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# Financing sustainable forestry in the tropics: A global overview

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## Structure of presentation

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- **Setting the scene: the economic viability of tropical forest management**
- **General trends in government policies and institutions**
- **The role of governments in promoting investment in sustainable forest management**
- **The role of international organisations**





# Economic viability of forest management

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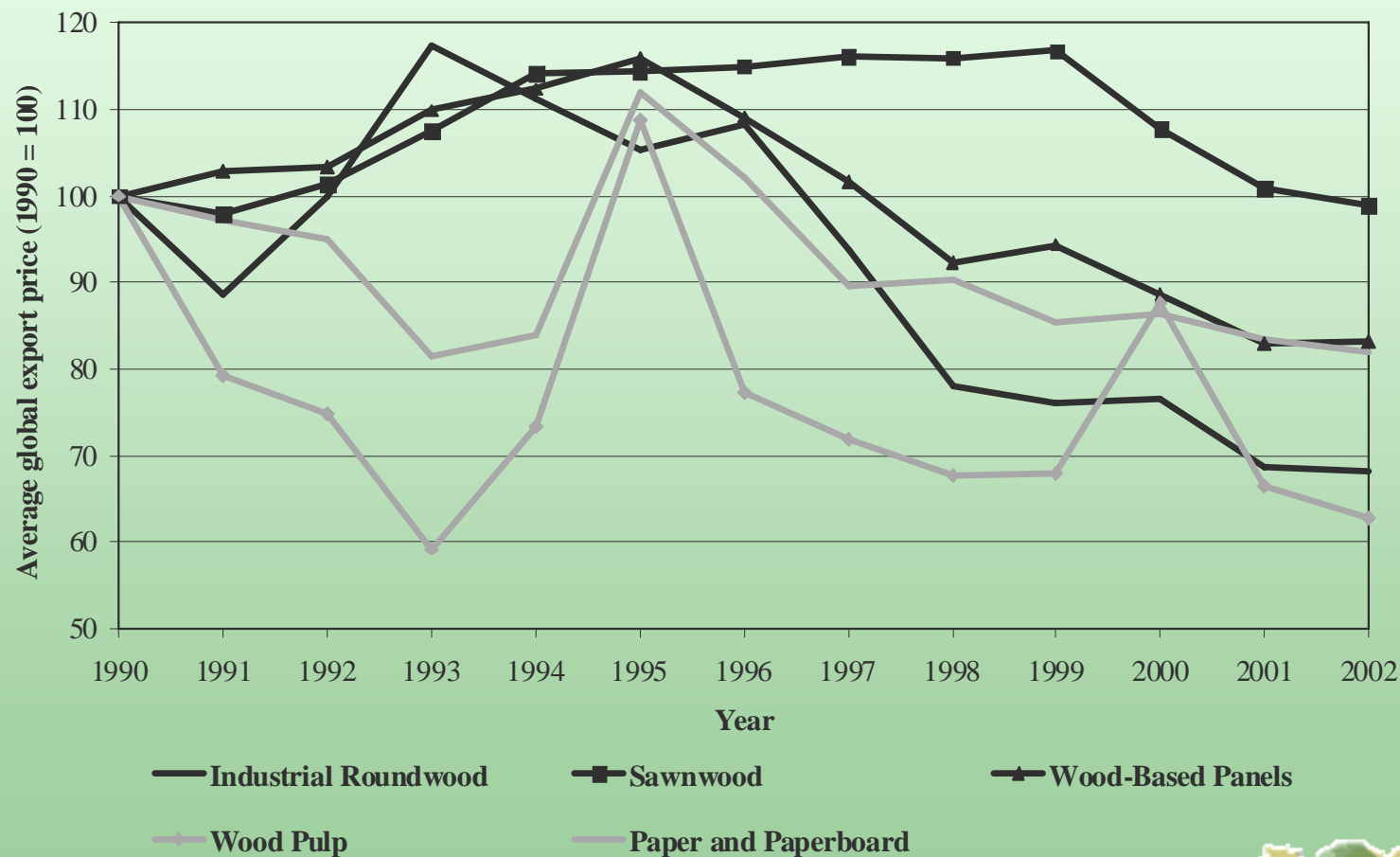
- **The basic economic problem:**
  - slow tree growth in many natural forests
  - declining trends in real product prices
  - relatively low level of value-added from wood production
  - declining market share of tropical roundwood, especially from natural forests
  - in addition, in some natural forest types:
    - low commercial stocking at time of harvest
    - relatively high production and management costs
    - high opportunity costs (alternative land uses)





# Economic viability of forest management

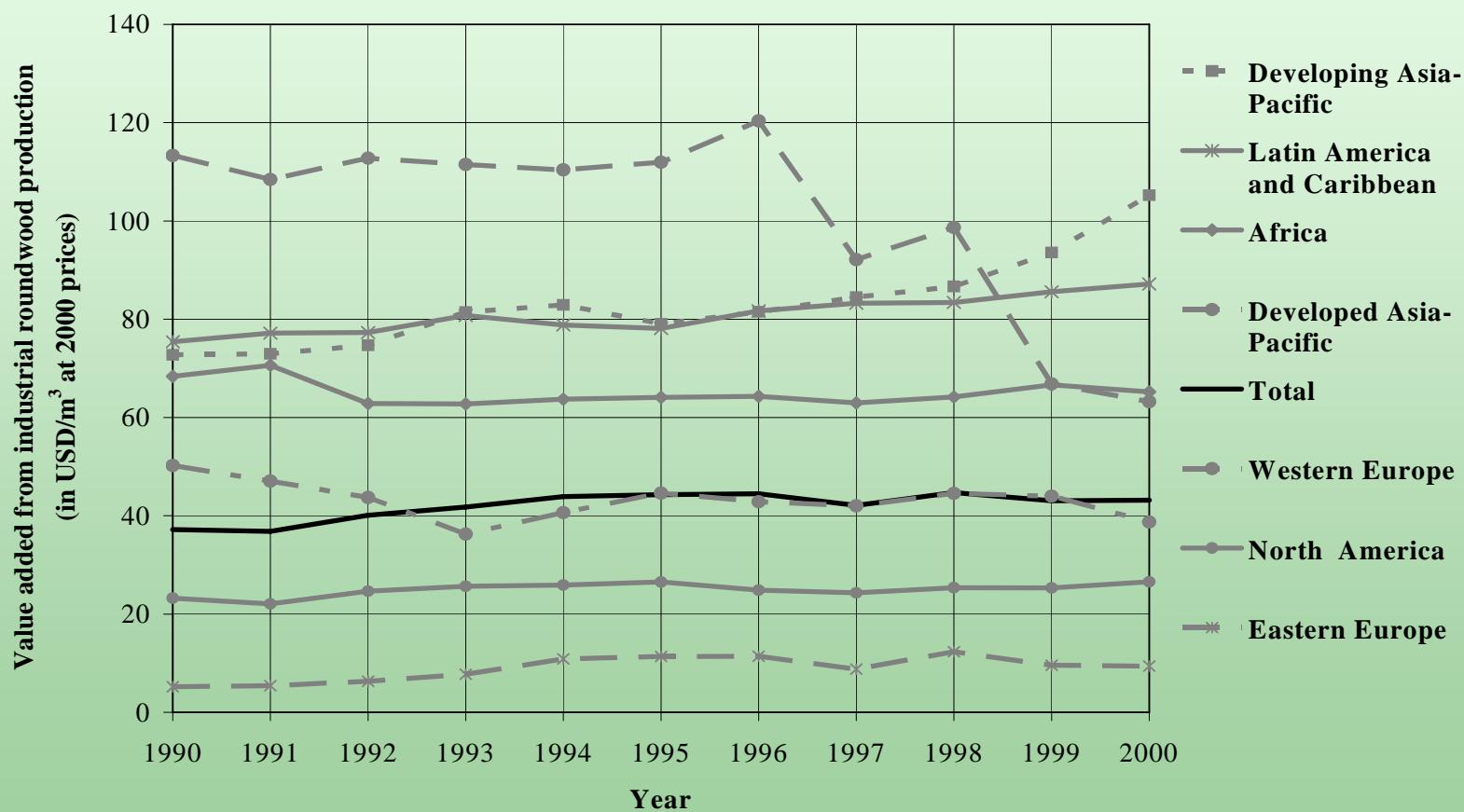
## Nominal forest product prices since 1990





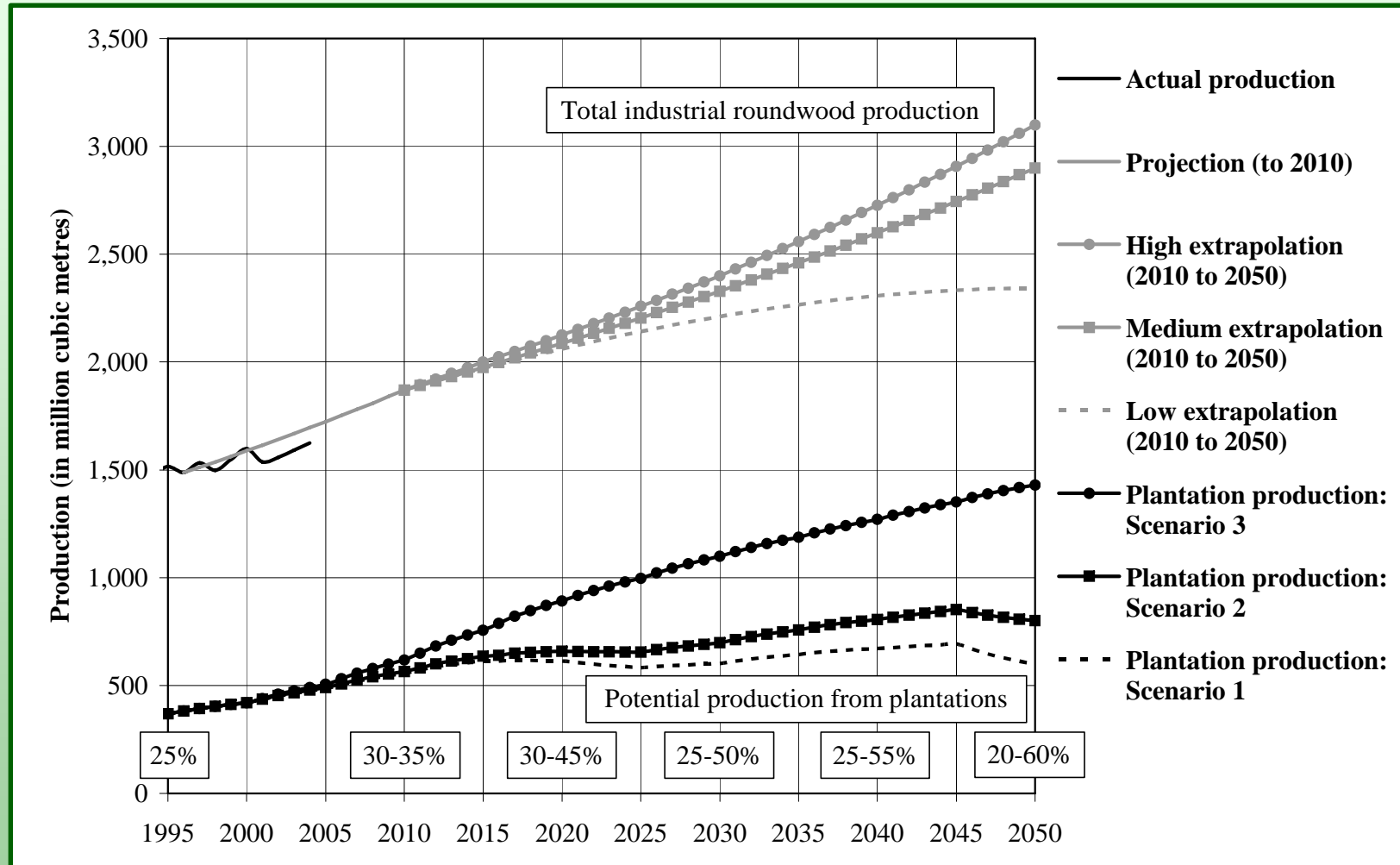
# Economic viability of forest management

## Real value-added from roundwood production





# Economic viability of forest management



Increased production from plantations





# Economic viability of forest management

- **Sustainable forest management:**
  - requires forest managers to respect non-market benefits, generally increasing management costs
  - also adds to transactions costs
    - compliance costs of producers
    - enforcement costs of forest administrations
  - in addition, forest concession systems are expensive to administer properly due to different objectives:
    - owner of the resource (often governments)
    - manager/producer of benefits (usually private-sector)
    - beneficiary (private-sector and others)





# Economic viability of forest management

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- **Consequences:**

- harvesting in primary tropical forests is still generally very profitable: value-added may range from
  - USD 500 per ha (dryland forests) to
  - USD 3,000 per ha (moist tropical forests)
- forest management in tropical forests is much less profitable: value-added may range from
  - USD 20 per ha per year (dryland forests) to
  - USD 100 per ha per year (moist tropical forests)
- it is difficult for natural forest management to compete with alternative land uses such as: agriculture; agricultural tree crops and forest plantations







# Economic viability of forest management

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- **Implications for investment in SFM:**
  - there is some scope to invest in improved harvesting
  - there is little scope to cover long-term recurrent costs
  - conditions under which SFM will be most viable:
    - concessions in locations with few alternative uses
    - small-scale management in areas with low population
  - investment is driven by market signals
    - generally, very little information is available
    - market signals (e.g. certification) are weak
    - government policies are often weak as well





## General trends in policies and institutions

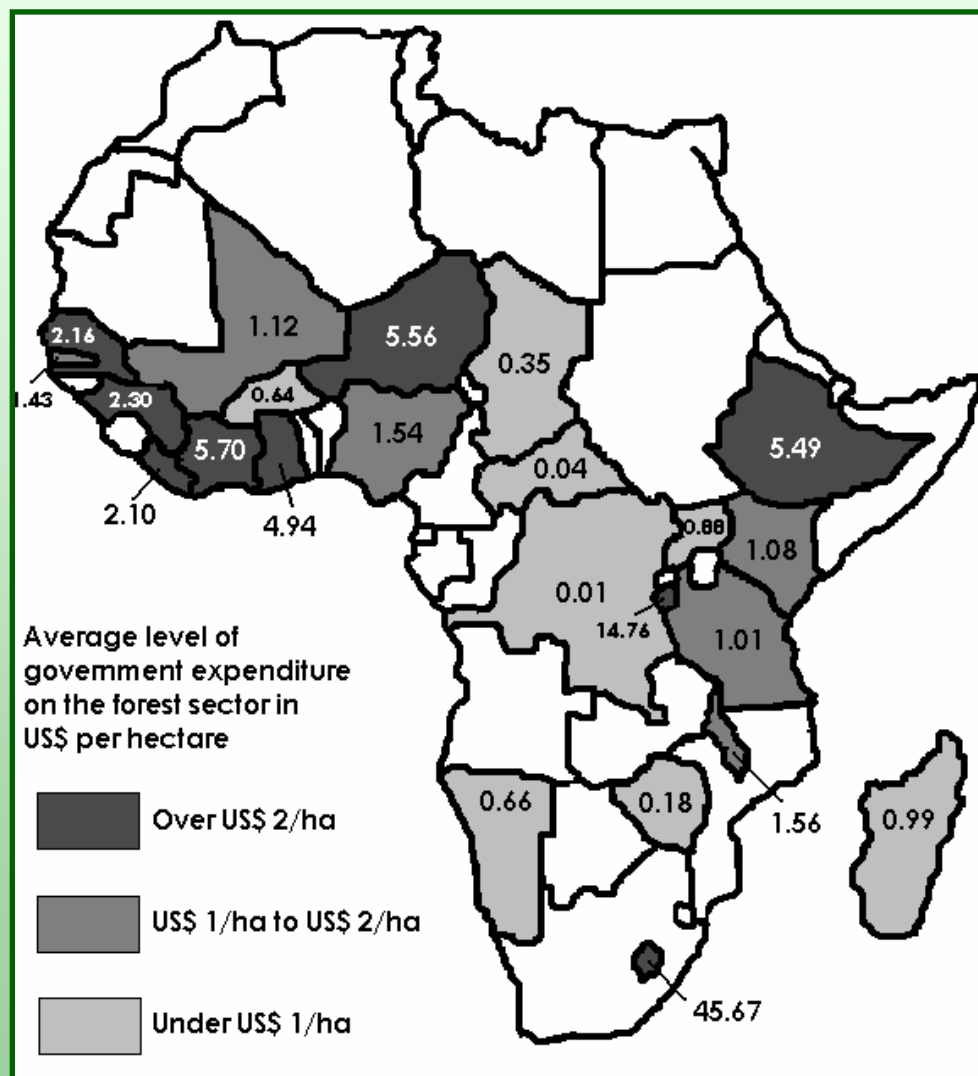
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- **Government budgets constantly under pressure: funding for forestry generally in decline**
- **Decentralisation and delegation of authority: weakening capacity to implement SFM**
- **Privatisation and less direct public intervention in many sectors (including forestry)**
- **Governments moving from providers to purchasers of public services**





## General trends in policies and institutions



Government expenditure on forestry in Africa in 1999 – USD/ha

(including donor funded expenditure)



# The role of governments

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- **What can governments do to promote investment in sustainable forest management?**
- **Broadly speaking, four sets of tools or instruments are available:**
  - direct intervention and/or investment
  - regulation
  - fiscal policies and market mechanisms
  - measures to raise awareness and promote SFM



## Direct intervention and/or investment

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- **Current status:**
  - very little direct involvement in commercial forestry
  - mostly focused on protected areas: often under-funded
- **Outlook:**
  - involvement in commercial forestry likely to continue to decline (e.g. privatisation of state forest enterprises)
  - investment in protected areas likely to remain limited due to financial constraints
  - more involvement of private-sector and non-government agencies in protected area management
  - some commercialisation of outputs from protected forest areas and, maybe, more use of trust funds





# Regulation

- **Current status:**

- a lot of forestry regulation in many countries
- much regulation is outdated, unclear and conflicting
- enforcement is generally weak, but may be improving
- a low level of law enforcement may be economically optimal in many cases

- **Outlook:**

- improved regulation of the sector requires:
  - more focus and deregulation (where appropriate)
  - more structured approach to law enforcement
  - clearer definition of rights and responsibilities
  - strengthening of the social contract





# Fiscal policies and market mechanisms

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- **Current status:**

- forest charges remain low in many countries, leading to waste and inefficiency due to incorrect market signals
- many countries spend more on their forest services than they collect in forest charges
- almost no incentives for sustainable forest management
- payments for environmental services are developing

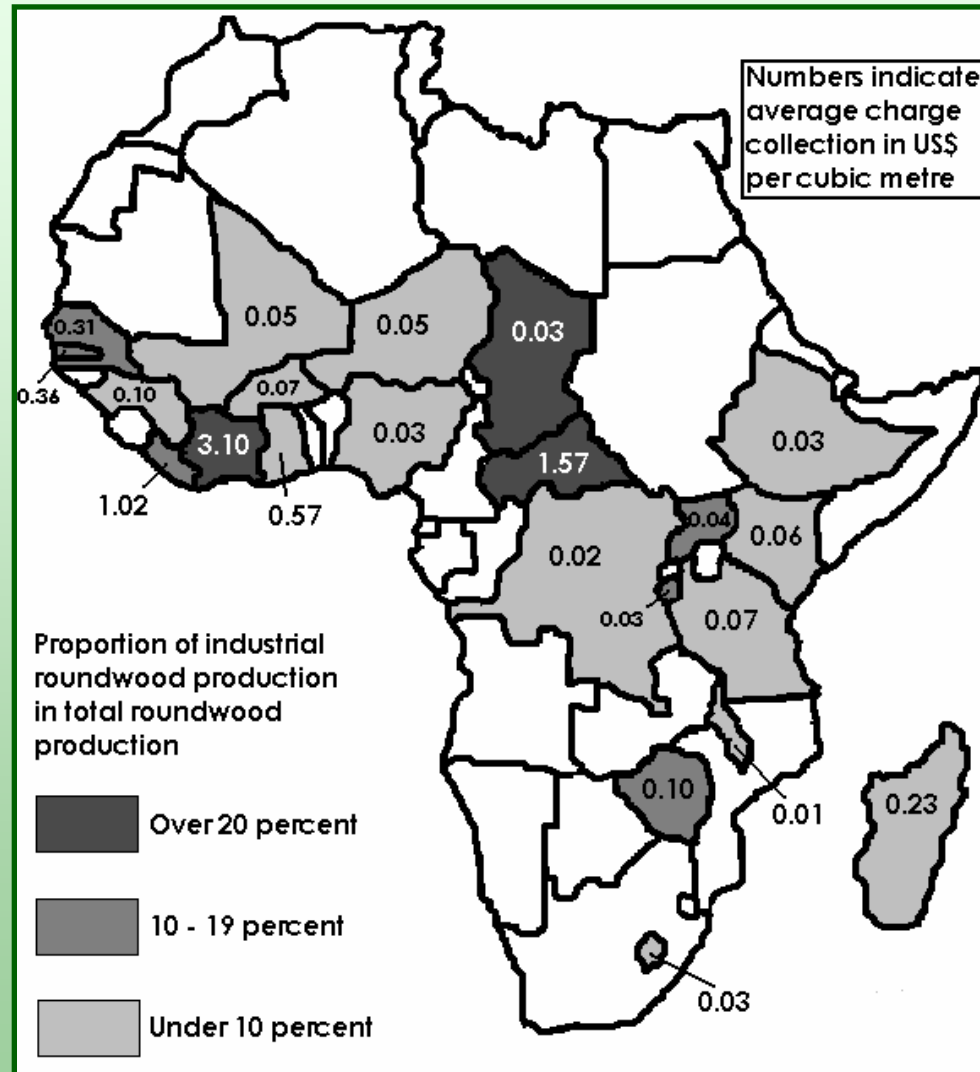
- **Outlook:**

- incorrect fiscal policies are the main constraint to investment in sustainable forest management
- forest charges and incentives should be revised
- PES are unlikely to have a major impact





# Forest charges



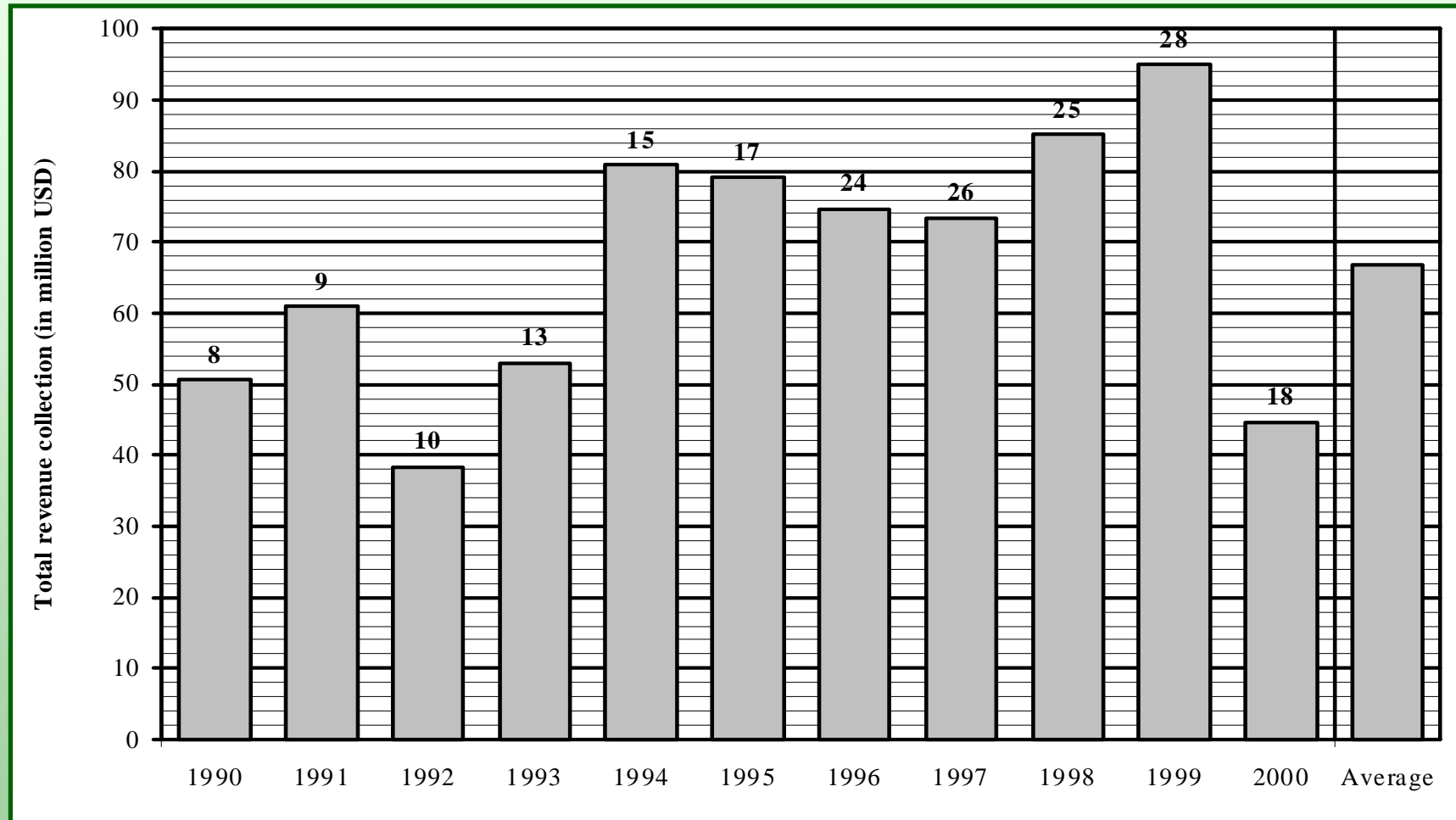
Average level of forest revenue collection in Africa in 1999 – USD/m<sup>3</sup>

(less than USD 5/m<sup>3</sup> for industrial roundwood)





# Total forest revenue collection in Africa



Average level of value-added: USD 2,750 million





## Partial estimate of PES (in USD million)

Market and location	Year							Total
	Before 2000	2000	2001	2002	2003	2004	2005	
US Conservation Banking	12.9	1.6	13.2	7.8	2.2	2.0	1.1	40.8
Australian Market-based Instruments				1.3	0.4	0.8	1.3	3.9
Voluntary deals and user fees	191.7	93.2	0.1	3.1	19.0	0.1	24.1	331.3
- North America	0.1	0.1	0.1	0.1	0.1	0.1	21.4	21.9
- Africa	171.8	93.1		2.9				267.8
- Asia-Pacific			0.0	0.1				0.2
- Europe							0.0	0.0
- South America	19.8				18.9		2.7	41.4
<b>Biodiversity market</b>	<b>204.6</b>	<b>94.7</b>	<b>13.3</b>	<b>12.2</b>	<b>21.6</b>	<b>2.9</b>	<b>26.5</b>	<b>375.9</b>
Kyoto Protocol					3.1	4.6		7.6
Europe					3.1	4.6		7.6
Non-Kyoto	17.0	18.4	7.1	8.5	0.0	0.6	32.4	84.0
- North America	0.5		7.1	8.3		0.6		16.5
- Asia-Pacific							32.4	32.4
- South America	16.5	18.4		0.2		0.1		35.1
<b>Carbon market</b>	<b>17.0</b>	<b>18.4</b>	<b>7.1</b>	<b>8.5</b>	<b>3.1</b>	<b>5.2</b>	<b>32.4</b>	<b>91.6</b>
Mexico Payment for Hydrological Services					17.5	5.7		23.1
Costa Rica Water-Based Ecosystem Services Market	0.2	8.0					0.7	8.9
<b>Watershed protection market</b>	<b>0.2</b>	<b>8.0</b>			<b>17.5</b>	<b>5.7</b>	<b>0.7</b>	<b>32.1</b>
<b>Total (all markets)</b>	<b>221.7</b>	<b>121.2</b>	<b>20.4</b>	<b>20.8</b>	<b>42.2</b>	<b>13.7</b>	<b>59.7</b>	<b>499.6</b>

Global forestry value-added in 2000: USD 77 billion





# Measures to promote SFM

- **Current status:**

- lack of information and analysis is a major constraint
  - market and investment information
  - sustainable forest management techniques
  - policies and legislation
- few specific policies to promote investment in SFM

- **Outlook:**

- information is improving in some countries, but more needs to be done
- policies and legislation should be examined and revised (where necessary)





# The role of international organisations

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- **Current status**



## A final thought.....

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- **Some improvement in co-ordination and equal access to support has been noted**
- **Establish the case for more support for forestry as providing public goods**
- ***Reorientate support towards those public goods rather than simply more tree planting!!***

