecological issues. For instance, people seem to be insufficiently aware about the benefits of renewable energy and energy efficiency, or about their capacity to design innovative solutions that can change the world. It was also observed that citizens are not sufficiently aware of the costs involved in municipal solid waste management. For instance, pilot trials conducted by a green entrepreneur showed that university students were not interested in disposing of aluminium cans in separate bins. In restaurants where managers had taken a decision to sort, kitchen staff would not sort well due to a lack of awareness and ownership. According to one green entrepreneur, the country's difficulties have also resulted in a negative attitude among a large segment of the population, this negativity prevents them from coming together to create new things and find solutions to their common issues.

Lack of regulatory and financial incentives supporting entrepreneurs and companies providing ecological added value and addressing ecological challenges.

Technical challenges can arise from the innovative use of new materials, or during the implementation of a project's idea. These technical challenges can often be resolved by finding human resources with the specific expertise required. However, green entrepreneurs sometimes face **difficulty in finding specialized human resources**, including engineers specialized in renewable energy, passionate bike messengers or artisans who can work with rubber. The loss of qualified human power due to immigration was also raised during an interview. Mutual support is common among local designers, helping to achieve results with very few resources. However, this **designers' community is shrinking due to the immigration** of many of the talented creators. There's also a lack of critical thinkers and design thinkers in the country, which are essential for design thinking and problem solving.

Competition was also mentioned as a challenge, including competition from non-environmental competitors providing similar services, and unfair competition from more established service providers in the waste sector. **Technical limitations** are also a challenge in some innovative businesses, as well as in the waste sector. Some interviewed green entrepreneurs complained about the **lack of information** regarding the technical and financial aspects of establishing a company, and the complicated public procedures for the registration of a new business. **Working with a volatile market** that is directly influenced on a daily basis by a multitude of factors poses a challenge for at least one of the interviewed green entrepreneurs.

2.2 Opportunities and Challenges for Grassroots Eco and Social Innovations

2.2.1 Triggering Factors for Grassroots Eco and Social Innovations

Interviews were conducted with eleven (11) civil society initiatives engaged in social and eco-innovations. Interview results reveal that **grassroots eco and social innovations all emerge from the need of a group of individuals to tackle environmental and social challenges, and contribute to the sustainable development of their community.**

Social and environmental challenges are considered an opportunity for the proliferation of innovative ideas and leading to a better public acceptance of environmental solutions. For instance, the lack of sustainable waste management solutions has triggered most of the civil society initiatives that were interviewed in the context of this paper. These include waste sorting and upcycling initiatives, and awareness activities targeting school and university students, as well as the general public. The waste crisis has also resulted in an increased public awareness and better public acceptance of waste sorting and recycling initiatives. Other triggering issues include hunger, environmental violations, sustainable development, and the need to create jobs and preserve cultural heritage. Initiators of successful initiatives explained that they continuously adapt to the evolving realities they come across, and look to expand their scope of work, to cover other sectors and regions.

The **recent surge in green initiatives** is attracting newcomers and **helping build a momentum**, according to one respondent. A rise of grassroots eco and social initiatives is visible on social media, particularly Facebook. Activities start by online communication and advocacy activities, and later evolve into field activities. For instance, the waste crisis has triggered the launching of several initiatives such as the You Stink movement⁵, the Badna Nhaseb (We Want Accountability) campaign⁶, and

⁵ You Stink Facebook page: <https://www.facebook.com/tol3etre7etkom/>

⁶ Badna Nhaseb (We Want Accountability) Facebook page: <https://www.facebook.com/BadnaNhaseb/>

the Women Uprising⁷ group. These grassroots initiatives are developing according to the evolution of the waste crisis, and the response and participation of the general public.

2.2.2 Access to Human, Financial and Physical Resources

Interview results indicate that technical and financial opportunities are generally available for civil society organizations. A NGO legal status is considered to give better access to funding, notably through grants. Grassroots initiatives are also funded from sponsors, competition prizes, personal funds, in-kind donations but also from revenues generated through activities and fundraising campaigns, such as the sale of food, recyclables or upcycled objects, or the provision of educational services.

All initiatives are started and supervised by volunteers but NGOs are also relying on staff according to need and funding availability. The number of volunteers involved in the same social and ecological initiative ranged from 2 to 400 persons, while the maximum number of 5 staff has been recorded. Media support, contacts and visibility are recognized as essential allies, when available, to reach public masses and push for change.

Technical knowledge is acquired from contacts and organizational affiliations, or acquired with time through trial and error. The availability of space was mentioned as an opportunity by one respondent, while it consisted of a challenge for another grassroots initiative.

2.2.3 Limiting Factors for Grassroots Eco and Social Innovations

Challenges listed by the interviewed CSOs also include:

Political instability, which impedes the issuance of new laws that would strengthen social and environmental practices.

Time, which poses a limitation for civil society actors who have to shuffle their time between personal income generating activities and ecological and social innovation.

Organizational management was also mentioned as a challenge at the start of new initiatives, but also due for some to the non-profit status of the organization, and the limited funding available to recruit support staff.

Bureaucracy, red tape and other administrative challenges to renew, for instance, a partnership with a public ministry.

Insufficient communication, competition among NGOs, and the multiplication of new initiatives that do not consider existing initiatives undertaken by other civil society

⁷ Women Uprising Facebook page: <https://www.facebook.com/WomenUprisingLebanon/>

actors. Instead of working together, people in Lebanon tend to work at an individual level and compete against each other, instead of teaming up declared more than one civil society actor.

Small funds that are currently offered **require time and effort** for the writing of proposals and applications, **and may have only a limited, short-term impact**. Access to large grants is more challenging, for activities such as the purchase of machinery and the expansion of waste recycling initiatives undertaken by civil society groups.

Social business is not defined in Lebanese law. Many individuals start a NGO then develop activities with a business mind-set.

Technical challenges in transmitting a new concept to a broad audience, and in Arabic.

Lack of interest among the public and resistance to innovation and change. Civil society initiatives sometimes face resistance from the public. For instance, an upcycling initiative revealed that people are reluctant to buy furniture items made from recyclables, unless these products are made of “noble” material such as wood or metal. Another initiative argued that they face difficulties while trying to involve Restaurants and food companies in donate surplus or near expiry products for a community kitchen project.

Some of the interviewed civil society actors complained about the **insufficient official public support**, notably from relevant ministries, and hinted to some political resistance and obstructive actions exerted against environmental and social solutions initiated by civil society.

The **lack of statistics and data**, such as the quantities of food waste produced by restaurants is also a challenge.

3 Cross-cutting Opportunities and Challenges according to Support Providers

3.1 Cross-Cutting Opportunities

This section is based on interviews conducted with a total of nine (9) support providing organizations. All support providers interviewed reported an increase in green entrepreneurship and innovative grassroots ecological and social initiatives in Lebanon. This increase was primarily attributed to the following factors.

3.1.1 An Array of Opportunities

Many of the interviewed stakeholders consider that social and environmental problems in Lebanon are a source of innovation and entrepreneurship. The waste crisis is also considered by some support providers as an opportunity for young entrepreneurs to offer environmental solutions to local authorities. Such services would notably include the collection, sorting, recycling and small-scale treatment of solid waste, tapping into an informal sector that is already in place.

Support providers recognized an increase in energy efficiency and renewable energy enterprises, which can be also attributed to the attractive financing mechanism put in place⁸. The number of eco-tourism, wastewater treatment and sustainable agriculture projects is also observed to be on the rise. Interviewed support providers consider that opportunities still exist at national level in many other social and environmental sectors including transport, sustainable construction, and water.

3.1.2 Availability of Incentive Funding and Technical Support

The Central Bank of Lebanon (BDL) announced, in August 2014, BDL Circular 331, promoting investments of up to 400 million dollars into the enterprise market⁹. This stimulated an increase in the number of incubators and accelerator programmes in the country¹⁰. While these incentives predominantly promote the development of start-ups around the knowledge economy and ICT technologies, interviews with support providers confirmed a growing recent interest for also promoting green initiatives.

The National Energy Efficiency and Renewable Energy Action (NEEREA) and Lebanese Environmental Action (LEA) programmes are administered by the Lebanese Centre for Energy and subsidized by the Central Bank of Lebanon. A total budget of up to one billion dollars is available every year through these programmes for water, air and the environment¹¹. The LEA programme was established in the last quarter of 2015 for the financing of environmental projects in recycling, landscape, green roofs, organic farming, ecotourism, green walls, stones cladding, roof tiling, wastewater treatment and rainwater collection.

The Global Social Venture Competition Programme, which is organized by Berytech in partnership with UC Berkeley, Saint Joseph University (USJ), and ESSEC business schools focuses this year (2015-2016) on green entrepreneurship, including environmental awareness, environmental solutions and clean technologies. The programme targets end-year students in universities and recent graduates and provides access to three winning teams to a business incubation process for up to 6

⁸ The National Energy Efficiency and Renewable Energy Action (NEEREA) provides interest-free long term loans for residential, commercial, non-profit and industrial users for all energy efficiency and renewable energy projects, for new and existing facilities. Source: <http://lcec.org.lb/en/AboutUs>

⁹ "Everything you need to know about BDL Circular 331" <http://2015.bdlaccelerate.com/everything-you-need-to-know-about-bdl-circular-331/>

¹⁰ "The Rise in Lebanon's Startup Ecosystem in 2015" <http://2015.bdlaccelerate.com/the-rise-in-lebanons-startup-ecosystem-in-2015/>

¹¹ El Khoury, Pierre, LCEC General Manager, Personal Interview with SCP/RAC. Beirut, January 14, 2016.

months¹². Berytech also recently sponsored the first peace hack event in Lebanon. The winning team received an incubation award for a project that aims at connecting private donors wishing to donate in kind or in cash with NGOs, through an app/web interface. NGOs would channel these donations to people in need. The platform would verify the donor and recipient, and offer a tracking and validation process.

The recently-established “Fondation Diane” for civic awareness and eco-sustainable development offers support and financing for green-focused projects and companies with a goal of sustainability and profitability. Sectors of interest include waste, water treatment, green energy, sustainable agriculture, eco-transportation, eco-construction and eco-tourism.¹³

The “Samir and Claude Abillama Eco-entrepreneurship Award” is a sum of 20,000 USD that is awarded every year to an individual or a team for their winning eco-entrepreneurship idea (product, process, service or system). The programme is administered by the AUB Nature Conservation Centre and focuses on the role of eco-entrepreneurship in supporting job creation and environmental protection in order to promote the well-being of local citizens.¹⁴

The EU-funded SwitchMed initiative includes a training and support programme targeting green entrepreneurs and CSOs’ eco-innovation initiatives. SwitchMed’s local partners in Lebanon are BIAT¹⁵, for green entrepreneurship, and Green Line¹⁶, for the empowerment of grassroots initiatives on eco and social innovation. The Ministry of Environment is the National Focal Point for the activities.

Additional financial and technical support possibilities include donor-funded international cooperation programmes, micro-funding programmes from Kafalat, Majmouaa and others, crowdfunding campaigns, competitions launched by international organizations, such as UNDP, as well as competitions launched by banks and private companies operating in Lebanon and the region, in the frame of CSR initiatives.

3.1.3 Entrepreneurship Mentality and Innovation Skills

Foreign experts working in Lebanon observed that people in the country have an entrepreneurship mentality and know how to establish businesses. A high level of awareness and technical skills was also denoted among the youth who need jobs, and a high level of innovation among them.

¹² Benefits include financial support (3,000\$ to 5,000\$ in cash for each of the 3 winners) to be spent for business development and around 10,000\$ in incubation and support, including access to a working space, business coaching, access to technical support, networking, as well as access to third party training for free or at a subsidized cost.

¹³ For more information and contact details: <http://www.fondation-diane.org/>

¹⁴ For more information and contact details: <https://www.aub.edu.lb/units/natureconservation/programs/eco-entrepreneurship-award/Pages/about-the-award.aspx>

¹⁵ For more information and contact details: <http://www.biatcenter.org/index.php/projects/index/9>

¹⁶ For more information and contact details: <https://www.facebook.com/GreenLineAssociation/>

3.1.4 Potential to turn the Refugee Crisis into an Opportunity

Despite the enormous challenges posed by the refugee crisis, one support provider considered that there is potential to turn it into an opportunity for the country. This could be achieved for example through innovative solutions that provide economic opportunities for refugee and host communities, including green entrepreneurship projects and joint ventures. These solutions would be addressing increasing environmental challenges on one hand, while also creating sustainable livelihoods.

3.2 Cross-Cutting Challenges

3.2.1 Legal and Institutional Challenges

Green initiatives require an enabling environment to succeed, and adequate policies set by the government. Legal and institutional challenges raised by support providers and workshop participants included the following:

Bureaucratic challenges and absence of a separate legal status for social and green businesses. Several key stakeholders complained of complicated and expensive bureaucratic procedures. A lack of transparency and unclear laws were said to sometimes encourage bribery. Many social and green entrepreneurs are currently choosing to work in a NGO setting while really aiming at making profit by offering social and ecological solutions.

Fossil-fuel subsidies disfavouring investments in clean energy production. Fossil fuel subsidies are resulting in unfair competition between energy-intensive businesses benefiting from these subsidies, and more environmental companies that are investing in environmental solutions.

Environmental regulations are considered to be **not sufficiently implemented**, according to some interviewed stakeholders. Is the case, for instance, for Environmental Impact Assessments (EIAs) which are conducted and presented to the Council for Development and Reconstruction and the Ministry of the Environment. However, in the lack of legal enforcement, the number of companies implementing these EIA recommendations is still unsatisfactory declared one respondent.

3.2.2 Financial Challenges

Key stakeholders reported a **reluctance from banks in providing loans for green entrepreneurs**. Banks and investors focus traditionally on securing high capital returns from an investment, with insufficient consideration of the social and environmental impacts of a green project, and its contribution to building a healthier society.

Moreover, access to funding requires paper work, business planning and writing skills, which are not always available or clear for green entrepreneurs and civil society actors. Recipients maybe consider that the effort and time invested in applications and reports

is not worth the benefit. Support providers on the other hand, consider that entrepreneurs want to receive funding without making planning efforts.

Cash collateral and guarantee conditions hinder access to the available loans and micro-funding schemes for individuals who cannot secure these financial guarantees. With the exception of renewable energy, the direct return on investment tends to be considered less guaranteed for green projects compared to projects in the sector of technology, because of the relatively long time to start generating profit. Since subsidized loans are being administered through private banks, some applications can be denied funding, and others hindered by complicated bureaucratic procedures.

CSOs also face a financial challenge for the funding of new activities, or to continue a project after the end of donor funding.

3.2.3 Contextual Challenges

Political stagnation. The country has been without a President of the Republic since May 25 2014. The Parliament has extended its mandate twice since June 2013 and parliamentary sessions have been halted for months. Political divisions impede the Council of Ministers from meeting or taking major decisions. The political setting also weakens the enforcement of existing legislation. Environmental issues are not considered a priority, as observed by one key stakeholder. Decision-makers are yet to find a sustainable solution to the ongoing garbage crisis, despite the urgency of the situation and the environmental and public health hazards generated by the lack of appropriate action.

Socio-economic crises. Lebanon has been facing ever since the Syria crisis a plethora of socio-economic crises, aggravated by an overwhelming refugee crisis. The political deadlock and the degrading economic situation and prevailing instability may all reduce the confidence of investors and entrepreneurs to start a project in Lebanon. The degrading situation is also driving the immigration of bright creative minds who have been struggling for years to make a living in Lebanon. The rate of unemployment is high (7.1% in 2015¹⁷), particularly among the youth (20.6% of youth labour force in 2013).¹⁸ Purchasing power is therefore limited. People choose to buy basic commodities to sustain their living, rather than invest in more expensive green products, despite their advantages. The difficult economic situation is also putting financial pressure on volunteers and limiting the time they can offer for civil society initiatives.

Geographic limitations. Lebanon is a relatively small country. The limited size of the market is driving green entrepreneurs to consider export of their products and services, to develop and maintain their businesses.

¹⁷ ILO World Employment and Social Outlook -Trends 2016 <http://www.ilo.org/global/research/global-reports/weso/2016/lang--en/index.htm>

¹⁸ ILO – Trends Econometric Models, April 2014 http://www.ilo.org/global/about-the-ilo/multimedia/maps-and-charts/WCMS_244259/lang--en/index.htm

Geographic differences. The entrepreneurship scene appears to be much more vibrant in Beirut and Mount Lebanon, and to some extent in Central Bekaa, compared to the South and the North of the country, declared one support provider. This difference was explained by the lack of an entrepreneurship mentality among the youth of these regions, despite the local presence of support platforms and funding opportunities.

3.2.5 Human Resources and Technical Challenges

Research and development and adaptation to the market needs require the right level of specific expertise, time and funding. There is also a general **lack of research and reliable market data**. All of these factors are often limiting green entrepreneurship and grassroots ecological and social initiatives.

Limited capacities. Many green entrepreneurs and initiators of social and ecological initiatives seem not to be willing, due to a lack of time or skills, or possibly a lack of motivation, to develop a business plan or write a project proposal to apply for technical and financial support. Civil society organizations are considered by some outsiders to seldom have the human and financial capacities to manage the logistics and expenses of large-scale projects.

Poor access to information. Many initiators of green projects are not aware of the existing financial and non-financial opportunities to support their projects in Lebanon and worldwide. They also lack information about legal and technical aspects for establishing a company or registering a NGO.

Missing links across sectors. Lebanon is a small country composed of several ecosystems. Environmental NGOs know each other to a fair extent, but their activities tend to be isolated from the work of social NGOs that focus more on humanitarian and human-rights issues. Similarly, green entrepreneurs have little communication or exchange with civil society actors involved in ecological and social initiatives. Many also struggle to find the right human resources to meet their projects' needs. Finally, the number of green entrepreneurs is still considered limited, in comparison to the large number of start-ups working on technology. In the midst of the political deadlock, it is considered essential to foster linkages among these different actors to form pressure groups and most importantly, to create comprehensive and innovative solutions to the ongoing social and environmental challenges in the country.

4 Strategies and Recommendations for the Promotion of Green Entrepreneurship and Eco and Social Innovations in Lebanon

The following recommendations have been developed based on the suggestions of key stakeholders during the synergy workshop and individual interviews. Recommendations are primarily addressed to policy makers, financial actors and other support providers.

4.1 Strategic Recommendations and Actions

4.4.1 Develop a Comprehensive Strategy for Sector Development

Establish an integrated ecosystem for the promotion of green entrepreneurship and ecological and social innovation in Lebanon, ranging from integrated educational programs to market development. Coordination among already existing initiatives can help develop a joint strategy and ecosystem.

Provide a comprehensive chain of services to support new and existing initiatives. In the case of solid waste management, a national plan needs to be developed by all parties, incorporating all the existing solutions for sustainable waste management: the industrial firms that use recyclables for their business, collectors, NGOs, municipalities, etc. Flexible funding would have to be offered for new initiatives that will be established to fill the missing links, such as community composting.

4.4.2 Raise Public Awareness

Awareness is recognized as an essential priority to build the right mind-set among the general public, for the promotion of green entrepreneurs and eco and social innovations in Lebanon. Suggested recommendations and actions include:

Launch public awareness campaigns with the support of mass media, for public outreach at national level. There is need to find the appropriate approach to build environmental consciousness and convince people to take action, possibly by highlighting long-term impacts and personal benefits. Awareness-raising on environmental and social issues, and on their tangible solutions should instore basic environmental habits and create enough public demand for green services and products.

Create a community-service culture in schools and universities. Establish community-service programs in universities and organize conferences, to expose students to social and ecological initiatives taking place in different countries. Offer environmental education and awareness in schools, including through a course on ecological and social innovation, to prepare the new generations on tackling social and environmental issues such as water conservation and waste reduction, reuse, recycling

and upcycling. A culture of social and environmental responsibility needs to be created among the younger generations.

Involve the private sector. Provide in-house trainings and awareness programmes in private companies, on how to go green at home and in the workplace.

4.4.3 Networking, Advocacy and Lobbying

Build a strong network of green solutions and scale it up. Reduce the communication gap between civil society organizations and green entrepreneurs. Create exchange platforms for people to meet and exchange about their projects, and improve inter and intra cooperation and synergy. Promote a complementarity in the services offered for a comprehensive development of green solutions.

Communicate with the public, private, and volunteering sectors to survive, as well as with state actors.

Build strategic international partnerships to implement the strategy in different phases. Initiate a coalition to advocate for the establishment and implementation of laws and regulations in favour of social and ecological initiatives and green entrepreneurship.

Further advocate for environmental legislation, and the provision of legal incentives for sustainable waste management.

4.2 Recommendations for Policy Makers

Provide an Enabling Legal Framework for Green Entrepreneurship and Grassroots Eco and Social Innovations – The majority of key stakeholders highlighted the need for **favourable policies and regulations and financial incentives**. Specific recommendations include the following:

- **Strengthen the enforcement of environmental legislation.**
- **Apply “the polluter pays principle”. Issue a Directive for Environmental commitment, introduce regulatory incentives to foster the use of environmental solutions** (to reduce emissions and energy consumption, increase the reliance on renewable sources of energy, reduce packaging etc.) **and penalize companies that fail to abide by environmental standards.**
- **Make waste sorting at source compulsory and provide incentives for waste reduction, large-scale composting and recycling.** Legally impose waste reduction and sorting at corporate level¹⁹, and issue penalties against businesses breaching environmental law.

¹⁹ Companies are considered to have the capacity to sort waste in-house. Restaurants generate large quantities of organic waste that can be separated by a dedicated and trained staff, and collected separately.

- **Promote the donation of food surpluses by restaurants** through public regulations
- **Encourage CSR through legal instruments** and use the CSR programs of large corporations to support grassroots social and eco innovations and sponsor green entrepreneurs in their initial stages, financially and/or technically.
- **Promote Lebanese innovation** by allocating **public funding for research and development.**
- **Encourage green initiatives, by offering government financial support, subsidies or tax reduction** for projects with a sustainability component. Motivate people to come up with ideas, and make them know their ideas are welcome.
- **Review fossil fuel subsidies** and amend legislation to increase the production of clean, renewable energy. The removal of fossil fuel subsidies is considered necessary to ensure the competitiveness and continuation of green businesses in the country.
- Create a **special legal status for green companies**, with tax breaks and incentives, by issuing a **social-green business or social-green entrepreneurship law**. The legal framework to set up a green enterprise should be made more affordable and speedier and with less legal paperwork, and encourage public private partnerships.
- Promote local green products and **protect farmers** by providing them **with incentives for sustainable agricultural production.**
- Collect, analyse and disseminate market **data and statistics.**
- **Remove customs on highly taxed green raw input materials** that are used in green projects.

4.3 Recommendations for Financial Actors

Improve Access to Affordable Financing – Public and private financial actors are considered to have a strategic role to assume for the promotion of green entrepreneurship and grassroots ecological and social innovations in Lebanon. Specific recommendations for financial actors include the following:

- Enhance and increase **BDL Accelerate programmes for green entrepreneurship.**
- Provide subsidies and other financial incentives such as loans with reduced interest rate, and flexible and fair funding mechanisms, to encourage young people who want to start their business to do so in the green sector. These loans would be similar to Kafalat but targeted for green enterprises, i.e. subsidized loans, with no collateral and with feasible ceiling.
- Create financial platforms that regroup a pool of private impact investors who are ready to offer flexible and affordable loans for green entrepreneurs and grassroots ecological and social innovations. These mission-led investments consider a blended return on investment, including social and environmental impacts.
- Encourage different organizations or groups to come together to work on the same issue: launch large grant programmes that bring people together to work on large collaborative initiatives on eco-innovation.

4.4 Recommendations for Technical Support Providers

- Assess the Needs. Develop a better understanding of the specific needs of the different green entrepreneurs and grassroots eco and social initiatives at individual and collective levels.
- Set-up Incubators, Accelerators and Innovation Hubs for Green Entrepreneurs, with the involvement of the private and public sectors. Consider establishing a Virtual Incubation programme to better reach remote regions in Lebanon. Provide capacity-building and training, green technical skills, and independent information on legal and technical aspects to establish a company and possibly independent bodies to consult for legal support and business development. Provide financial and non-financial services not only to start, but also to develop projects until actual execution.
- Organize large scale networking events at national and international levels to bring together people from different expertise, for them to connect, exchange experiences and possibly work together. Sponsor participation in these events.
- Promote collaborative action and exchange among the initiators of ecological and social initiatives.
- Increase awareness of funding. Provide information about support opportunities available at all levels of entrepreneurship and for civil society social and ecological initiatives.

- Facilitate access to international markets and buyer networking.
- Promote synergy between civil society actors and green entrepreneurs, for an exchange of complementary skills and knowledge. Create close cooperation and partnerships with national existing organizations dealing with green enterprises.
- Support the small and micro green enterprises that are already operational in Lebanon.
- Connect NGOs and grassroots movements with business support organizations to spin off green enterprises.

4 Annexes

- Annex 1 List of Key Stakeholders / Institutions Interviewed
- Annex 2 List of Synergy Workshop Participants
- Annex 3 Questionnaires for Key Stakeholders Interviews

Annex 1. List of Key Stakeholders / Institutions Interviewed

#	Organization/Initiative	Person	Type
1	AFED	Najib Saab	Support Providers
2	Baskinta Baytuna and Suburbs	Elie Karam	Civil Society
3	Berytech	Ramy Boujawdeh	Support Providers
4	Beeatoona	Nazek Bohsali	Civil Society
5	Cedar Environmental	Ziad Abi Chaker	Green Entrepreneur
6	Chreek	Georges Ghafary	Civil Society
7	Compost Baladi	Laurent Wakim	Green Entrepreneur
8	Deghri Messengers	Karim Sokhn	Green Entrepreneur
9	Eat Sunshine	Dalia Taher	Green Entrepreneur
10	Eco-Consulting	Maya Karkour	Green Entrepreneur
11	ELCIM	Fady Fayad	Support Providers
12	ESCWA	Johanna von Toggenburg	Support Providers
13	Fondation Diane	Cyril Rollinde	Support Providers
14	Food Blessed	Maya Terro	Civil Society
15	Food Heritage Foundation	Mabelle Chedid	Civil Society
16	Green Line	Haifa Allabadi	Civil Society
17	Hbr creative platform	Nelly Baz	Green Entrepreneur
18	ILO	Shaza Jondi	Support Providers
19	LCEC	Pierre Khoury	Support Providers
20	LCPC	Ali Yaacoub	Support Providers
21	Recycled Art Work	Katia Aawar	Civil Society
22	Run Waste	Shady Sadek	Green Entrepreneur
23	Smart Waste	Nell Abou Ghazale	Civil Society
24	Soils Permaculture	Rita Khawand	Civil Society
25	SouthBic	Andre Bacha	Support Provider

#	Organization/Initiative	Person	Type
26	Terre Liban	Antoine Abou Moussa	Civil Society
27	Vea Wear	Patrick El Zoghbi	Green Entrepreneur
28	Yellowblue	Antoine Kaldany	Green Entrepreneur
29	Waste	Marc Metni Waleed Jad	Green Entrepreneurs
30	Women Uprising	Corinne Chedwai	Civil Society

Annex 2. List of Synergy Workshop Participants

“Green Entrepreneurs and Civil Society Organizations: change agents towards sustainable lifestyles” – 17th November 2015

#	Organization
1	BIAT
2	Green Line
3	SouthBic
4	Ministry of Environment
5	Women Uprising
6	Fondation Diane
8	BBJO
9	SCP/RAC
10	Green Line
11	APNature
12	UN ESCWA
13	Berytech
14	Compost Baladi
15	WASTE
16	Arcenciel
17	EcoConsulting
18	SCP/RAC
19	UNIDO
20	Beyond Reform & Development - Mowgli
21	Hbr creative platform
22	VEA
23	Lebanon Green Building Council
24	Berytech

Annex 3. Questionnaires for Key Stakeholders' Interviews

Questionnaire for Green Entrepreneurs' Interviews

- 1- What made you decide to launch your green enterprise?
- 2- When did you launch your enterprise?
- 3- What opportunities had you identified when you started (*Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, External factors (environmental, social, economic, political, legal)*)?
- 4- Are these opportunities still available at present?
- 5- What challenges did you face at start (*Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, Challenges in Organizational Management, External factors (environmental, social, economic, political, legal)*)?
- 6- Are you still facing these challenges at present?
- 7- How much time do you dedicate to your project/enterprise?
- 8- Do you have business partners involved?
- 9- Do you have paid staff/consultants? How many, and what is their role?
- 10- What are your sources of funding?
- 11- In your opinion and based on your experience, what can be done to further promote green entrepreneurship and social and eco innovation in Lebanon?

Questionnaire for Civil Society Actors' Interviews

- 1- Can you describe your organizations' purpose and recent initiatives related to social and ecological innovation in Lebanon?
- 2- What made you launch this initiative?
- 3- When did it start?
- 4- What opportunities were available at start? *Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, External factors (environmental, social, economic, political, legal)*
- 5- What challenges did you face at start? *Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, Challenges in Organizational Management, External factors (environmental, social, economic, political, legal)*
- 6- Did you have to modify your project's activities and outcomes during implementation?
- 7- What are the existing opportunities and challenges at present?
- 8- How many staff and volunteers are involved in the initiative? What is their role?
- 9- What are the current sources of funding for this initiative?
- 10- What is your exit strategy, if available.
- 11- In your opinion and based on your experience, what can be done to further promote green entrepreneurship and social and eco innovation in Lebanon?

Questionnaire for Support Providers' Interviews

- 1- Can you describe your organizations' purpose and recent initiatives related to social and ecological innovation in Lebanon?
- 2- What made you launch this initiative?
- 3- When did it start?
- 4- What opportunities were available at start? Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, External factors (environmental, social, economic, political, legal)
- 5- What challenges did you face at start? *Access to skills and knowledge, Access to technical support, Access to finance, Networks and visibility, Regulations and policies, Challenges in Organizational Management, External factors (environmental, social, economic, political, legal)*
- 6- Did you have to modify your project's activities and outcomes during implementation?
- 7- What are the existing opportunities and challenges at present?
- 8- Do you provide services in partnership with other organizations? Please provide details.
- 9- How many staff and volunteers are involved in the initiative? What is their role?
- 10- What are the current sources of funding for this initiative?
- 11- What is your exit strategy, if available.
- 12- In your opinion and based on your experience, what can be done to further promote green entrepreneurship and social and eco innovation in Lebanon?

