



Food and Agriculture
Organization of the
United Nations

THE CHARCOAL TRANSITION

Greening the charcoal value chain to mitigate
climate change and improve local livelihoods



21 MARCH

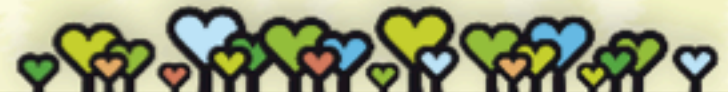
INTERNATIONAL DAY OF FORESTS 2017

Forests and Energy

| Importance of Wood Energy



Forests provide fuel for heating, cooking and industrial needs and protect watersheds to enable hydroelectric generation.



| Importance of Wood Energy



About 50% -1.86 billion m³ – of global wood production is used for energy.



| Importance of Wood Energy



2.4 billion people worldwide use woodfuel to cook meals, sterilize drinking water and heat homes.



| Importance of Wood Energy

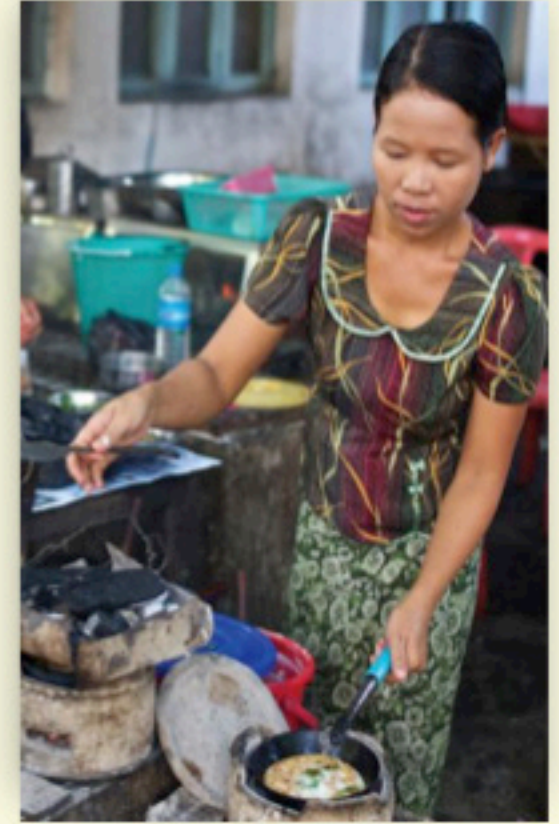
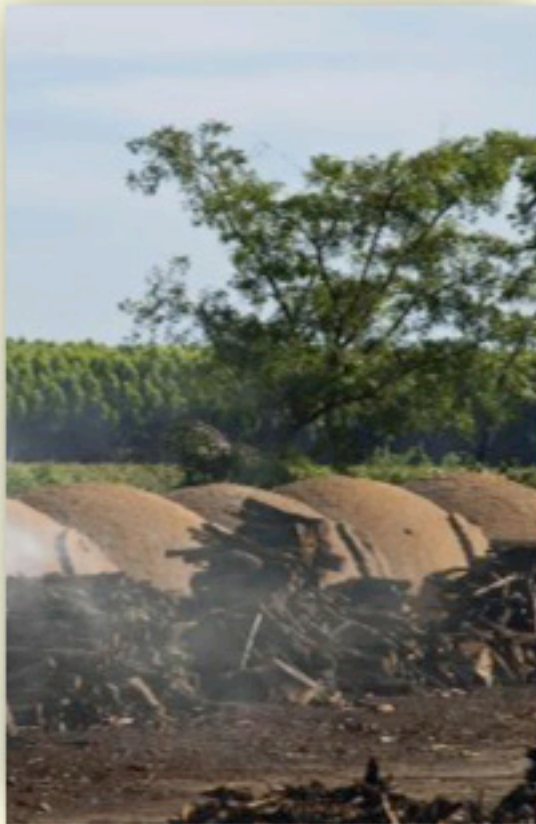


Woodfuel provides 40% of today's global renewable energy supply –as much as solar, hydroelectric and wind power combined.

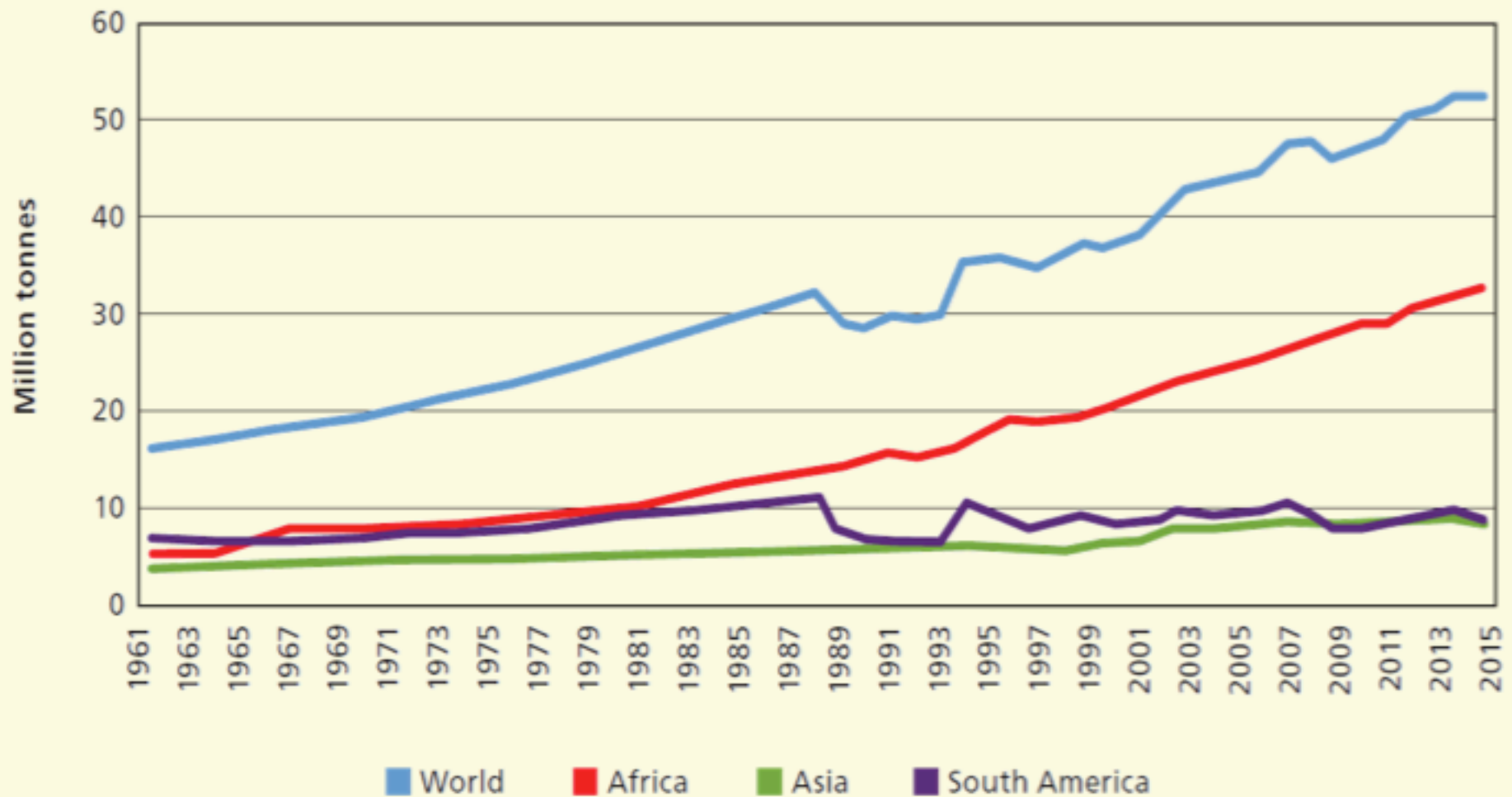


| The charcoal sector

17% of **wood** used for **fuel converted to charcoal**
generates income for **40 million people**



Global Trend in Charcoal Production



Source: FAOSTAT



| The challenges

- ◆ Unsustainable wood harvesting
→ **forest degradation**
- ◆ **Inefficient charcoal** manufacture and combustion
- ◆ **Negative health impacts** from rudimentary and inefficient stoves
- ◆ **Foregone revenue** from informal/illegal trade
- ◆ **Greenhouse gas emissions**

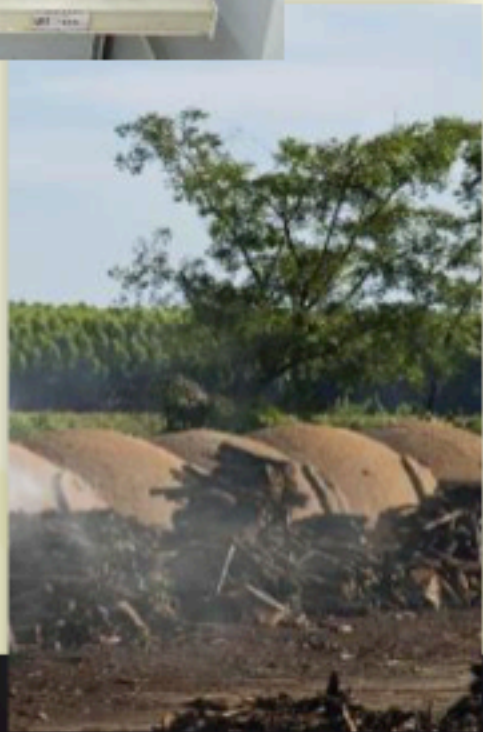


| Towards a greener charcoal value chain

Stage of value chain	Intervention
Sourcing of wood/ charcoal	Sustainably managed source (e.g. natural forests, planted forests, community forests)
	Alternative sources: agricultural waste, wood residues, wood outside forests, including agroforestry
	Briquettes from charcoal dust
Carbonization	Improved kilns with higher efficiencies
	Cogeneration of charcoal and electricity (industrial-scale production)
Transportation/ distribution	Short transportation distances
	Efficient handling of product
End use	Improved cook stoves



Greenhouse gas reductions along the charcoal value chain



- ◆ Sustainable wood sourcing and use of residues: **variable**
- ◆ Carbonization: up to **80% reduction**
- ◆ Improved stoves: up to **63% reduction**
- ◆ Simultaneous interventions along the value chain: up to **86% reduction**



| Greening the Charcoal Value Chain



- **Targeting the whole value chain**
- **Developing comprehensive policy frameworks** across sectors for a sustainable charcoal value chain
- **Making the charcoal value chain a specific component of NDCs**
- **Ensuring financial viability** of sustainably produced charcoal by:
 - reforming tenure to increase legal access to resources;
 - putting a fair price on wood resources
 - Incentivizing sustainable practices
 - Attracting investment
- **Supporting stakeholders** through research, provision of reliable data and sharing of success stories



FAO's Support to Countries

Action plan in response to recommendations of COFO and AFWC

- ◆ **Targeted and holistic policies** that promote access to sustainable and modern energy services (SDG7)
- ◆ **Availability and reliability of data** on woodfuel in national and international statistics.
- ◆ **Life cycle assessments** to optimize the uses of wood in the context of sustainable development




FAO's Support to Countries

Action plan in response to recommendations of COFO and AFWC

- ◆ **Cross-sectoral communication and collaboration** to support sustainable sourcing, efficient production and consumption, and effectively regulated trading
- ◆ **Information and knowledge sharing**
- ◆ **Technology innovation** to improve efficiencies





**Thank you
for your
attention**