

## Tables & Figures chapter 12

**Table 12.1.** Mean household expenditure on electricity and other fuels and energy as a percentage of total household expenditure

Expenditure on	Before subsidy	After subsidy	Difference	
Electricity (R/month)	38	31	7	18%
Fuels excluding electricity (R/month)	70	59	11	16%
Energy as % of household expenditure	18%	12%	6%	

Source: (*Prasad 2003*)

**Table 12.2.** External damages from electricity generation and benefits of avoided health costs (1999 Rand)

<i>Estimated external damages from electricity generation</i>				
<i>Year/Impact</i>	<i>Low</i>	<i>Central</i>	<i>High</i>	
1997 (1999 R million)				
Air pollution and health	852	1 117	1 450	
Climate change	1 625	7 043	17 708	
Total	3 327	8 734	19 191	
<i>Estimated health benefits from electrification</i>				
	<i>Low</i>	<i>Central</i>	<i>High</i>	
Total (R million)	290	1 074	2 584	
c/kWh	0.09	0.52	1.26	

Source:(*Spalding-Fecher, 2005*)

**Table 12.3. Profiles of emissions and human development at different levels of development**

	Units	Developed/industrialized /		Developing/	
		Annex I countries (c) OECD	EIT	Non-Annex I countries (d) Developing	Least developed
Emissions profiles by gases, 2000(a)		100		100	100
CO <sub>2</sub> FF	%	81		41	4
CH <sub>4</sub>	%	11		16	22
N <sub>2</sub> O	%	6		10	12
LUC	%	0		33	62
High GW <sub>p</sub> gases	%	2		0	0
<b>Human development profiles (b)</b>					
HDI, 2003		0.892	0.802	0.694	0.518
Life expectancy at birth	Years	77.7	68.1	65.0	52.2
Adult literacy	%	100.0	99.2	76.6	54.2
GDP/capita, 2003	\$(ppp)/ capita	25915	7930	4359	1328
Population growth rate (2003- 2015)	%/yr	0.5	-0.2	1.3	2.3
GDP/c growth rate (1990- 2003)	%/yr	1.8	0.3	2.9	2.0
Electricity consumption per capita, 2002	kWh/ capita	8615	3328	1155	106
CO <sub>2</sub> emissions per capita, 2002	tonnes/ capita	11.2	5.9	2.0	0.2
<b>Vulnerability assessment (e)</b>					
Vulnerability scores		10-15	14-22	18 - >40	

Notes:

- (a) Source: Baumert and Pershing (2004, p. 6). FF: fossil fuel combustion; High GW<sub>p</sub> (global warming potential) gases: sulfur hexafluoride (SF<sub>6</sub>), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs).
- (b) Source: UNDP (2005). HDI range: 0.00<HDI<1.00; PPP: purchasing power parity. PPP normally deflates the income level of the developed nations while inflating those in the developing world as one dollar would have larger purchasing power that it has in the developed world.
- (c) Annex I countries include both developed OECD and EIT countries. However, a few newly admitted OECD countries are not in Annex I list, including South Korea, Singapore, and Mexico. The group of economies in transition (EIT) countries contains several sub-groups: those that are part of the enlarged EU, central Asian Republics, and other members of the CIS. In UNDP (UNDP, 2005) categorization, the coverage is larger, including Central and Eastern Europe and the Commonwealth of Independent States (CIS).
- (d) In emissions profiles, these two subgroups were counted separately while in the UNDP human development profiles, least developed is a subgroup of the developing world.
- (e) Source: Adger et al. (Adger et al., 2004b). Vulnerability scores range from 10 to 50, with 10 the least vulnerable and 50 the most vulnerable. These scores are derived from a series of proxy variables for vulnerability including food security, ecosystem sensitivity, settlement/infrastructure sensitivity, human health sensitivity, economic capacity, human resource capacity, governance capacity and environmental capacity (see, (Baumert et al., 2004), p. 17).

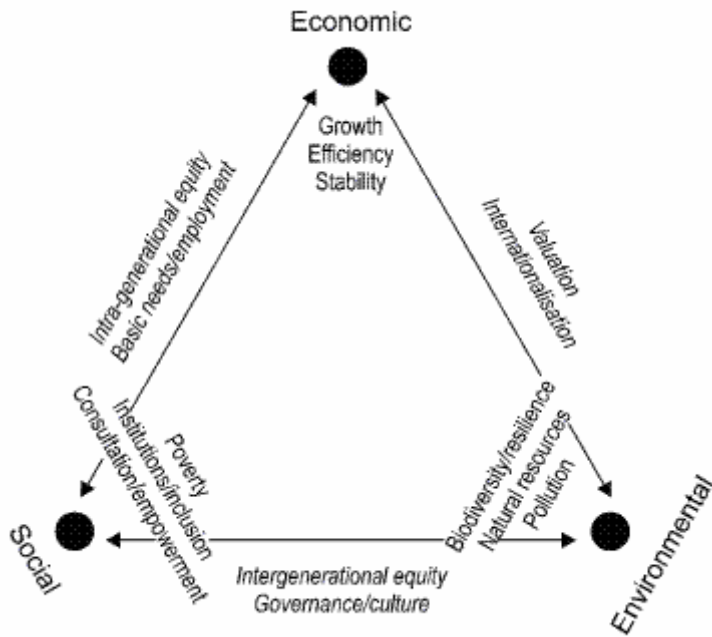


Figure 12.1. sustainable development has three broad dimensions: economic, social and environmental

Figure 12.2 Adaptation, mitigation and development paths

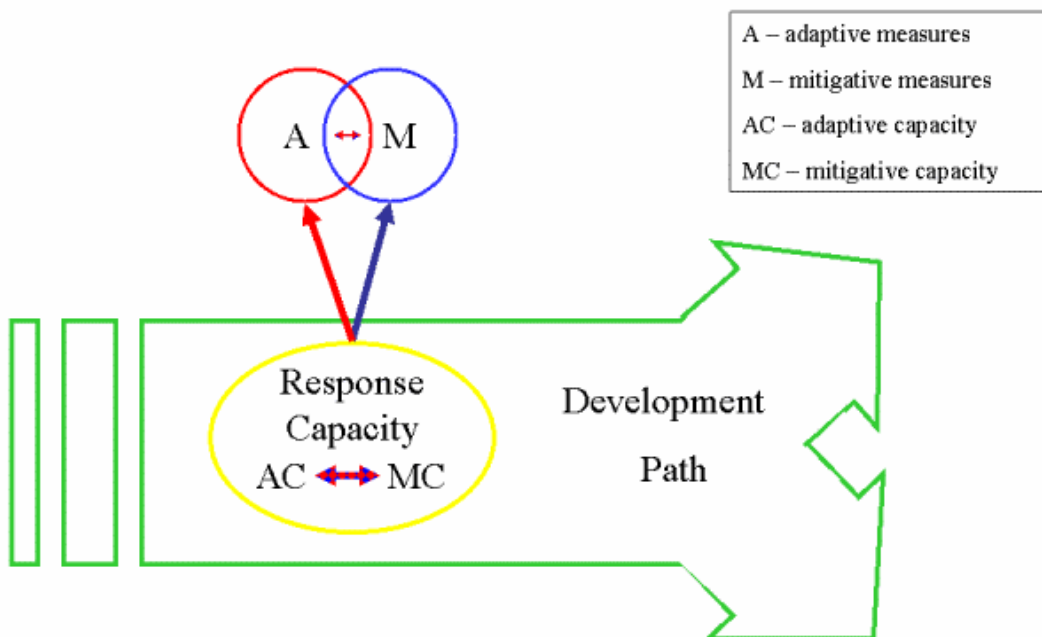


Figure 12.2. Adaptation, mitigation and development paths