Woodfuel in a Global Change Context

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Woodfuel : a global demand

Use : electricity
200 Mwe = 450,000 households
1.2 Mt of woodchips/agricultural waste
Origin: natural forest, fields
Within radius : 150 km
Retail price : 35 €/Mwh

Use: cooking
400,000 households
1.1 Mt of firewood/charcoal
Origin : savannas, fields, fallows
Within radius : 150 km
Retail price : 30 €/Mwh
Woodfuel: a global demand

Biomass power plant Polianec (Poland)

Fuelwood retail market Bamako (Mali)

Current world demand for Fuelwood = 2 500 Mm3/year

Sources: IEA, EUWood

Demand (Mm3/year)

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>500</td>
<td>1100</td>
</tr>
<tr>
<td>Africa</td>
<td>100</td>
<td>150</td>
</tr>
</tbody>
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Europe (27)

Africa

+600%

+30%
Woodfuel: a global demand

Biomass power plant
Polianec (Poland)

Fuelwood retail market
Bamako (Mali)

2 different contexts, but similar concerns
Risk of shortages, need for new resources, sustainability, profitability…

... despite opposite images

Rural employment/development
GHG reduction
Technological innovation

Poverty
Pollution, respiratory diseases
Deforestation

GIZ International Wood Energy Expert Exchange 2016 - Gazull, Gautier
Woodfuel: a global trade

Trades of woodchips, pellets and charcoal

Sources: Irena 2011, Gdf-Suez 2015, Pellcert 2012, authors 2015
Times are changing

Emergence of new stakeholders

Intl. energy companies

Intl. biomass suppliers

Intl. Industries with local implantations

Local power suppliers (RDE)
Times are changing

Discourses are changing

• Woodfuel = profitable, modern, job reservoir, source of innovation
• Woodfuel = central to diversify energy portfolio

A window of opportunities for...

• energy plantation, modernization of traditional supply chains
• more transparency and sustainability standards
• new markets in Africa (InterAfrica, Europe, Asia)

But ...

• Various woodfuel stories and experiences
• Need for data on consumption, flux, preferences
• Need for innovative sustainable production models