Energy and Environment Working Group

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Types of energy in refugee camps

1. Energy for lighting

- >> Household lighting
- >> Community/street lighting

2. Energy for cooking

- >> Household fuel demand
- >> Institutional fuel demand (school feeding and in-patient programs)

3. Energy for basic services

- >> Energy for schools and health centers
- >> Energy for water pumps



Energy for Lighting - Gambella

- A total of:
 - >> 63,765 household solar lanterns distributed
 - >> 906 solar street lights were installed
- In 2017 (BLFR Program)
 - >> 12,735 solar lanterns distributed
 - >> 306 street lights installed
- The plan for 2018 (BLFR Program)
 - >> 7,560 solar lanterns and
 - >> 294 street lights
- Gaps:
 - >> **20,000** solar lanterns
 - >> **4425** solar street lights





Energy for Lighting - Assosa

- There is no street lights installed in Assosa refugee camps
- 500 solar lanterns were distributed for refugees in Gure-Shembola
- Energy for lighting gaps:
 - >> 15,000 solar lanterns
 - >> 940 solar street lights





Challenges – Energy for lighting

- Limited budget
- Improper utilization of household solar lanterns
- Unmet needs forced some of families to sell the lanterns
- Theft and vandalism of solar street light batteries
- Absence of proper maintenance and management of solar street lights



Energy for Cooking

Gambella

The cooking energy situation

- All the refugee households are dependent on firewood
- 53,000 fuel saving stoves were distribute in 2015
- An alternative fuel assessment has been done by OSD

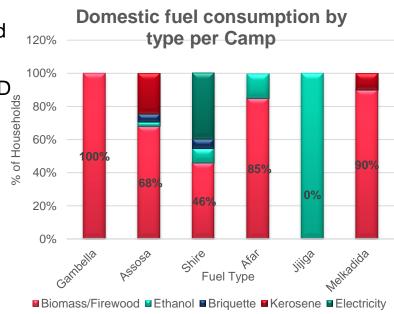
 >> Briquette can be produced from elephant grass

 >> Ethanol from Fincha sugar factory

 e Challenges

The Challenges

- No single cooking fuel solution
- Lack of energy implementing partner
- **Budget limitations**
- High influx





Plan for 2018 - Gambella

- Pilot briquette production from elephant grass
- Pilot biogas production
- Woodlot development for household energy
- Distribution of fuel saving stoves and training on fuel saving practices
- Explore the possibility of ethanol intervention





Energy for Cooking

Assosa

The cooking energy situation

- About 70% of HHs dependent on firewood
- Briquette production from grass piloted at 420 HHS
- 90.000 liters of kerosene fuel distributed
- 20,000 liters of Ethanol fuel distributed

Plan for 2018

- Scale up the ethanol provision to 31%
- Scale up the briquette production to 27%
- Connect Sherkole Camp communal kitchens with grid

Challenges

Budget limitation



Energy for basic services

50% of health centers, schools and water pumps are targeted to be supplied by modern energy (solar PV)

Gambella:

- 2 boreholes in Pugnido Refugee Camp are solarized
- Solarize all schools in Gambella refugee camps for 2018

Assosa:

Three boreholes are being solarized in Bambasi Refugee Camp



NRM and Environmental Rehabilitation Programme

Activities:

- Re-forestation of degraded forest lands
- Greening camps with various plant species
- Gully controls and rehabilitation of risk prone sites with biological and physical structures including gabion wall construction
- Awareness raising on environmental consequences
- Integration of livelihood activities with environmental programs
- Expansion of bio-sphere and protective areas



NRM and Environmental Rehabilitation Programme

Achievements:

- 530,000 trees planted in Gambella
- 350,000 trees planted in Assosa

Plan for 2018:

- Woodlot development
- Provision of alternative solutions

Challenges:

- Dependence on the natural forest
- Limited scale of intervention with alternative solutions





Thank you!

