Climate Change and Sustainable Development:

What are the Implications of the Paris Agreement for Africa’s Sustainable Development Agenda

James Murombedzi
Introduction

• The adoption of a binding climate change agreement which addresses the key pillars of the Bali framework and is based on the principle of Common but Differential Responsibilities
• A strong commitment to keep temperature increase below 1.5 degrees C.
• An emphasis on the importance of adaptation for Africa, and
• Additional and adequate finance, including a strong commitment to capitalize the Global Climate Fund (GCF)
To What Extent does the Paris Agreement Represent African Goals?

• The Paris agreement’s main aim is to keep a global temperature rise this century well below 2 degrees Celsius and to explore opportunities to increase the level of ambition by limiting the temperature increase to 1.5 degrees Celsius above pre-industrial levels.

• What are the implications of “well below 2 degrees C for Africa?

• A significant demand by Africa at COP 21 was the need for a legally binding agreement based on the principle of common but differentiated responsibilities.

• Enlightened self-interest
Enlightened self-interest?

Why are they doing this [agreeing to their pledges]? Frankly, none of them are doing it to save the planet. *Let us be very clear.* They’re doing it for what I think is a *much more powerful political driving force,* which is for *the benefit of their own economy.*

—UN climate chief Christiana Figueres, *(CNN, 2 December 2015).* *(my emphasis)*
Yo! Amigo!!
We need that tree to protect us from the greenhouse effect!
The Tragedy of the Commons

Imagine an open pasture shared by multiple cattle owners. Each owner increases their herd to maximize their benefit. With an unregulated resource, this is “logical” since the benefit is enjoyed by the individual and the impacts are shared by all. This leads to the ultimate overgrazing of the pasture.

- **Shared Resource**: 40 acres [16 hectares] 1,320 ft² (400 m²)
- **Sustainable Use**: 20 Cows Carrying Capacity
- **DepPLETED Resource**: 20+ Cows Trapping Point

The Tragedy of the Commons applies to numerous environmental, economic, and social phenomena and has particular relevance to greenhouse gas regulation related to global warming.
Tragedy of the Commons

$200 in Lake Ness Example

$200 in Lake Ness Example

MPC = MSC
Marginal Private Cost and Marginal Social Cost

MPB
Marginal Private Benefit

(7 people in Lake Ness example)

MSB
Marginal Social Benefit

(4 people in Lake Ness example)

Number of People Fishing

Q
Nationally Determined Commitments and Sustainable Development in Africa

• By the end of COP21 a record 187 countries, representing approximately 95% of GHG emissions, had presented their INDCs.
• The outcome of these pledges would be to emit 723 Gt of CO2 by 2030
• That is out of the 1000 Gt CO2 budget limit that must be respected by any 2°C scenario.
• This optimistic outcome increases CO2 emissions to 40 Gt per year. At that rate there would be only seven years of CO2 emissions left in the budget.
• This means that current pledges place every 2°C scenario far beyond reach.
Decarbonization and Clean Energy

What are the possibilities for Africa in the context of the Paris agreement?
Inequities in Global Income, Oil Consumption, and Population (% Share)

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Gross National Income</th>
<th>Oil Consumption Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa (SSA)</td>
<td>1.5</td>
<td>1.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Latin America</td>
<td>8.6</td>
<td>4.5</td>
<td>5.8</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>4.7</td>
<td>10.6</td>
<td>7.1</td>
</tr>
<tr>
<td>North America</td>
<td>6.7</td>
<td>32.8</td>
<td>29.5</td>
</tr>
<tr>
<td>High Income</td>
<td>15.7</td>
<td>78.9</td>
<td>59.2*</td>
</tr>
</tbody>
</table>

* OECD’s Oil Consumption Share.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>53.3</td>
<td>57.0</td>
<td>58.7</td>
<td>93.4</td>
<td>114.3</td>
<td>117.2</td>
<td>9.7</td>
</tr>
<tr>
<td>North America</td>
<td>92.5</td>
<td>101.5</td>
<td>96.3</td>
<td>75.6</td>
<td>60.7</td>
<td>59.9</td>
<td>5.0</td>
</tr>
<tr>
<td>South &amp; Cent. America</td>
<td>26.7</td>
<td>62.9</td>
<td>71.6</td>
<td>97.9</td>
<td>103.2</td>
<td>103.5</td>
<td>8.6</td>
</tr>
<tr>
<td>Europe &amp; Eurasia</td>
<td>98.4</td>
<td>78.6</td>
<td>80.3</td>
<td>114.1</td>
<td>145.2</td>
<td>144.4</td>
<td>12.0</td>
</tr>
<tr>
<td>Middle East</td>
<td>362.4</td>
<td>431.3</td>
<td>657.7</td>
<td>691.0</td>
<td>742.7</td>
<td>742.7</td>
<td>61.5</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>33.8</td>
<td>39.1</td>
<td>36.3</td>
<td>42.6</td>
<td>40.5</td>
<td>40.5</td>
<td>3.4</td>
</tr>
<tr>
<td>World</td>
<td>667.1</td>
<td>770.4</td>
<td>1,000.9</td>
<td>1,114.7</td>
<td>1,209.5</td>
<td>1,208.2</td>
<td>100</td>
</tr>
<tr>
<td>of which OECD</td>
<td>109.2</td>
<td>118.6</td>
<td>115.1</td>
<td>100.0</td>
<td>81.9</td>
<td>79.8</td>
<td>6.6</td>
</tr>
<tr>
<td>OPEC</td>
<td>434.6</td>
<td>535.8</td>
<td>765.9</td>
<td>840.5</td>
<td>914.5</td>
<td>914.6</td>
<td>75.7</td>
</tr>
<tr>
<td>Non-OPEC</td>
<td>150.5</td>
<td>172.0</td>
<td>171.7</td>
<td>180.8</td>
<td>176.4</td>
<td>174.5</td>
<td>14.4</td>
</tr>
</tbody>
</table>

Countries with high levels of resource dependence
Public support for fossil fuels remains high.

Total support for fossil fuels, in millions of current USD.

“Assuming present trends continue, the odds are quite good that we’ll become the best-informed extinct species on the planet!”
The Partners