# Renewable energy skills, education and training



# CHALLENGES FACING SOMALI YOUTH

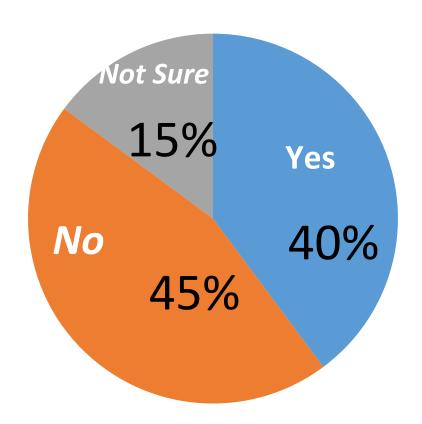
#### Youth unemployment;

- •Somaliland at <u>84%</u>
- Puntland at <u>62%</u>
- South-central Somalia at <u>54%</u>

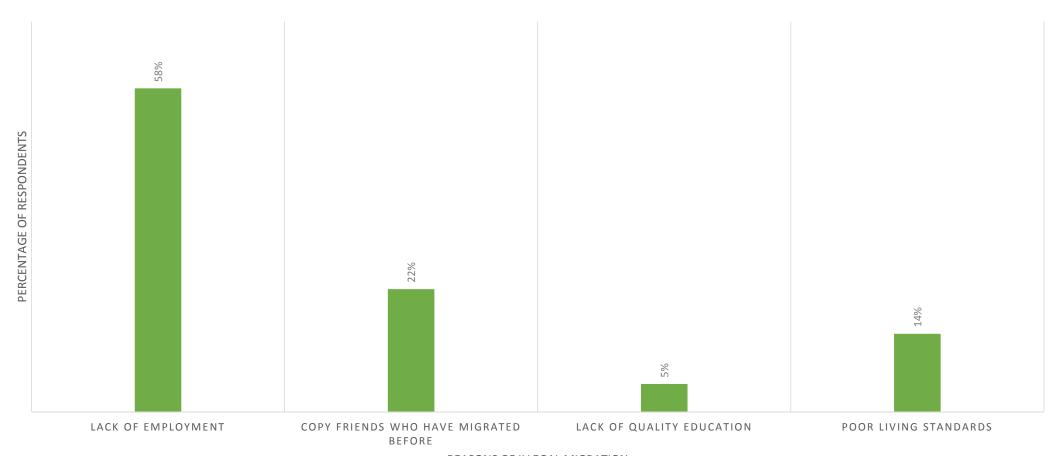
UNDP Somalia Human Development Report 2012

## RECENT SURVEY

# Would you personally illegally migrate knowing the risk that you might face?

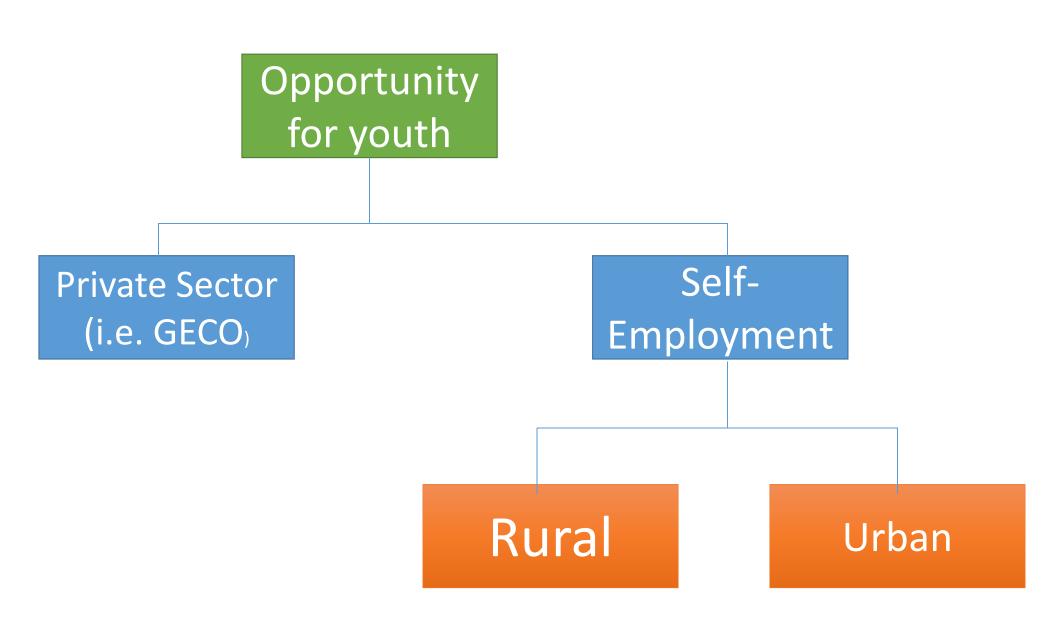


## REASONS YOUTH IN SOMALILAND ILLEGALLY MIGRATE



**REASONS OF ILLEGAL MIGRATION** 

# With this in mind What opportunities can the Renewal Energy Sector offer to Somali youth?



## Demand for qualified human resources

"If not addressed in a timely manner, the shortage could become a major barrier"

## Merging Job

#### Expected Job opportunities in the renewable energy lie in the following areas

Assembly and installations	Solar Energy Mechanic Energy Specialists (Solar Water Heating Systems)
Solar Energy Mechanic	Mechanic Manufacturer & Marketer
Marketer of Solar Lanterns and Solar Energy Based Systems.	(Solar Lanterns, Woodstoves)
Wind turbine engineers	Biogas Energy Mechanic Bio-plant Mason Plant
Assembly – Solar PV and Wind Turbines	Architect & Designer Recycling Engineer Community Recycling
Energy Mechanic	Manage
Energy Efficiency Consulting - Designing and Planning	Energy Policy Analysis and Development,
Assessment of Social and Environmental Impacts of Energy Systems	Energy Economics and Energy Management, Health and Safety

## Merging Job Profile

- Selling/Marketing
- Planners, designers and Installation/ Assembly
- Operating
- Maintaining and after services
- Solar Energy Mechanic
- Wind Turbine Engineers
- Health and Safety certified labours
- Spare parts suppliers and seller

### Who can provide this?

## The organizations that could offer such employment opportunities are;

- Non government & International Organizations with support from donors and private sector entities
- Universities and private industry research organizations
- Renewable energy manufacturing and installation companies
- Energy companies exploring possibilities of alternative forms of energy

## Is new skills required?

- The new jobs created by the growth of the renewal energy sector will require a mix of both traditional and new skills.
- For example, construction companies that carry out building and housing retrofitting will require workers with traditional construction skills and up To date training in energy efficiency.

## Merging Challenges

Difficulties in finding trained labour for renewable energy related jobs will be a challenge if quickly we don't act.

## What Do we need to do?

 Labour market institutions and employers need to act quickly in order to provide the adequate workforce training required by the sector

• For some, **new skills** will be required, for others **upgrading of existing skills** will be needed.

## Currently the Renewable Energy Sector

- Somalia/land has the year long Sun and Wind which are both perfect for;
  - Solar Energy
  - Wind Energy
- Small scale solar companies starting to emerge, provide;
  - Installation of solar in main cities
  - Providing of after service
- Minimal training center to coupe with merging demand

## Vocational center Specialised training center

- for the exploitation of the renewable energy technologies and its diverse applications it is essential to train the young men and women who would implement them;
  - Training for women and youth in solar assemble, installations, operations and Maintenance ()
  - training of technicians
  - electricians
  - Health and safety
  - Assembling of solar and wind equipments

# Opportunities for youth in the RE sector, types of opportunities that will arises

### How do we prepare for this sector?

- SHS involve sales, installation, maintenance and loan payment collection. Vocational training has been an important factor, particularly benefiting women, who provide after-sales services in rural areas (IRENA, 2015). In fact, under the IDCOL programme, relevant technical and management training has been delivered to 410,000 individuals ranging from local technicians to customers (IRENA, 2013).
- Other IDCOL programmes that promote biogas, improved cookstoves and other renewable energy technologies supported 4,000 jobs in the sector in 2014 (Haque, 2015).

#### Role of the Private Sector

#### Financial institutions

• Loans for family's especially those in rural communities for solar installations and support for small enterprise for sales, loan collections, maintenance and installation of equipment.

#### • Electricity Companies

 Support training centers that show interest supporting the sector through technical and financial support.

#### Universities

• Include skills required for the this merging sector in to the courses provided by the universities.

 The use of renewable sources of energy and renewable energy technologies is an important element for supporting entrepreneurial initiatives and employment.