

Capacity-building on climate change mitigation for poverty alleviation in Western Asia

Executing entity: Economic and Social Commission for Western Asia (ESCWA)

Co-operating Agencies: Economic Commission for Africa (ECA), Economic and Social Commission for Asia and the Pacific (ESCAP) and UNESCO's regional office in Cairo /potential additional agencies might later join.

Brief Description:

The main objective of the project is to build capacity of policymakers, civil society and the private sector in the field of renewable energy technologies to enhance energy security and improve access to energy services in the poor rural areas.

The introduction of energy access in the remote rural area would help alleviate poverty, enhance productivity along with social and economic conditions. Practices and South-South cooperation to increase public-private partnerships will be promoted through various activities such as developing educational material, training modules and a showcase location. Training workshops at the national and regional levels, and a regional technical capacity-building conference will be organized to strengthen the capacity of stakeholders in promoting renewable energy services in rural areas.

The project will strengthen the capacity of target groups such as local governments, rural municipalities, private sector, civil societies, college students and technical staff to develop effective policies and programmes to scale up the use of renewable energy.

Collaboration with ECA and ESCAP will be sought in the development of guidelines and a set of training modules on enabling the environment for establishing public-private partnerships and criteria for selection of appropriate partnership models responsive to specific development needs.

The project will also benefit from the process of establishment of the Clean Technologies Innovation Center (CTIC) in which ESCWA in collaboration with UNESCO, intend to host a series of technology transfer and R & D activities. UNESCO's Regional Office in Cairo, Egypt, has already identified a local partner in Sudan, who will supply a 4000m² land plot where the technical hands-on training will be implemented. This land plot, will later host the planned CTIC.

Project's Expected Accomplishments:

EA1: Enhanced capacity of target groups to develop effective policies and programmes to scale up the use of renewable energy for integrated rural development and enhance energy security and improve access to renewable energy services in rural areas of developing countries for poverty reduction.

EA2: Development and application of policy measures with regard to establishing public-private partnerships for better access to energy services through collaboration among existing regional and subregional institutions and centres of excellence, being governmental, non-governmental, academic and/or research organizations.

EA3: Increased use of locally available renewable energy resources, such as energy from residues and wastes, small hydro, solar and wind, through the development and demonstration of pilot systems and initiatives based on public-private partnerships. The main target groups in such projects are local governments and municipalities working in a private-public partnership to implement remote areas applications

Project's Main activities:

A1.1 Hold an **inception meeting** via videoconference, including mass media outreach programme for project visibility. Detailed agenda, time plan and location for the workshops and seminars to be conducted will be determined in the meeting. Available resources and experiences gained in the cooperating organizations (ESCWA, ESCAP, ECA, and UNESCO) will be discussed to build up on already available resources and to benefit from the lessons learned in the different organizations. Other United Nations, regional, governmental and/or non-governmental organizations will be invited to participate in the inception meeting.

A1.2 Produce a number of **educational material and training modules** around the practices for establishing public-private partnerships and criteria for selection of appropriate partnership models responsive to specific development needs, building up on the existing material in ESCWA, ESCAP, ECA and UNESCO. The first set of the material will be issued towards the beginning of the project to build up the public awareness on the renewable energy options and applications in remote areas. The second set of the material will be issued towards the end of the project building up on the results of the workshops and international conference. The second set of publications will also use the accomplishments made through implementing the different operational renewable models and their effectiveness in different applications, conditions and locations.

A1.3 Organize a **training / skills development workshop** to discuss a) the barriers and challenges facing scaling up the use of renewable energy in rural areas; b) the importance of using renewable energy sources to enhance energy security and improve energy access; c) the ways to finance renewable energy projects; d) the policies and programmes needed to put in place a financial mechanism and/or fund for scaling up renewable energy projects; and e) the policies and programmes needed to encourage and motivate the private sector to invest in renewable energy in a public-private partnership.

A2.1 ESCWA will coordinate with UNESCO and actively participate in an **international conference** organized mainly by UNESCO on “Practices for adoption and implementation of Renewable Energy (RE) policies leading to deployment of these Technologies in Developing Countries (DCs)”, where financial institutions, private sector, government representatives, etc. will be summoned to form necessary partnerships using new financial models to deliberate and finalize the implementation plans for a number of renewable energy demo projects in the region.

A2.2 Organize a **regional workshop** to promote practices and South-South cooperation to increase public-private partnerships as well as active participation for small business development in the areas of implementing renewable energy projects for rural development. The workshop will focus on a) the practical policies and regulations to promote renewable energy in rural areas; b) the legal and institutional aspects to be taken into consideration when starting a renewable energy project; c) the skills needed in managing long term energy projects with focus on renewable energy; and d) the financing and public-private partnerships models with emphasis on the local and regional needs and specificities. Mass media outreach programme to increase project visibility will be considered.

A3.1 Acquire (through donations and/or procurement) the **operational models of the different renewable energy technologies** (50kW fuel cell generator, 50kW hydrogen electrolyzer, solar water pump, 30kW horizontal wind turbine, a solar thermal module, a micro hydropower plant demonstration...etc).. These models will be used as **hands-on training tools**, running models and show cases **in workshops, seminars, conferences and training activities** during the project. They will highlight the design, installation, commissioning, operations and maintenance requirements in developing successfully similar projects on larger scales. UNESCO Regional Office in Cairo will support this activity through its network of donors. UNESCO Regional Office in Cairo is in the process of contacting and seeking for donors who would contribute towards acquiring several RE operational models. Efforts would be also exerted by ESCWA in this regard, especially during the series of meetings which would precede the establishment of the technology venue. Contacts will also be initiated with potential donors and manufacturers who would be ready to supply the needed equipment / modules on a donation basis. The budget allocated in this DA project for this activity would cover the basic core equipment that would be needed for demonstration purposes.

A3.2 Conduct a **national training workshop** for local government officials from 15 rural municipalities. Those officials would be selected and nominated after consulting and coordinating with the national Focal Point of ESCWA in the country and / or the Ministry of Local Administration in charge of municipality affairs, while ensuring even representation of all different remote areas within the country. The workshop will a) raise awareness on the applications of renewable energy resources; b) increase knowledge on the different technologies that can be used; c) improves capacity for identifying the local needs in renewable energy requirements; and d) enhance the ability to form a national networking group for renewable energy. A replica of the UNESCO African Global Energy Education and Training Programme will also be implemented.

A3.3 Organize a regional technical capacity-building conference on the design and installation of the different renewable energy technologies pilot systems. The conference will a) raise awareness on the effectiveness of different renewable energy technologies in different climate areas; b) improves capacities to identify and pursue main requirements for different communities in the renewable energy applications; c) enhance the regional knowledge in matters related to the design and installation of the different technologies; d) build up confidence in renewable energy through the use of the operational models acquired and installed as pilot systems and show cases; and e) provide hands-on training using the operational models acquired and installed.

A3.4 Organize educational guided visits to the venue where the operational models will be exposed for local schools, technical institutes and university students, and representatives from local businesses serving the energy industry, to gain insight on the operation of these models. The venue is expected to be managed by a local entity (NGO, Science & Technology Ministry, municipalities, renewable energy authority...etc).

Proposed Project Time Line:

Activity	Mar-2011	Apr-2011	May-2011	Jun-2011	Jul-2011	Aug-2011	Sep-2011	Oct-2011	Nov-2011	Dec-2011	Jan-2012	Feb-2012	Mar-2012	Apr-2012	May-2012	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012	Jan-2013	Feb-2013	Mar-2013	Apr-2013	May-2013	Jun-2013	Jul-2013	Aug-2013	
A1.1	Inception Meeting																														
A1.2			Educational Material																												
A1.3							Training / Skills Development Workshop																								
A2.1		International Conference																													
A2.2													Regional Workshop																		
A3.1						Preparations for the regional hands-on technical conference																									
A3.2																						National Workshop									
A3.3																						Regional Conference									
A3.4																							Educational Guided Visits								

The project timeline might be subject to modifications depending on the recommendations to be set out in the inception meeting.