UNITED NATIONS E



Economic and Social Commission for Western Asia (ESCWA)

Report

Webinar on "Regional Initiative for Promoting Small-Scale Renewable Energy Applications in Rural Areas of The Arab Region – Business Models"

25 October 2021 at 13:00 – 15:00 Beirut Time (EET)

Summary

The UN Economic and Social Commission for Western Asia (ESCWA), in partnership with the Self-Employed Women Association (SEWA) organized a webinar on 25 October 2021 titled "Regional Initiative for Promoting Small-Scale Renewable Energy Applications in Rural Areas of The Arab Region – Business Models".

The main objectives of the webinar were to facilitate the exchange of experiences on the challenges and opportunities facing the conceptualization and application of integrated business models, particularly to present the business model toolkit developed by ESCWA as part of the REGEND programme and to look at Asian and African experiences and business models.

The ESCWA consultant presented the REGEND integrated business model toolkit and the panelists shared best practices and lessons learned from the field from their respective projects/areas. The participants emphasized the importance of complementing renewable energy technologies as enablers with area- and activity-specific capacity-building and productive equipment that will develop and enhance the knowledge, skills, and capacity of rural populations.

The webinar concluded with a series of recommendations meant to enable deployment of small-scale RETs in rural communities in the Arab region, spanning various subjects such as finance, capacity building, women and youth empowerment, WEF nexus, policy and regulation.

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I. INTRODUCTION

1. The UN Economic and Social Commission for Western Asia (ESCWA), in partnership with the Self-Employed Women Association (SEWA), organized a webinar on 25 October 2021 titled "Regional Initiative for Promoting Small-Scale Renewable Energy Applications in Rural Areas of The Arab Region – Business Models".

The main objectives of the webinar were to facilitate the exchange of experiences on the challenges and opportunities facing the conceptualization and application of integrated business models, emphasize the importance of complementing renewable energy technologies as enablers with area- and activity-specific capacity-building and productive equipment that will develop and enhance the knowledge, skills, and capacity of rural populations towards the improvement of their incomegeneration activities, enable the collection of best practices and lessons learned from the field and formulate recommendations that address and improve the process of conceptualizing and applying integrated business models in rural areas. The webinar was designed to present the business model toolkit developed by ESCWA as part of the REGEND programme and to look at Asian and African experiences and business models.

2. The webinar spanned over two hours and consisted of two sessions with 7 participants. Section II of this report summarizes the webinar's recommendations while Section III provides a summary of the presentations and the main topics of discussions held during each of the two sessions. Section IV reviews the organization of work, including information regarding the webinar's agenda and participants. The full documentation of the webinar is available at the following address:

 $\frac{\text{https://www.unescwa.org/events/business-models-integration-renewable-energy-technologies-rural-}{\text{development}}$

II. RECOMMENDATIONS

- **3.** The webinar concluded with the following recommendations:
 - a) In the context of small-scale RETs for productive use, assist the rural communities in evaluating their energy need.
 - b) Adopt financial, social and environmental indicators when monitoring projects.
 - c) Include continuity of the projects in the integrated business models to ensure sustainability.
 - d) Continue fostering collaborations through a framework that brings, government, public and private players together to implement policies effectively.
 - e) Understand the challenges faced by local communities, especially women and youth, so that opportunities can be fully and adequately realized.
 - f) Promote awareness of the value chain related to small-scale RETs integration with agriculture and other productive activities in rural communities.
 - g) Provide mentoring and capacity building opportunities to financial institutions so they understand better the viability of small-scale RETs and, as a result, offer adequate financial instruments.
 - h) Provide access to green and micro financing and ensure affordability is embedded within the integrated business model. Consider also risk-sharing mechanisms.
 - i) Embed the gender component in the business model to support the role of women as beneficiaries and owners of small-scale RETs.
 - j) Upscale programmes such as REGEND and SEED to replicate the success stories and maximize value to the target communities.

III. MAIN TOPICS OF DISCUSSIONS

- **4.** Presentations and discussions are summarized in the following sections which are organized according to the sequence of the webinar's sessions.
- 5. The session opened with an overview by ESCWA introducing the objectives of the regional workshop focusing on integrated business model development. The current regional and global rural energy access challenges were mentioned. This affects productive activities, access to water and sanitation in addition to the impact of climate change. This impact affects women more since they are often the ones undertaking rural activities to provide for their families. In the Arab region, around 30 million people do not have access to electricity, most of which in a rural context. The aims of the REGEND initiative and progress so far were mentioned with emphasis on the event's focus, namely integrated business models for deployment of small-scale RETs in the Arab region. The integration should encompass the business approach as well as stakeholders' collaboration to design enabling policy and regulations to support the RETs implementation.
- **6.** The event's partner, the Self-Employed Women Association (SEWA), shared welcoming points before moving on to the next section of the workshop.

A. REGEND BUSINESS MODEL PRESENTATION

- 7. A presentation by ESCWA's consultant introduced REGEND's integrated business model toolkit for deployment of small-scale RETs in rural communities in the Arab region.
- 8. The presentation covered the key aspects to consider in defining an integrated business model approach such as: affordability, WEF nexus, rural development, women empowerment, community participation and buy-in, environmental protection, financing mechanisms and capacity building.
- 9. A guideline was presented with the steps required to develop the business model with the aid of the Energy Market System Assessment (EMSA) framework. Feasible financing options through service or ownership models were discussed as well as the scale up of small-scale RETs projects through a regulated or market-driven approach.
- **10.** A case study by the UNDP of solar mini grids in Yemen was presented illustrating the impact of small-scale RETs in improving communities and empowering women. The main pillars and impacts of the REGEND's project were highlighted.

B. PANEL DISCUSSION

- 11. The panel included six speakers covering WEF nexus, gender aspect, energy access and PPPs, agriculture and financial instruments, community-driven capacity building for women and youth, and preliminary results from one of REGEND's pilot projects in Jordan.
- 12. An intervention from the Director of the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) emphasised the importance for the Arab countries to simultaneously close the water, energy and food security gaps. As such, access to data, technologies and knowledge are key to setting up viable business models. Financial instruments provide flexibility and initiatives such as competitive auctions and Public Private Partnerships (PPPs) have been successfully implemented in the Arab region. The benefit of adopting small-scale RETs for productive activities includes stimulating local entrepreneurs, women empowerment, job creation in addition to environmental impacts such as reduction of greenhouse gases. The panelist stressed on local capacity building for technology suppliers and users as well as awareness-raising activities to develop the knowledge of small-scale RETs, in addition to making sure that business models are developed in line with each country's conditions.

- 13. A representative from SEWA discussed the impact of women in rural communities with increased clean energy access. The panelist also highlighted benefits of small-scale RET solutions such as economic security and poverty reduction. A video was presented about rural women benefiting from localized clean energy. It is critical for the business model to be gender-inclusive and to incentivize women-owned enterprises and facilitate access to affordable RETs to help the development of energy in rural communities. Additionally, financial initiatives such as loans/credits for green enterprises are required for a just and fair transition. A business model should be such that women are owners, managers, distributors and producers. Cases studies covering many examples of success stories by empowered Indian women were shared.
- 14. A panelist from Power for All described their experience with PPPs for providing energy access in Africa, as part of the Utilities 2.0 project in Uganda. A customer-centric approach was presented by uniting the centralized power utility and several distributed renewable energy companies. In particular, the uptake of mini-grids was highlighted where the technology is designed for the purpose of productive use in targeted communities. The project included growing customers' consumption and demand for at least 1 year to reach about 80% capacity of the mini-grid before starting inter-connections. This provides larger volumes to help with economic viability. The panelist emphasized the need to promote female-owned businesses in addition to fostering collaborations from private and public sector players to tackle financial barriers to small-scale RETs use, including soft costs.
- Agricole (APIA) in Tunisia discussed the agriculture sector difficulties in accessing information and finance due to the farmers inability to provide the loans collaterals required by the banks. Investment in Tunisia is needed to enable access to small-scale RETs to rural communities, specifically for agriculture and agri-food sectors. Loans and other funding support are only possible when using new, un-used, components and there is an issue regarding lack of awareness of regulations and relevant institutional frameworks within financial organizations, which makes them unable to properly assess viability of solar PV-based projects. Therefore, technical mentorship for financial institutions is recommended, together with putting in place risk-sharing mechanisms for funding small-scale projects. The panelist stressed on enhancing the photovoltaic value chain and providing farmers with financial support (e.g. micro credits) and soft skills capacity building (e.g. writing a technical feasibility study, negotiating with suppliers and customers). She also highlighted the need for policies and regulations to enable small-scale solar PV-based projects in the agriculture sector in Tunisia.
- 16. A representative from the Sustainable Energy and Economic Development (SEED) project in Jordan, sponsored by Cowater, highlighted the importance of capacity building in supporting the uptake of small-scale RETs in rural communities. In particular, the panelist discussed the success of the project in regard to the role of women. Training opportunities were provided and customised based on market demand in the local community. Challenges were studied beforehand to identify and address any potential cultural misconceptions. The panelist highlighted that the success of such projects comes from listening to the local community, believing in the leadership capabilities of women and youth, building confidence in the new generations that should be seen as opportunities rather than threats and providing a suitable safe environment for the trainees.
- 17. An intervention by an expert from Jordan described one of the REGEND pilot project and the benefits it provided to the community such as reduced gas consumption, increased savings, improved standard of living and increased access to energy at a larger scale. The panelist also stressed the importance of the continuous support received from the ministries of Energy and Agriculture in achieving success in the project. Another important aspect highlighted is the observed ripple effect in the community as other associations are now interested in similar projects. The next objective will

be to encourage the women involved in the project to re-invest some of their revenues in their business so that they become self-sustaining and grow.

C. CLOSING SESSION

18. The workshop sessions were closed by Ms. Radia Sedaoui, Chief of the Energy Section, Climate Change and Natural Resources Sustainability (CCNRS) Cluster at ESCWA. The closing statement emphasized the fruitful shared experiences from Asia and Africa and useful recommendations provided by the participants during the webinar.

IV. ORGANIZATION OF WORK

A. DATE AND VENUE

19. The webinar was held online on 25 October 2021 from 13:00 to 15:00 Beirut time.

B. OPENING

20. The webinar was formally opened by Ms. Radia Sedaoui, Chief of the Energy Section, CCNRS Cluster, ESCWA. Ms. Reema Nanavaty, from SEWA, also gave brief opening remarks. The draft business models toolkit report, prepared by REGEND, was shared with the represented participants for their input and feedback prior to the webinar.

C. PARTICIPANTS

21. The webinar was attended by 32 participants representing various national and regional institutions, UN and international organizations, and national experts in Lebanon.

D. AGENDA

- **22.** Presentations and discussions were made over two sessions. The agenda of the webinar is summarized below:
 - a) Welcoming remarks and setting the scene
 - b) REGEND Business Model Presentation
 - c) Interactive Panel Discussion covering various Asian and African integrated business model experiences
 - d) Questions and answers
 - e) Closing remarks and way forward

ANNEX I: AGENDA



ANNEX II: LIST OF PARTICIPANTS

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