

INTEGRATED FRAMEWORK FOR GREEN ECONOMY, POVERTY ERADICATION AND SUSTAINABLE DEVELOPMENT

Professor Mohan Munasinghe

Chairman, Munasinghe Institute for Development (MIND), Colombo
 Professor of Sustainable Development, SCI, Univ. of Manchester, UK
 Distinguished Guest Professor, Peking University, China
 Honorary Senior Advisor to the Government of Sri Lanka, Colombo
 Shared the 2007 Nobel Prize for Peace (Vice Chair, IPCC-AR4)

Plenary speech presented at
 UNCSD 2012 – Intersessional Conference
 UN, New York, 10 January 2011

MIND Munasinghe Institute for Development

Why do we need the Green Economy? Growing Risks of Global Breakdown due to Repeated Heavy Shocks

- Financial-economic crisis: Toxic assets are a multiple of annual global GDP.
- Persistent poverty and growing inequity
- Resource shortages: energy, water, food.
- Environmental harm, extreme events, conflicts, mass migrations, pandemics
- **Climate change: the ultimate risk multiplier**

Multiple threats are inter-related and synergistic
 Stakeholder interests are divergent
 Responses are uncoordinated – Weak political will

MIND Munasinghe Institute for Development

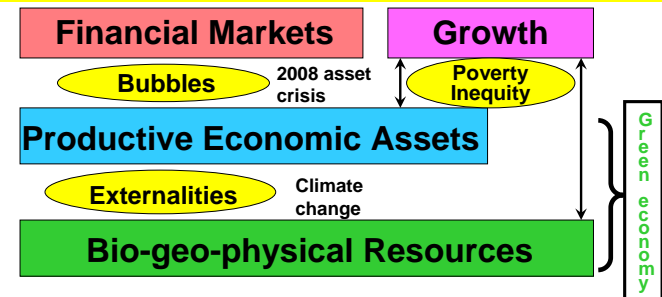
WHAT ARE OUR VALUES AND HOW WELL (BADLY) DO WE ESTABLISH PRIORITIES ?



Triple crisis bubbles driven by greed: reality diverges from illusion 2
 A few get rich quickly, many innocents pay a heavy price afterwards

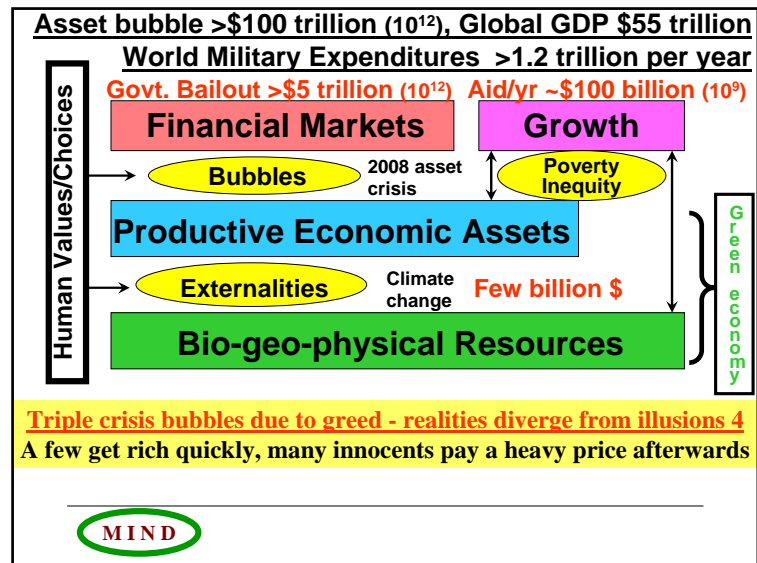
MIND

WHAT ARE OUR VALUES AND HOW WELL (BADLY) DO WE ESTABLISH PRIORITIES ?



Triple crisis bubbles due to greed - realities diverge from illusions 3
 A few get rich quickly, many innocents pay a heavy price afterwards

MIND



Climate Change – IPCC AR4 Main Findings

- Global warming is unequivocal. Total radiative forcing of the climate now is unprecedented in several thousand years, due to rising concentrations of GHG (CO₂, CH₄ & NO₂).
- Humans activities since the 18th century are very likely to have caused net warming of Earth's climate, dominating over the last 50 years. More temp. and sea level rise is inevitable, even with existing GHG concentrations.
- Long term unmitigated climate change would likely exceed the capacity to adapt, of natural managed and human systems.
- Adaptation measures are available, but must be systematically developed
- Mitigation technologies are also available, but better policies and measures (PAM) are needed to realize their potential.
- Poor countries and poor groups are most vulnerable to warming, sea level rise, precipitation changes and extreme events. Most socio-economic sectors, ecological systems and human health will suffer.
- Making development more sustainable (MDMS) is the most effective solution - by integrating climate change policy into sustainable development strategy.

MIND

**What Next After the Financial Crisis :
 Business as usual?**

MIND

LOST OPPORTUNITY: Economic Stimulus Packages were not used to also solve longer term issues of Poverty, Resources & CC

1. Support productive long term investments (e.g., infrastructure, renewable energy, forestry, agriculture) and social development (e.g., health, education, sustainable livelihoods, safety nets), NOT subsidies for rich banks, companies & consumption expenses.
2. Boost poverty reduction and job creation efforts (e.g., more access to assets for the poor, promote exports of IT and manufactures).
3. Better governance, manage markets, reform prices

**Fraction of stimulus funds spent on green investments:
 Korea – 80%; China – 35%; Others mainly 10-15% or less**

MIND

Green Economy Approach Enhances the Momentum for Change

1. **Build for long term. Make Development More Sustainable** -- with balanced consideration of sustainable development triangle (economic, social and environmental elements). Transcend conventional boundaries using innovative, holistic, integrative approaches.
2. **Transform global governance structure.** Reform market regulation. Make UN system more effective, equitable & responsive. Make IMF/World Bank more inclusive. Give more weight to G20 (with advice from B20, C20, etc.)

MIND

Way Forward - A Long Term Vision of SD: 1

Levels	Indicators	Time	Human Interventions
Main Issues (surface)	Poverty, Inequity, Exclusion, Resource Conflicts, Harm to Environment (including CC)	Now	High risk from unrestrained, myopic market forces ("Washington consensus", globalisation etc.) – Reactive: piecemeal - mainly govt.

Business-as-usual poses unacceptable risks for the future

MIND

Munasinghe Institute for Development

Source: Munasinghe (2007), IPCC, MA, GTI

Way Forward - A Long Term Vision of SD: 2

Levels	Indicators	Time	Human Interventions
Main Issues (surface)	Poverty, Inequity, Exclusion, Resource Conflicts, Harm to Environment (including CC)	Now	High risk from unrestrained, myopic market forces ("Washington consensus", globalisation etc.) – Reactive: piecemeal - mainly govt.
Immediate Drivers (sub-surface)	Consumption Patterns Population Technology/Production Governance	Transition	Making development more sustainable (MDMS) with systematic policy reform to manage market forces (Sustainomics) – Proactive: integrated, harmonious approach - govt., business, civil soc.

The transition starts with Green Economy integrated within Sust. Dev. strategy

MIND

Munasinghe Institute for Development

Source: Munasinghe (2007), IPCC, MA, GTI

Way Forward - A Long Term Vision of SD: 3

Levels	Indicators	Time	Human Interventions
Main Issues (surface)	Poverty, Inequity, Exclusion, Resource Conflicts, Harm to Environment (including CC)	Now	High risk from unrestrained, myopic market forces ("Washington consensus", globalisation etc.) – Reactive: piecemeal - mainly govt.
Immediate Drivers (sub-surface)	Consumption Patterns Population Technology/Production Governance	Transition	Making development more sustainable (MDMS) with systematic policy reform to manage market forces (Sustainomics) – Proactive: integrated, harmonious approach - govt., business, civil soc.
Underlying Pressures (deep)	Basic Needs Social Power Structure Values, Perceptions, Choices Knowledge Base	Long Term	Fundamental global sustainable dev. transition catalysed by grass roots citizens movements, & driven by social justice, ethics and equity, innovative leadership, policies, info. flows, tech. (new SD paradigm) – Proactive: civil soc., business, govt.

MIND

Munasinghe Institute for Development

Source: Munasinghe (2007), IPCC, MA, GTI

HOW DO WE GET THERE ?

Addressing Complex, Multiple, Interlinked Sustainable Development issues within the Integrated SUSTAINOMICS Framework

MIND

Munasinghe Institute for Development

Core Concept 1: Make Development More Sustainable with EMPOWERMENT, ACTION & FORESIGHT

There are many definitions of sustainable development, and its precise meaning still remains elusive (and perhaps unreachable).

PRACTICAL TEST FOR HUMAN ACTIONS:

Does the activity make development more (or less) sustainable?

Making development more sustainable (MDMS) is a more practical incremental strategy that is easier to implement because many unsustainable activities are easier to recognize and eliminate.

Parallel track strategy:

1. Short to medium term – make development more sustainable (apply best practice).
2. Long term - aim for ideal goal of sustainable development (identify next practice).

MIND

Sustainable Development Peak – including climate change (covered by clouds)

Let's move forward NOW!! If we climb uphill, we will reach the peak eventually

We cannot see the peak!! Let's stop to discuss & analyze how to reach it.

EMPOWERED to Make Development More Sustainable (MDMS) – BEST PRACTICE

ANALYSING SD and CC – NEXT PRACTICE

Many obviously unsustainable practices exist today. MDMS encourages us to eliminate them NOW! Examples include energy wastage and deforestation.

MIND Munasinghe Institute for Development

Core Concept 2: Harmonise the SD Triangle for BALANCE & INTEGRATION

• growth
• efficiency
• stability
Economic

• inter-generational equity
• basic needs/quality of life
• valuation/integration
• incidence of impacts

**Poverty
Equity
Sustainability
Climate Change**

• inter-generational equity
• values/culture
Social
• empowerment/governance
• inclusion/consultation
• institutions/values

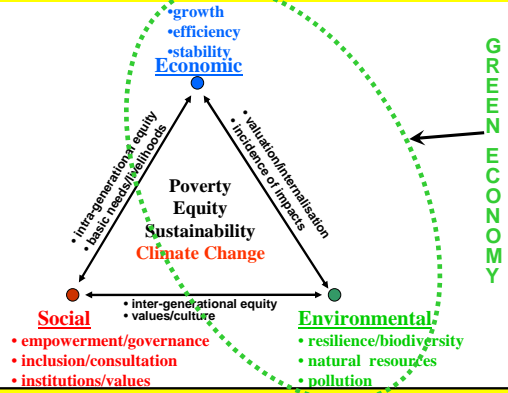
Environmental
• resilience/biodiversity
• natural resources
• pollution

Sustainable Development Triangle – harmonising key elements and interconnections (corners, sides and centre) Source: Munasinghe [1992], Rio Earth Summit

MIND

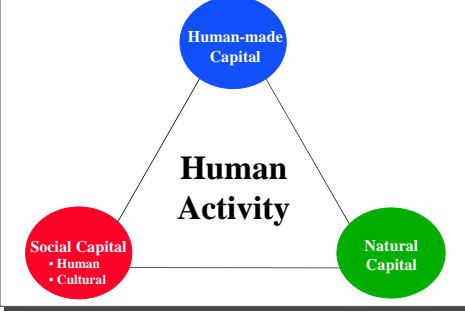
Munasinghe Institute for Development

Core Concept 2: Harmonise the SD Triangle for BALANCE & INTEGRATION



Sustainable Development Triangle – harmonising key elements and interconnections (corners, sides and centre) Source: Munasinghe (1992), Rio Earth Summit

Main Types of Assets for Sustainable Development

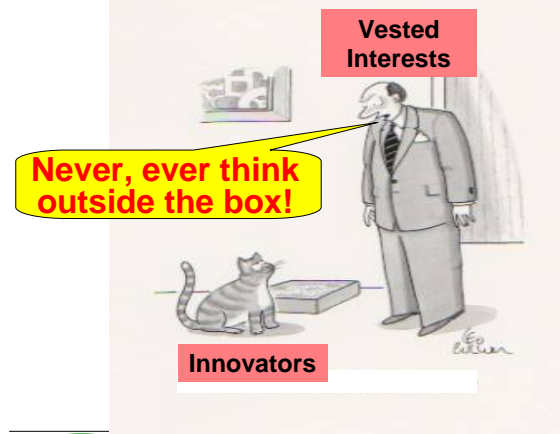


Source: Munasinghe (1992), Rio Earth Summit

Core Concept 3: Transcend Boundaries with INNOVATION & FRESH IDEAS

- Values – replacing unsustainable values
- Disciplinary – complex issues need all disciplines
- Space – spans local to global scales
- Time – spans days to centuries
- Stakeholder – need to include all stakeholders
- Operational – full cycle from data to application

Innovation helps transcend mental barriers



Transcending Unsustainable Values in the Green Economy

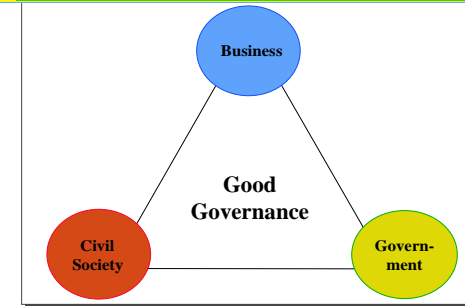
Build essential ethical and moral values (especially among youth)

Greed and selfishness are unsustainable

Selflessness, altruism, enlightened self-interest, and respect for nature will make development more sustainable

Ethical Dimensions of Climate Change 2006
Interfaith Declaration on Climate Change 2009

Transcending Stakeholder Boundaries to Ensure Cooperation in the Green Economy



Not only **government**, but also **business** and **civil society** have a vital and balanced role to play in strengthening city, national and global citizenship

Source: Munasinghe (1992), Rio Earth Summit

Core Concept 4: Full cycle application of integrative tools, from data gathering to practical policy IMPLEMENTATION

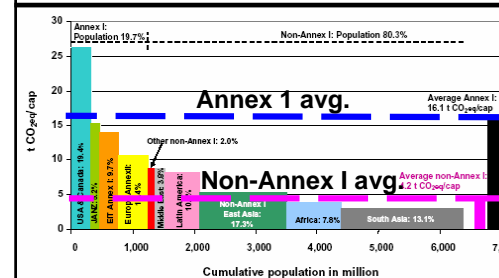
There are many practical analytical tools and policy options to integrate CC responses into SD strategy (from global to local levels)

There are many available case studies and best practice examples involving sustainomics applications

Green Economy & SD: Climate Justice & Right to Develop

Climate change is likely to impact disproportionately upon the poorest countries and the poorest persons within all countries, worsening inequities in health status and access to adequate food, clean water & other resources. Impacts worse & capacity to adapt is lower because of a lack of financial, institutional and technological capacity, and access to knowledge

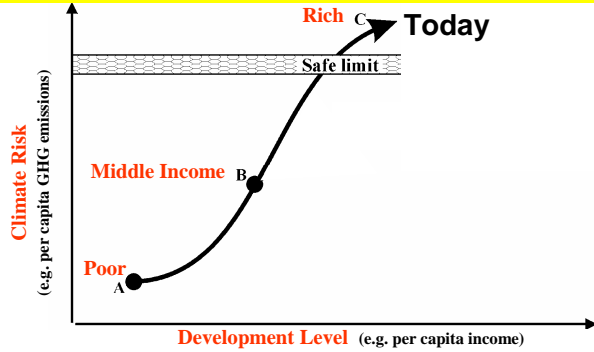
Adaptation Burden & Equity: CC → SD
Adaptation is the first priority of developing countries that are most vulnerable to climate change. Financial and technical help is crucial



Mitigation Obligation & Equity: SD → CC

Mitigation leadership is the main responsibility of industrial countries with high per capita GHG emissions and capacity to mitigate

Example: "Tunneling" & global cooperation to manage Climate Risk & Right to Develop - 1

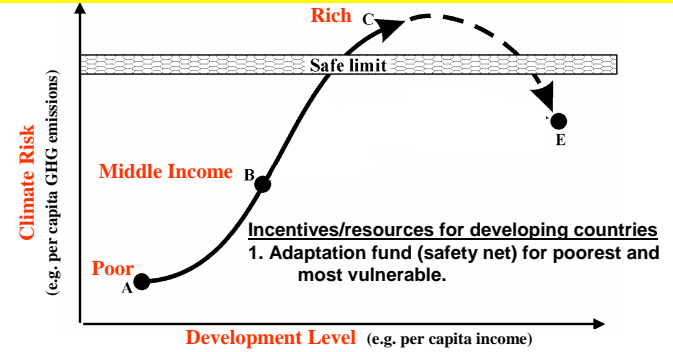


Source: M. Munasinghe (1995) "Making Growth More Sustainable," *Ecological Economics*, 15:121-4.

MIND

Munasinghe Institute for Development

Example: "Tunneling" & global cooperation to manage Climate Risk & Right to Develop - 2

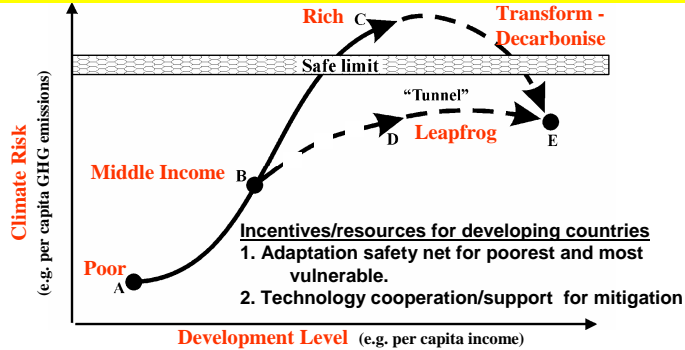


Source: M. Munasinghe (1995) "Making Growth More Sustainable," *Ecological Economics*, 15:121-4.

MIND

Munasinghe Institute for Development

Example: "Tunneling" & global cooperation to manage Climate Risk & Right to Develop - 2



Source: M. Munasinghe (1995) "Making Growth More Sustainable," *Ecological Economics*, 15:121-4.

MIND

Munasinghe Institute for Development

**Food for a Week, Europe
Unsustainable – must transform/decarbonize towards sustainability**



MIND

Source: Menzel, 2005

Food for a Week, African Refugees
Unsustainable/Unethical – must leapfrog/tunnel to prosperity



YONAH - 20/01 réfugiés de guerre soudanais vivent dans les camps de Ocha, Chocoma et d'... à 1900 Cal par jour: céréales, sucre, sel, huile. Quelques sacs et farine vitaminés.

MIND

Source: Menzel, 2005

Way Forward - A Long Term Vision of SD: 4

Levels Indicators Time Human Interventions

Immediate Drivers
 (sub-surface)

Consumption Patterns
 Production-Technology
 Population
 Governance

Transition

Making development more sustainable (MDMS) with systematic policy reform to manage market forces (Sustainomics) – Proactive: integrated, harmonious approach - govt., business, civil soc.

Sustainable Consumers and Producers play a key role in Green Economy-SD transition

MIND

Munasinghe Institute for Development

Source: Munasinghe (2007), IPCC, MA, GTI

Paper on Sustainable Consumption & Production Path to Sustainable Development

Consumers, business and climate change



Principal authors:

Mohan Munasinghe, Partha Dasgupta, Dale Southerton, Alice Bows, Andrew McMeekin

Editor: Gabrielle Walker

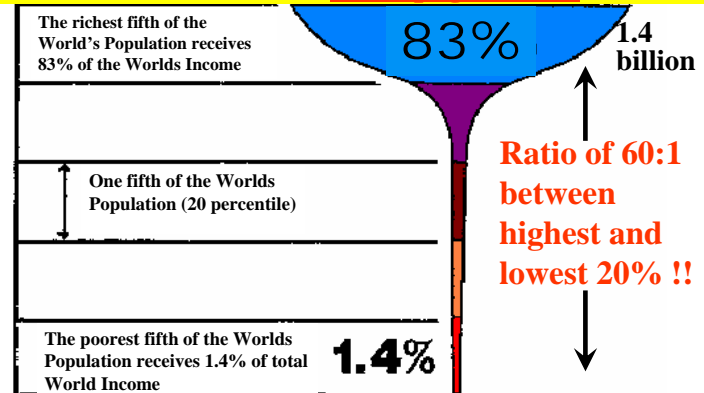
SCI Launch Meeting in London – Oct. 2009

Report endorsed by participants including:

- CEO Forum Members - Heads of companies like TESCO, Coca Cola, Unilever, Reckitt-Benckiser, Johnson SC, Nestle, Danone, and others – with almost one trillion dollars of annual sales turnover
- Senior Political Figures
- Leading Academics and Environmental NGOs

MIND

Unfair World Income Distribution 2000
Champagne Glass



MIND

Munasinghe Institute for Development

CONSUMPTION – Empower households

Address people's behavioural contexts to promote sustainable change

- Individual** • Empower and motivate – using prices, labels information, psychology and advertising.
- Community** • Change values, habits and socio-cultural contexts to shift to low-carbon products and behaviour. Eg., public attitude to smoking
- Producer** • Adapt material and physical elements of production - goods and infrastructures are inter-connected

Social capital embedded within individuals and communities, can be better mobilized, organized, and empowered to work synergistically with business and influence government, to make development more sustainable (MDMS)!

Sustainable
Consumption
Institute

INFORMING CHOICE
LEADING CHANGE

PRODUCTION - Life cycle analysis of carbon emission hot spots along the supply/value chain: 1

Raw material production	Manufacture & processing	Logistics distribution transport	Retail	Consumer use	Recycling & disposal
Light bulb (UK 11W)					
2%		1%	1%	95%	1%

MIND

Source: Adapted from Munasinghe et al. (2009)

PRODUCTION - Life cycle analysis of carbon emission hot spots along the supply/value chain: 2

Raw material production	Manufacture & processing	Logistics distribution transport	Retail	Consumer use	Recycling & disposal
Light bulb (UK 11W)					
2%		1%	1%	95%	1%
Orange Juice (Brazil freshly squeezed 1L)					
28%	19%	47%	5%	1%	0%

MIND

Source: Adapted from Munasinghe et al. (2009)

PRODUCTION - Life cycle analysis of carbon emission hot spots along the supply/value chain: 3

Raw material production	Manufacture & processing	Logistics distribution transport	Retail	Consumer use	Recycling & disposal
Light bulb (UK 11W)					
2%		1%	1%	95%	1%
Orange Juice (Brazil freshly squeezed 1L)					
28%	19%	47%	5%	1%	0%
Milk (UK, National Tesco)					
76%	5%	4%	10%	3%	1%

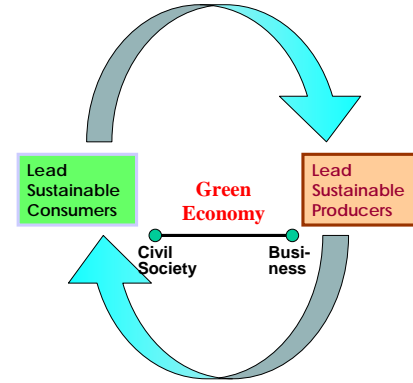
MIND

Source: Adapted from Munasinghe et al. (2009)

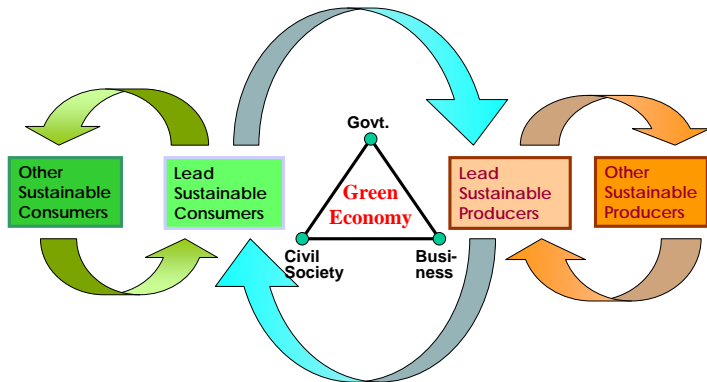
Green Economy brings Sustainable Consumers & Producers Together: 1
Virtuous Cycle for Making Development More Sustainable (MDMS)



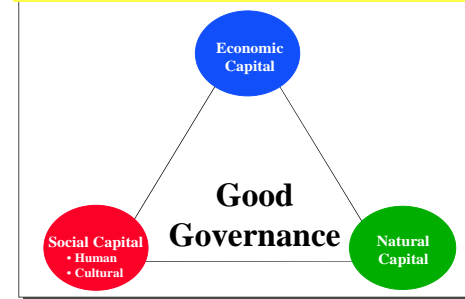
Green Economy brings Sustainable Consumers & Producers Together: 2
Virtuous Cycle for Making Development More Sustainable (MDMS)



Green Economy brings Sustainable Consumers & Producers Together: 3
Virtuous Cycle for Making Development More Sustainable (MDMS)



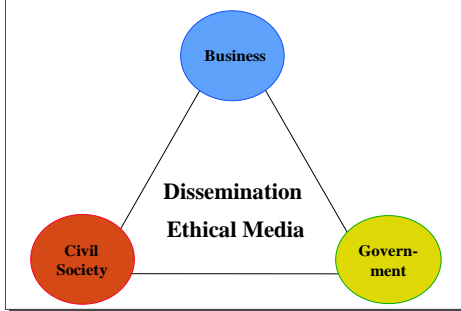
Building assets in the Green Economy



Social capital is as important as other types

Source: Munasinghe (1992), Rio Earth Summit

Responsible Media in the Green Economy: Making Development More Sustainable



Media must play greater role in the Green Economy - disseminating correct information to strengthen **civil society** and **business** in supporting & influencing **government** towards a more sustainable development path.

MIND

Munasinghe Institute for Development

Source: Munasinghe (1992), Rio Earth Summit

Building Sustainable Consumption & Production Paths – Millennium Consumption Goals (MCG)

1. Millennium consumption goals (rich) - complement MDG (poor)
2. 20% of richest percentile (1.4 billion people) account for >80% of consumption. Small changes towards more sustainable consumption can reduce burden on environment
3. Household consumption ultimately accounts for a large share of carbon emissions (and other resources) ~ 80%
4. Complements conventional approach of reducing emissions via top-down, large scale activities (energy, big industry)
5. Relies on influencing the behaviour of large numbers of individual household consumers
6. Will provide quicker results compared to top down government policies and long term industrial investments
7. Cuts across national boundaries and avoids self-interest based approach of governments and interest groups
8. Links with producers and global supply chains

MIND

Optimistic final message for the World

Multiple global problems pose a serious challenge to us all – the economic crisis, poverty, resource scarcities, ecosystem harm, climate change, etc. are interlinked. Although the issues are complex and serious, these problems can be solved together, provided we begin now. Sustainomics framework shows us how to make development more sustainable (MDMS), that will transform the risky “business-as-usual” scenario into a safer and better future. **GREEN ECONOMY TRANSITION IS THE FIRST STEP** Governance systems (at all levels) must be transformed to deal with multiple crises in an integrated way. Business and civil society must work with **govt.** in mobilising resources, identifying issues and implementing solutions. Sustainable producers and consumers following millennium consumption goals, can help to chart a new 21st century path for sustainable development

MIND

Alternative to Optimism is UNTHINKABLE !



Four horsemen of the Apocalypse: famine, plague, war, death

MIND

Faith in the Young !



MIND

Ancient Pali Blessing (Sri Lanka)

“DEVO VASSATU KALENA
SASSA SAMPATTI HETU CA
PHITO BHAVATU LOKO CA
RAJA BHAVATU DHAMMIKO”

Environmental: “May the rains come in time,
Economic: May the harvests be bountiful
Social: May the people be happy & contended
May the king be righteous”

Even in ancient times, a favourable environment,
economic prosperity, social stability (and good
governance), were clearly identified as key pre-
requisites for making development more sustainable.

MIND

Munasinghe Institute for Development

Environment



Society

Economy

Munasinghe Institute for Development

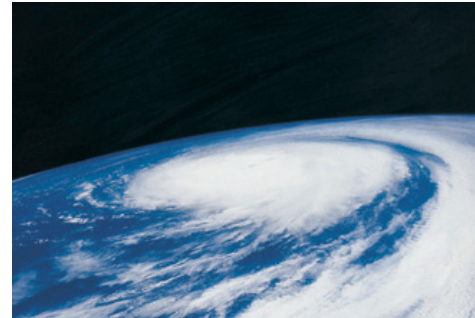
"making development more sustainable - MDMS"

10/1 De Fonseka Place, Colombo 5, Sri Lanka
Phone: +9411-255-1208; Fax: +9411-255-1608
E-mail: <MIND@mindlanka.org> ; Web: <www.mindlanka.org>

MIND

The University of Manchester

Sustainable Consumption Institute (SCI)



Leading research into sustainable consumption

MIND

Munasinghe Institute for Development

**MIND Press
Book:
650 pages**

**Second
Edition
Published in
April 2010**



MIND

Munasinghe Institute for Development

**Thank you
very much**

MIND