

## Regional Initiative for Promoting Small-Scale Renewable Energy Applications in rural areas of the Arab Region

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### **Socio-Economic Indicators**

	2017	2016
GDP	56.7 billion USD (in 2018)	54.2 billion USD (in 2017)
GDP per Capita		12,013 USD (2017)
Debt to GDP Ratio	152%	148%
GDP Growth	1.5%	1.7%
Fiscal deficit	- 9.3% of GDP	
Inflation Rate	6.5%	(highest in five years)
Average Inflation Rate	3.1%	
СРІ	107.23	
Economic Activity rate	48% (in 2009) for the population aged > 15 years	
Unemployment Rate	15-25% / reported elsewhere as 40 percent	
	Job creation is dominantly in low productivity activities	

#### **Socio-Economic Indicators**

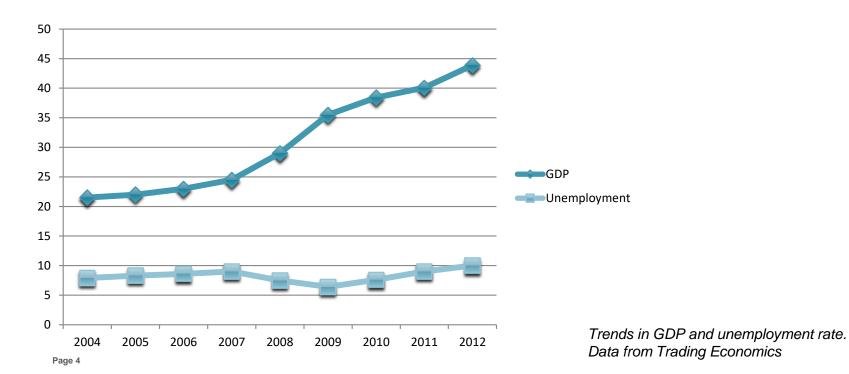
	2017	
Human Development Index	0.757	high human development category
Human Development Index Rank	80 out of 189 countries	
Gender Inequality Index*	0.381	85 out of 160 countries
<b>Environment Rank</b>	94 <sup>th</sup> out of 180 countries (2016 Environment Performance Index)	
Poverty rates	27% live below 3.15 USD/ day day	and 7% live below 2.40 USD/
Unemployment Rate	15-25 percent / reported elsewhere as 40 percent	
	Job creation is dominantly in low productivity activities	
Adult Literacy Rate	89.1% (2009)	
	Gender parity is achieved at primary level	
Education	Almost 90% primary education. 72% Intermediate and 54% secondary levels	
* reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic		

activity

#### **Unaddressed, Structural Economic Issues**

The Lebanese economy has structural issues impacting the labor market and prohibiting job creation despite GDP increase:

- Large monetary inflows to the country
   Low export capacity leading to trade deficit
- Lack of sustainable and equal development across regions



#### High Dependence on Aid and Politics, and Low Competitiveness

- ➤ The economy is dependent on foreign aid, with a weak business investment climate and lack of efforts in addressing the economy's structural issues.
- ➤ SMEs constitute 93 to 95% of all companies, highlighting an inability to grow and low competitiveness on the national and regional, international levels.
- > SMEs growth is hindered by the high operating costs driven by the elevated cost of energy.

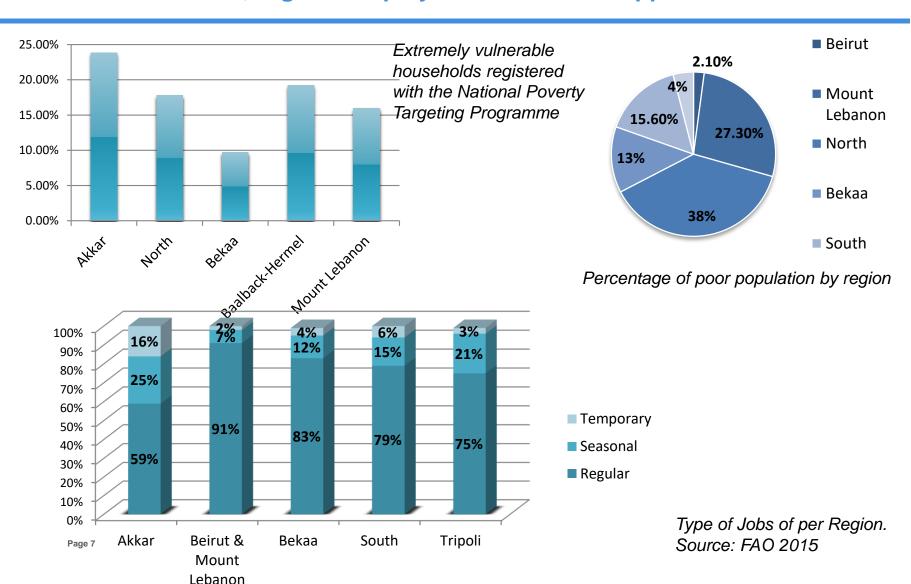
#### Regional Development: Selective, Unsustainable, Unplanned and Subject to Political Patronage

- Anecdotal evidence shows that development is based on political patronage, rather than needs' assessment, and on donors' thematic focus and availability of funding.
- ➤ There are large regional disparities, expected to accentuate with the future infrastructure investments' plans —CEDRE-; which should be adequately addressed to enhance the economy and decrease the inequality in living conditions.

#### **Rural Indicators**

Rural Population	12% of Lebanon's population is estimated to be rural	
Active Population	Rural population accounts for an estimated 20-25% of the active population	
Poverty	Poverty is dominant in the rural areas of Akkar, North, South, Bekaa and Baalbek- Hermel	
	Rural poor are mostly small farmers, wage labourers, fishermen, and women heads of households	
	The most remote rural areas are characterized by low income levels	
<b>Main Productive Activity</b>	Agriculture, with its related subsectors	
	Agriculture is either the sole source of income or an additional source of income for the majority of the Lebanese rural population	
Women Activity	Women are active in education, agriculture (agri-food and livestock)	

#### Low Income, High Unemployment and Small Opportunities



- ➤ The North and Akkar still hold the poorest population and the lowest socio-economic indicators across regions.
- Disparities also exist between villages and towns within the same region.
- Data is however unavailable.

#### **Electricity in Rural Areas**

Lebanon is 99- 100 % electrified

Shortage of electricity supply of approx. 1,500 MW

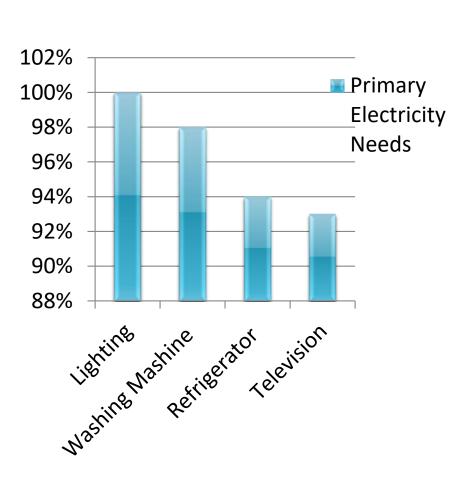
Shortage equivalent to 12-18 hours of electricity black-outs especially in rural areas

Weak network resulting in high voltage drops especially in rural areas

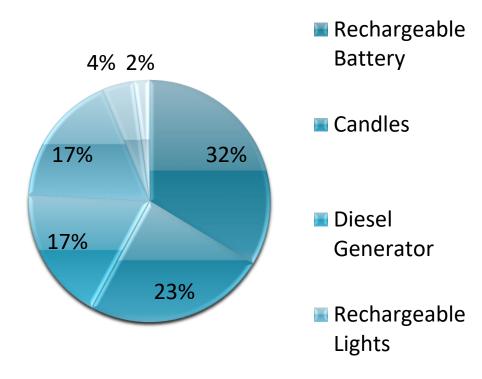
Lack of equitable electricity distribution, thus, the further away from the capital, the higher the electricity shortage

Higher electricity bills driven by the higher generator bills (when applicable)

#### **Sources and Usage of Electricity in Rural Areas**



#### **Back-up Sources of Electricity**



#### Main Challenges for Productive Activities in Rural Areas

#### Low Entrepreneurship

- Securing seed funding for earlystage entrepreneurship is less challenging than upscaling and growing the businesses.
- Growing a business is rarely accounted for at the start-up stage.
- Entrepreneurship in rural areas is needsbased, and is more common among men than women.
- Most women activity in productive sectors is in-house and informal.

#### **Skill Gaps**

- There is lack of management expertise and necessary skills for selling products and growing the market share, such as marketing and branding, especially among women.
- Equipping women with the necessary business skills improves their decision-making process in assuming greater roles and responsibilities.

## Unreliable Electricity

- The unreliable electricity supply is a common barrier for the improvement of productive sectors.
- The high cost of back-up generation increases operating costs.
- There's uneven distribution of electricity supply across the country, resulting in different electricity bills.

## Climate Change Vulnerability

- The total cost on the Lebanese economy is estimated at of 1.9 billion USD in 2020, reaching 16.9 billion USD in 2040.
- The largest share of GHG emissions in the agriculture sector comes from soil, thus, tackling soil emissions is a major factor in the reduction of the overall emissions of the sector.
- Increase in water shortage.
- High soil degradation.

#### **Major Trends in Women Empowerment Programs in Rural Areas**

# Cultural, Educational and Financial Barrier

- Skills and educational gaps
- Lack of decision-making ability and responsibility are key barrier hindering women's larger engagement in productive activities.
- Limited access to finance.

#### Non-standardised National Level

 Wide discrepancies in the local context across regions.

# Projects' Requirements

- Aim for fast impact
- Lack of follow-up

#### **Pillars for Project's Identification**

- > Relatively vulnerable rural area
- Availability of natural resources; agricultural land, springs, rivers...
- Infrastructure and ease of access
- > Human resources and active population
- Availability of productive activities, with growth potential
- Active participation of women in the labor force (or potential)
- > Low security risk
- > Strong local governance; municipalities
- > Active NGOs

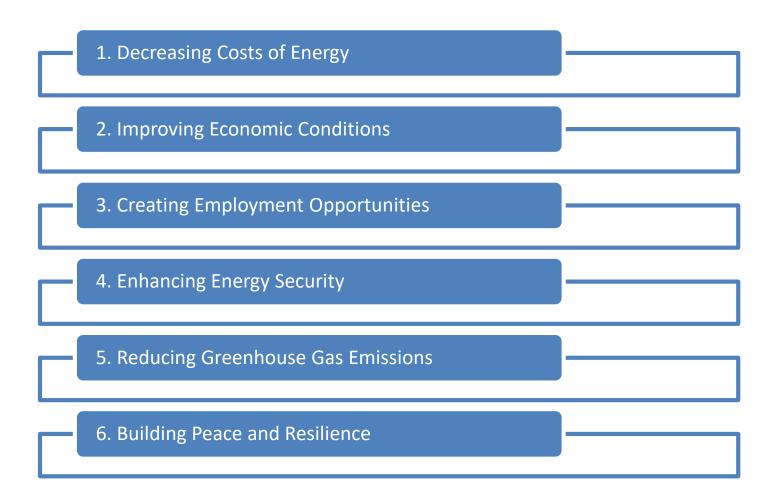
#### **General Field Observations**

- ➤ The trust deficit in government, donors and CSOs is widening, especially in Akkar.
- > Similarly to donors' fatigue, the local community is suffering from "assessment and surveys" fatigue.
- ➤ The lack of trust and the witnessed fatigue have led to an obvious fear of information sharing.
- ➤ The socio-economic indicators seem a lot worse on the ground than they appear in data and figures.
- Women are less active than in other areas, with low entrepreneurship spirit and initiatives.
- ➤ The most common barriers for productive sectors in rural areas are the high operation costs, the lack of support, low selling rates of products, lack of marketing capacity, and transport.

#### **Energy Consumption in Agriculture in Akkar**



#### Socio-Economic Impact of Renewable Energy in Rural Areas



#### **Selected Sites**

#### Akkar El Atika

- Women cooeprative
- Beekeepers cooperative
- > Agriculture cooperative







### **Selected Sites**

## Sahqdouf

Sewing factory





## **Suggested Interventions**

Village	Project Implementation	Capacity Building
Akkar El Atika	-Solar photovoltaic systems including battery storage, for the three cooperativesSolar water heating systemProcurement of equipment and training on their operation to grow current productive activities or develop new ones	-Managing cooperatives -Entrepreneurship -Marketing -Branding -Operation and maintenance of solar photovoltaic systems
Shaqdouf	-Solar photovoltaic systems including battery storage for the sowing factorySolar water heating systemProcurement of equipment and training on their operation to grow current productive activities or develop new ones	-Starting and managing a cooperative -Entrepreneurship -Marketing -Operation and maintenance of solar photovoltaic systems

## **Thank You**

