Clean Energy Education & Empowerment (C3E)

Knowledge Building on Women in Clean Energy

Mainstreaming Gender into FAO's Work on Energy

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Rome (Italy), 11 April 2018

ENEA Headquarters - Lungotevere Thaon Di Revel, 76

FAO Energy - Gender evaluation methodologies and data at the international level

A. **Investing in Sustainable Energy Technologies for the Agrifood Sector (INVESTA)** Gender Sensitive Value Chain Analysis and Mapping Guidelines
B. **Safe Access to Fuel and Energy (SAFE)** approach for crisis-affected population
C. **Global Bioenergy Partnership (GBEP) indicators**

A. Gender-sensitive approach in the INVESTA project

- **Investing in Sustainable Energy Technologies for the Agrifood Sector (INVESTA):** Cost-benefit analysis methodology tailored at energy interventions in agrifood value chains
- **Gender-sensitive value chain analysis** to:

1. identify underlying **gender issues in the value chain**
2. measure the **impact of introducing clean energy solutions into the agrifood value chain**

A. INVESTA Methodology (1)

Dimensions of women's economic empowerment:

1. ***Access to productive resources***, including assets, agricultural services and financial services
2. ***Power and agency*** concerns capabilities, self-confidence and decision-making power

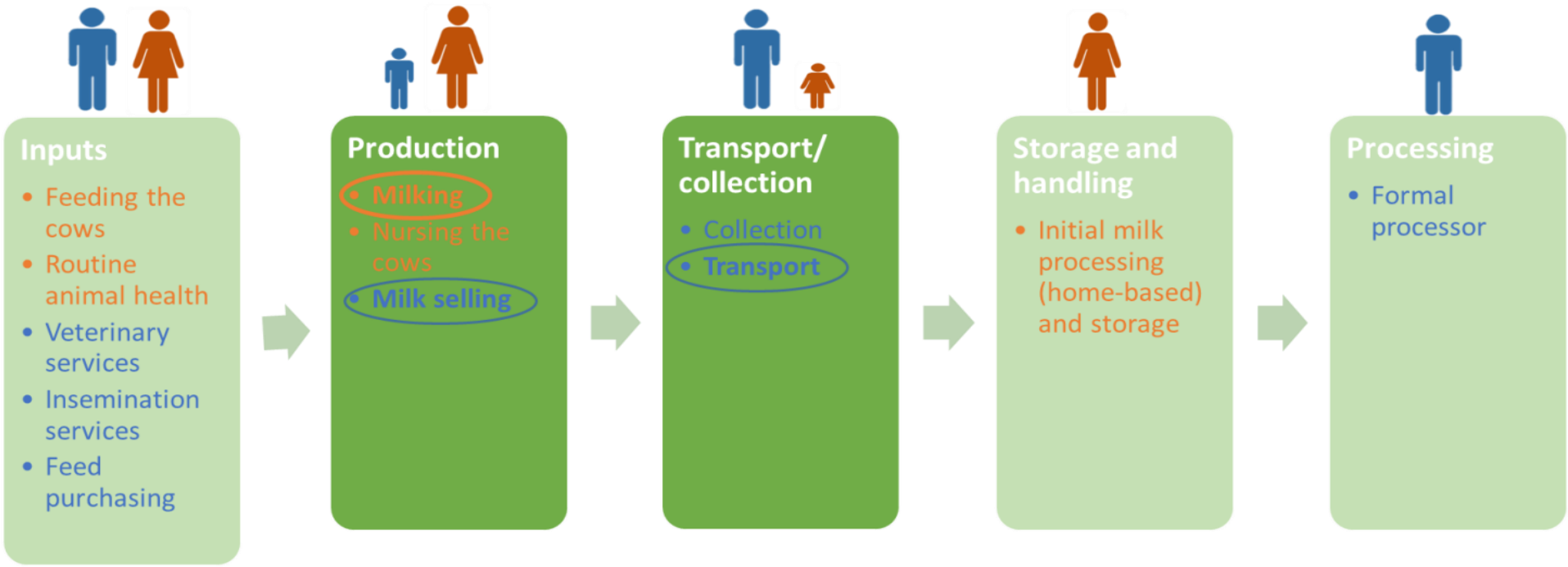
A. INVESTA Methodology (2)

- **Guiding questions:**

1. **Role of women and men in households, farming and VCs** (typical roles and activities of men and women in HH and VC; access to asset and services; income generation and control; participation; power and agency)
2. **Impact of clean energy interventions in a VC on women and men** (changes in roles and activities; access to energy; exposure to air pollution; income; time saving; job opportunities).

- Several social **indicators** in the cost-benefit analysis (CBA) measured using gender-disaggregated data whenever possible: ***health risks due to indoor air pollution, access to energy, household income, time saving and employment.***

A. EXAMPLE: Gender-sensitive mapping and analysis of **Biogas domestic milk chiller and cookstove**



C. Barriers and policy recommendations

for gender equality and women's empowerment when promoting investments in clean energy technologies in agrifood

BARRIERS	POLICY RECOMMENDATIONS
• **Lack of** country-level **information** for gender analysis	• **Facilitate collection of sex-disaggregated data**
• **Technologies** can be unresponsive to women's needs • Inequitable **access to information**	• **Mainstream gender considerations** throughout innovation cycle and marketing
• **High investment costs** for women-headed households and women in male-headed households	• Improve **women's secure access to land** • Support **financial and business literacy** • Develop **gender responsive financial services**
• Inequitable **access to cooperatives** between men and women	• Facilitate **gender equitable and single-sex cooperatives**
• **Shortage of managers and skilled technicians** in rural areas. Those available are often men.	• **Build the capacity** of men and women to hold these roles. Promote girls and boys **education** in STEM fields • Develop **support services** and supply chains that are accessible, affordable and operated by men and women

B. Safe Access to Fuel and Energy (SAFE) approach for crisis-affected population

- The FAO SAFE approach provides a multi-sectoral response to challenges and contributes to resilience building in protracted crises
- The FAO SAFE framework is a guidance document for FAO officers developing, implementing or monitoring resilience programs with a SAFE component
- It includes **six performance and impact indicators for monitoring gender-related aspects of SAFE interventions**

B. Gender role and energy access

- 3 billion persons still primarily rely on traditional biomass for cooking
- The burden of collecting fuelwood and preparing meals for the family is primarily shouldered by women and children
- Three major consequences :
  - productive time lost
  - exposure to protection risks
  - health risks (4M premature deaths)

B. Time spend for wood collection

- In Bidi-bidi camp (Uganda), *"Women collect fuelwood almost every day; taking 2-3 hours"*
- In Cox's Bazaar district (Bangladesh) women and children collect wood every day during 4.47 hours in average. The average distance observed is 8.75 km
- Around the city of Goré (Chad) women collect woodfuel three times a week for six to seven hours
- In average, 14 to 30 hours per week for woodfuel collection.

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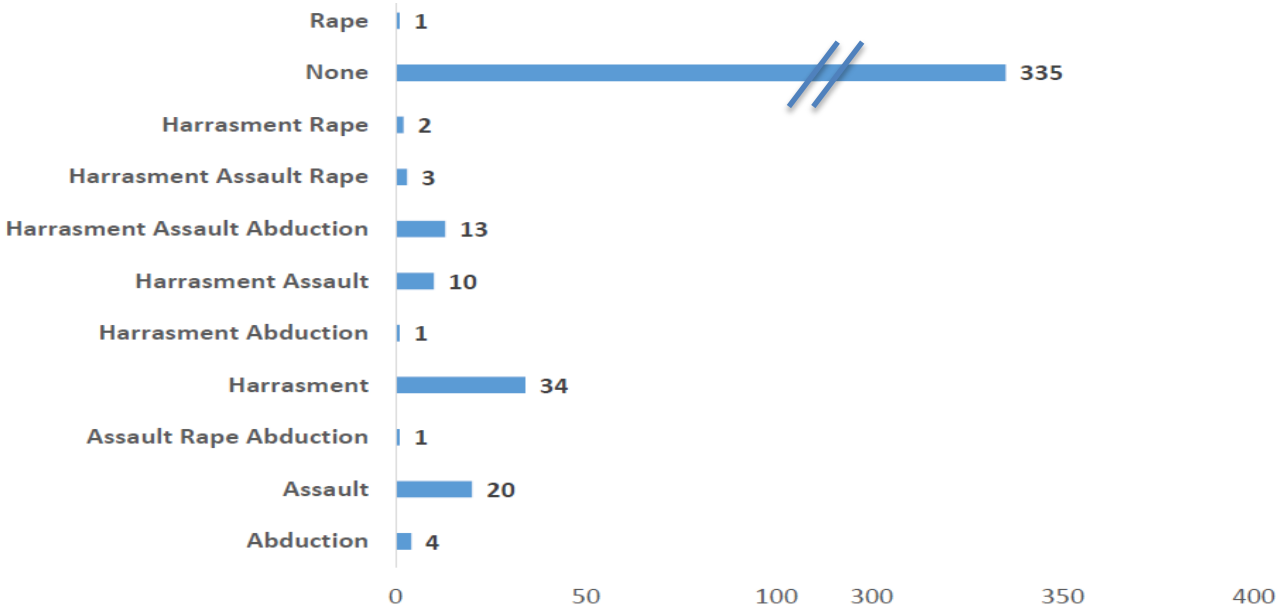
B. Exposure to protection risks



- SAFE Rapid assessment - IDP sites in Maiduguri city (Nigeria)

Threat Status/ Caused by	HH	Verbal abuse	Social abuse	Physical assault	Psychological abuse	Sexual assault	Confiscation of wood fuel	Arrest
No Threat	230							
Police/BGB	1							
Bandits or opportunists	4							
Host Community	34							
Ongoing Conflict	15							
Elephant Attack	3							
Forest Depart.	19							

- SAFE assessment in Cox's Bazar (Bangladesh)

B. Gender indicators for SAFE

Expected Results	Indicator	Sub-indicator	Formula	Source
Reduced fuel use as proxy for change in level of exposure to GBV during woodfuel collection	Fuel use	Average # of kg (solid fuel, LPG, gas) or litres (liquid fuel) of fuel used for cooking per targeted HH per day	Total # of kg or litres of fuel used for cooking by targeted HH per day / Total # of targeted HH	Kitchen Performance Test (KPT)
Increased saving in HH time spent collecting wood as proxy for change in level of exposure to GBV during woodfuel collection	Frequency and time spent on woodfuel collection	Average # of trips made and average # of hours spent per week on woodfuel collection	Total # of trips made OR total # of hours spent collecting woodfuel by targeted HH per week / Total # of targeted HH	Beneficiary survey
	Distance travelled for woodfuel collection	Average # of km travelled per week to collect woodfuel	Total # of km travelled to collect woodfuel by targeted HH / Total # of targeted HH	Beneficiary survey
Reduced indoor air pollution	Perception of indoor air pollution	% of HH who believe FES reduce emission of smoke	% of HH self-reporting to observe reduced smoke after using FES	Beneficiary survey
Reduced skipping of meals	Skipping of meals	Average # of meals skipped due to lack of cooking fuel by targeted HH per week	Total self-reported # of meals skipped by targeted HH per week / Total # of targeted HH who received a FES	Beneficiary survey
Increased distribution of portable lights	Distribution of portable lights	% of portable lights distributed	% of HH receiving portable lights	IP survey
Increased security and protection due to lighting	Perception of safety and security due to lighting	% of individuals who feel secure at night	% of HH self-reporting to feel secure at night	Beneficiary survey

C. Global Bioenergy Partnership (GBEP) indicators

- The GBEP indicators require, whenever possible, the compilation and use of **sex-disaggregated data**, in order to shed light on the possible gender-differentiated impacts of modern bioenergy development
- Two of the **GBEP social indicators** are relevant from a gender perspective and reflect traditional gender-differentiated roles:
  - Indicator 13: ***Change in unpaid time spent by women and children collecting biomass***
  - Indicator 15: ***Change in mortality and burden of disease attributable to indoor smoke***

For more information:

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