

UNDERSTANDING OF SUSTAINABLE DEVELOPMENT

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I. Introduction

Over the past few years, energy security concerns have moved up the global agenda.

- Two main reasons:
 - + Unpredictable supply
 - + Rising demand



- Overexploitation of forests contributes to natural disasters:
 - + flash floods and mudslides, destroying entire settlements, properties, cattle, crops, and transport and communications facilities
 - + often provoking outbreaks of disease.
- Burning fuels also adds to greenhouse gas emissions.



Sustainable development is needful

II. Sustainable development

2.1 Historical events

Human Environment Stockholm 1972



- The first world conference
- The conflicts between environment and development were first acknowledged
- Consider the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment

II. Sustainable development

- Proclaim 26 principles for the preservation and improvement of the human environment

Example: Principle 1

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. In this respect, policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated.

II. Sustainable development

World Commission on
Environment and
Development (WCED)
1982

- *Our Common Future*
1987



- Definition of sustainable development by the Brundtland Commission

“Sustainable development is development that meets the needs of the present without compromising ability of the future generations to meet their own needs”

II. Sustainable development

United Nations Conference on Environment and Development (UNCED) Rio de Janeiro, 1992

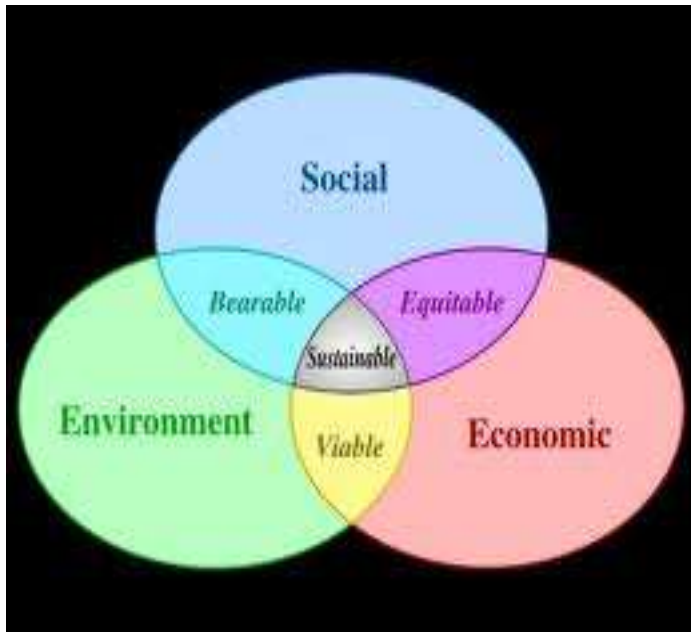
- Rio Declaration on the Environment and Development,
 - Agenda 21,
 - Framework Convention on Climate Change
 - Agreement on Biological Diversity
 - Global Forest Principles
 - social movements



II. Sustainable development

World Summit on Sustainable
Development
Johannesburg, South Africa,
2002

- confirmed the principles and commitments of Rio



Two documents were passed by the
Johannesburg World Summit:

- Johannesburg Declaration on Sustainable Development,
- Plan of Implementation.

II. Sustainable development

UN Conference on
Sustainable Development,
Rio Janeiro, 2012

The Future we Want

- A historic opportunity to define pathways to a safer, more equitable, cleaner, greener and more prosperous world for all.



Two main themes:

- How to build a green economy to achieve sustainable development and lift people out of poverty;
- How to improve international coordination for sustainable development.

II. Sustainable development

2.2 What is understood by development?



- a) General definition: Development is associated with a better future
- b) Economists measure: increase *per capita* income, or gross domestic product (GDP).
- c) The UN Development Program (1994): Processes that increase people's opportunity of choice.



- d) Ecologists regard: Processes that threaten environmental robustness as negative even if they benefit people.

II. Sustainable development

2.3 What is understood by sustainable development?



a) Fundamentally: sustainable development is increasing well-being over a very long time.

b) The Brundtland Commission definition: Sustainable development is development that meets the needs of the present without compromising ability of the future generations to meet their own needs



II. Sustainable development

WHAT IS TO BE DEVELOPED:	FOR HOW LONG? “Now and in the future” 30 years; Forever	WHAT IS TO BE SUSTAINED:
PEOPLE Child survival Life expectancy Education Equity Equal opportunity ECONOMY Wealth Productive sectors Consumption	LINKED BY Only Mostly But And Or	NATURE Earth Biodiversity Ecosystems LIFE SUPPORT Ecosystem services Resources Environment COMMUNITY Cultures Groups Places
SOCIETY Institutions Social capital States Regions	Figure 1. Definitions of sustainable development	

SOURCE:
**Our
Common
Journey**
(1999).

II. Sustainable development

2.4 Sustainable Development models

a) Conceptual model

The dimensions of conceptual model are presented in a diagrammatic form (Fig. 1). Shaded portion of the model clearly depicts the position of sustainable development. It is the product of interactions of all components. This model's attention to the development process goes beyond a consideration of the socio-cultural, political, economic, technological and ecological components, stressing the external and internal environmental factors.

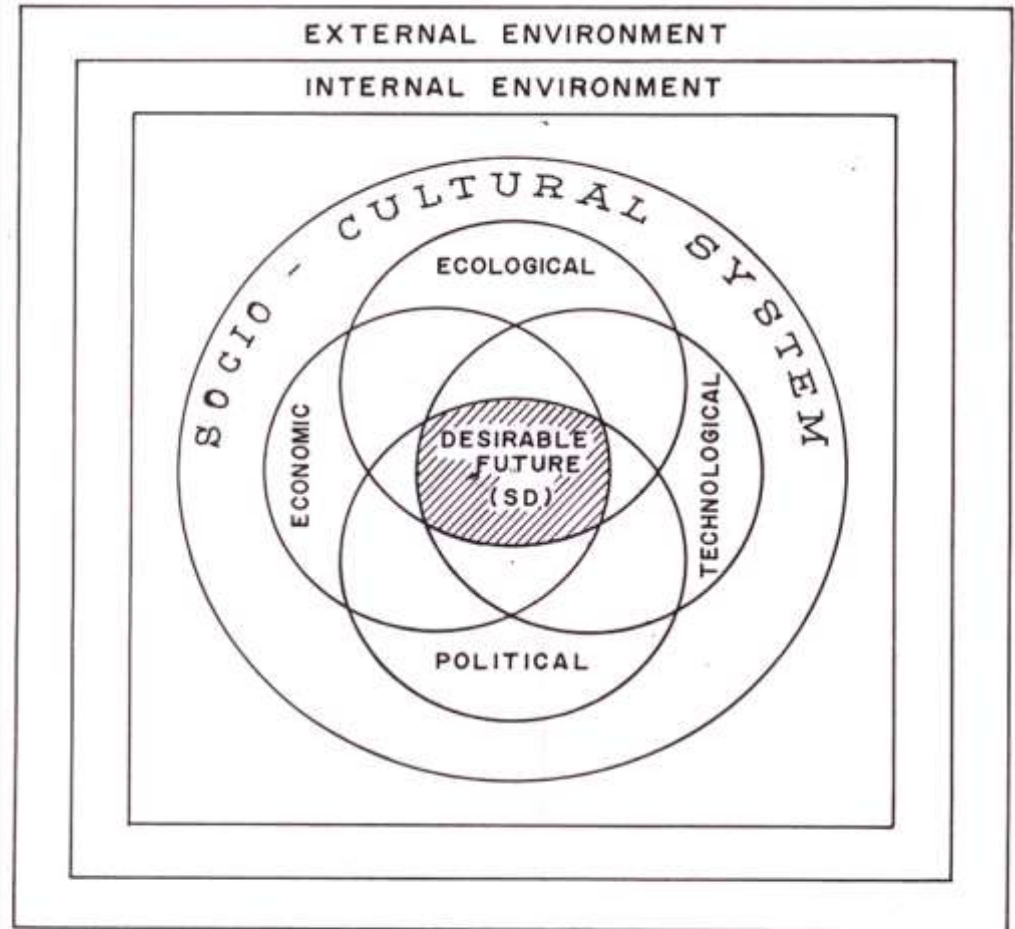


FIG. 1. CONCEPTUAL MODEL OF SUSTAINABLE DEVELOPMENT (SD)

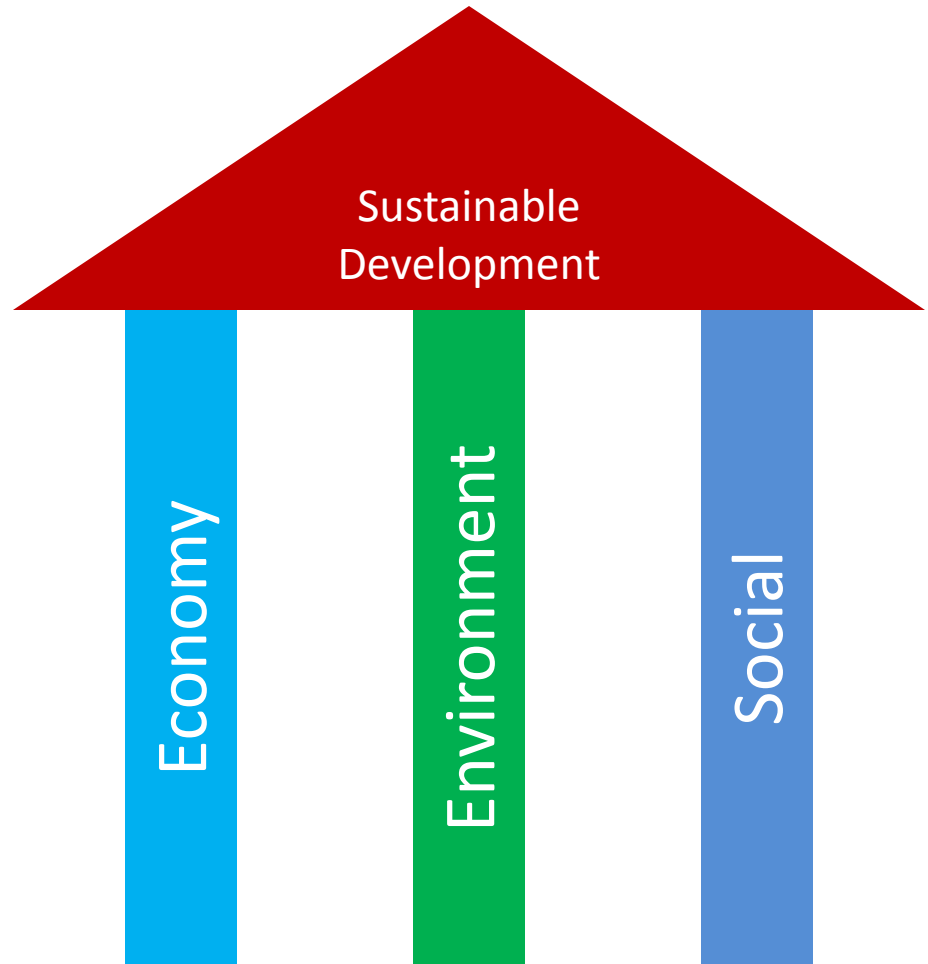
II. Sustainable development

b) Three Pillar Model

This is one of the most well-known models created using the three dimensions -Economy, Environment and Society.

The diagram shows a house constructed with three pillars of environmental (conservation), economic (growth), and social (equity) dimensions.

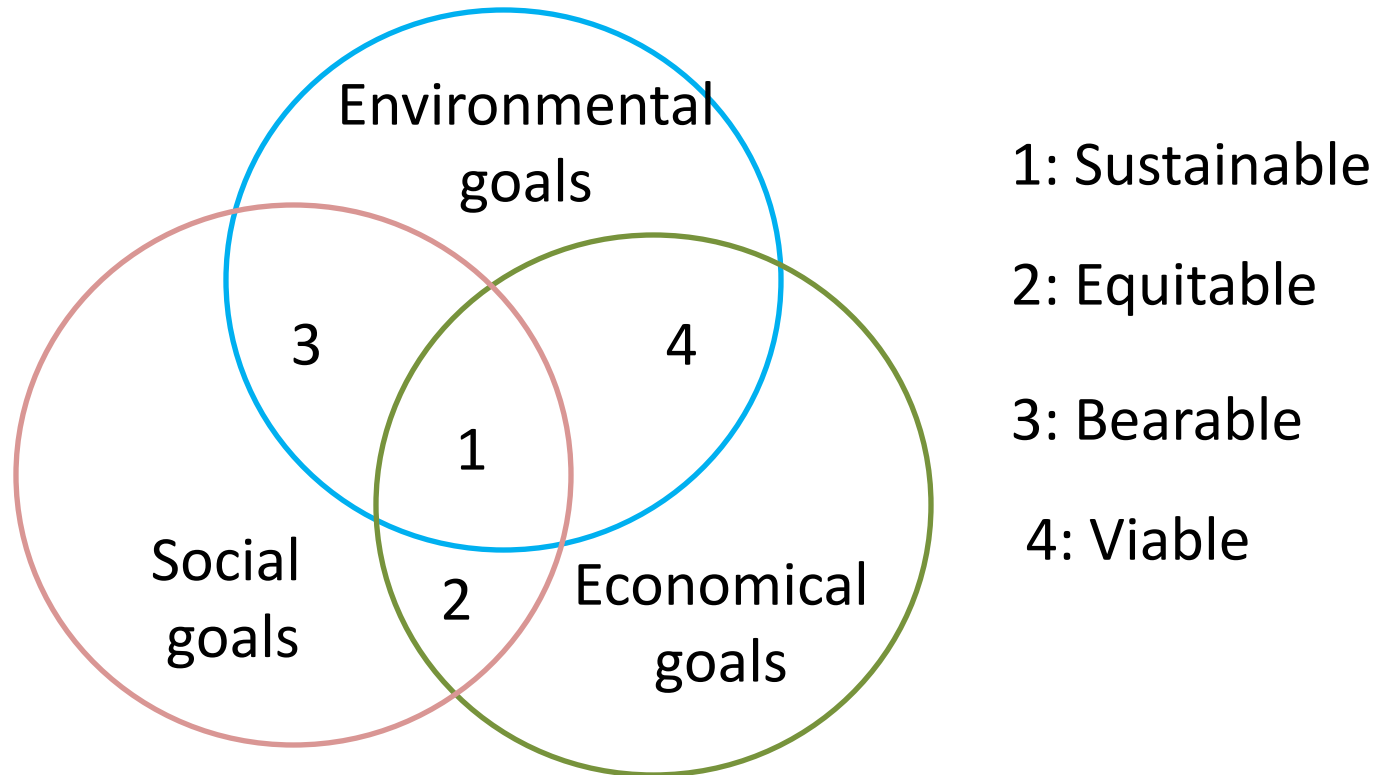
Sustainable Development is modelled on these three pillars. It is based considering the society, but does not explicitly take into account 'human quality of life'.



II. Sustainable development

c) Three cycles SD (Model JACOBS and SADLER, 1990)

This model puts sustainable development at the convergence point of the three goals



Only the social goal and the economical goal allow movement to the environment goal. Such movement allows achieving a greater sustainable development

II. Sustainable development

Implementing these three objectives uses measures which complete the above figure:

- Maintaining environmental integrity:
 - conservation of the species and all land,
 - durable management of the utilization of animal populations and vegetation.
- Improving of social equality:
 - all ethnic groups to have access to a job, education, medical and social care,
 - freedom of participation in decision making processes.
- Improving economic efficiency:
 - optimal management of human, natural and financial resources in order to satisfy the individual's needs

II. Sustainable development

d) Model VILLEN, 1990

- Growth
- Efficiency
- Stability

Economic goals

**Sustainable
development**

Social goals

- Empowerment
- Inclusion consultation
- Institutions/governance

Environmental goals

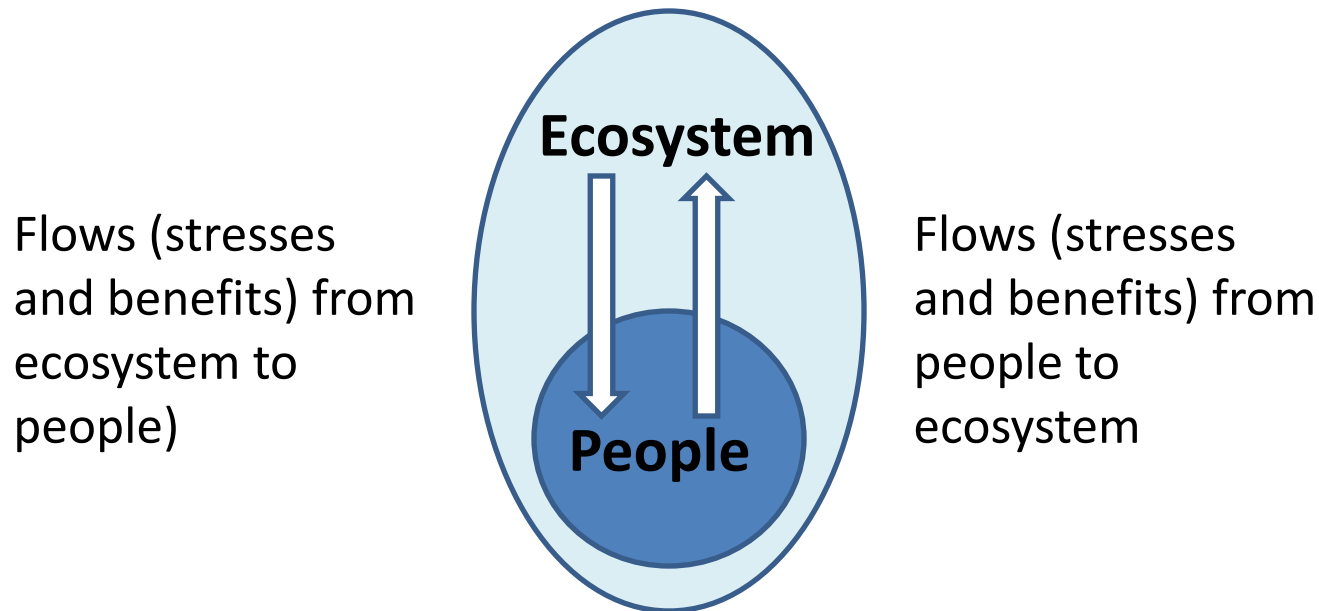
- Resilience
- Natural resources
- Pollution

II. Sustainable development

f) The IUCN's Egg of Sustainability (1994)

Thus according to this model:

sustainable development = human well-being + ecosystem well-being



The Egg of Sustainability

II. Sustainable development

2.5 Indicators of Sustainable Development (SD)

- **Gross National Happiness (GNH)**

Gross National Happiness (GNH) is an attempt to define quality of life in a more holistic and psychological terms than Gross National Product.

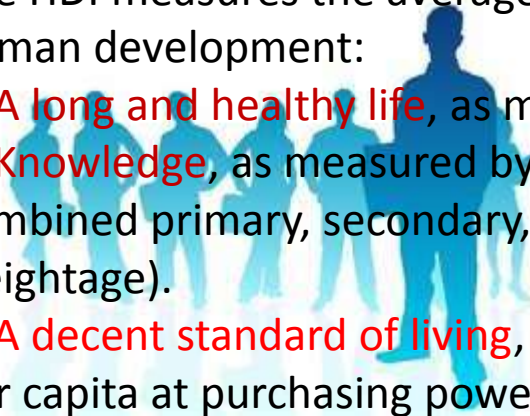


The four pillars of GNH are the promotion of equitable and sustainable socio-economic development, preservation and promotion of cultural values, conservation of the natural environment, and establishment of good governance.

- **Human Development Index (HDI)**

The HDI measures the average achievements in a country in three basic dimensions of human development:

1. **A long and healthy life**, as measured by **life expectancy at birth**.
2. **Knowledge**, as measured by **the adult literacy rate** (with two-thirds weightage) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weightage).
3. **A decent standard of living**, as measured by the log of gross domestic product (GDP) per capita at purchasing power parity (PPP) in USD.



II. Sustainable development

- **Ecological Footprint(EF)**

Ecological Footprint (EF) compares human consumption of natural resources with Earth's ecological capacity to regenerate them.

Per capita EF is a means of comparing consumption and lifestyles, and check this against nature's ability to provide for this consumption.

Exemple: In 2003, the average biologically productive area per person worldwide was approximately 1.8 global hectares (gha) per capita. The US footprint per capita was 9.6 gha, and that of Switzerland was 5.1 gha per person, whilst China's was 1.6 gha per person.

<http://www.mec.ca/coop/communit/meccomm/ecofoot.htm>



- **The Happy Planet Index (HPI)**

The HPI is an index of human well-being and environmental impact. The Happy Planet Index is an innovative measure that shows the ecological efficiency with which human well-being is delivered. It is the first ever index to combine environmental impact with human well-being.

II. Sustainable development

2.6 Sustainable Development Principles (9 principles)

- 
1. Promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire.
 2. Requires economic growth in places where such needs are not being met.
 3. Demographic developments are in harmony with the changing productive potential of the ecosystem.
 4. Not endanger the natural systems that support life on Earth; the atmosphere, the waters, the soils, and living beings.
 5. Ensure equitable access to the constrained resources and re-orient technological efforts to relieve the pressure.

II. Sustainable development

2.6 Sustainable Development Principles (9 principles)

6. Most renewable resources are part of a complex and interlinked ecosystem and maximal sustained yield must be defined after taking into account system-wide effects of exploitation.

7. The rate of depletion of non-renewable resources should foreclose as few options as possible.

8. The conservation of plant and animal species.

9. The adverse impacts on the quality of air, water and other natural elements are minimized so as to sustain the ecosystem's overall integrity.



II. Sustainable development

2.7 Sustainable Development (SD) in Lao PDR

a) Public awareness on SD



- **Sustainable Laos Education Initiatives Inc.** is a Canadian registered non-profit organization that fundraises and runs environmental education projects in remote rural areas in Lao PDR

II. Sustainable development

2.7 SD in Lao PDR

“Rural Sustainability” program combines:

- Sustainable agriculture,
- Green business,
- Community leadership,
- Environmental and social studies,
- Organizational governance,
- Language learning,
- Land law,
- Health, and appropriate technology.



Into a unique curriculum



Laos promotes its sustainable tourism



II. Sustainable development

2.7 SD in Lao PDR

b) The important events on SD in Lao PDR

Lao PDR ratified:

- The United Nation Framework Convention on Climate Change (UNFCCC) on 4/1/1995 and the Kyoto Protocol on 6/2/2003



- The United Nation Convention on Biological Diversity(UNCBD) on 19/12/1996

II. Sustainable development

2.7 SD in Lao PDR

- The United Nation Convention on Combating Desertion (UNCCD) on 19/12/1996 (implement on 26/12/1996)
- Laos signed the Stockholm Convention on 5 March 2002 and ratified on 28 June 2006 on (Persistent Organic Polluants -POPs)



- The Vienna Convention for the Protection of the Ozone Layer on 28/05/1998
- Montreal Protocol on 01/03/2006
- Lao PDR became RAMSA's member on 02/02/2009

III. Millennium Development Goals (MDG)

3.1 Important dates:

- MDGs Summit
- 20-22 September 2010
- New York



- To accelerate progress towards all the Millennium Development Goals (MDGs) by 2015,

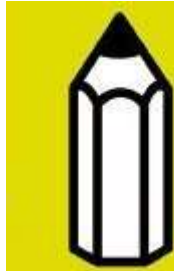


III. Millennium Development Goals (MDG)

3.2 Content of 8 MDGs



**1. Eradicate
extreme
poverty and
hunger**



**2. Achieve
universal primary
education**



**3. Promote
gender equality
and empower
women**



**4. Reduce child
mortality**



**5. Improve
maternal health**



**7. Ensure environmental
sustainability**



**6. Combat HIV/AIDS,
malaria and other diseases**



**8. Develop a global
partnership for
development**

III. Millennium Development Goals (MDG)

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger



Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

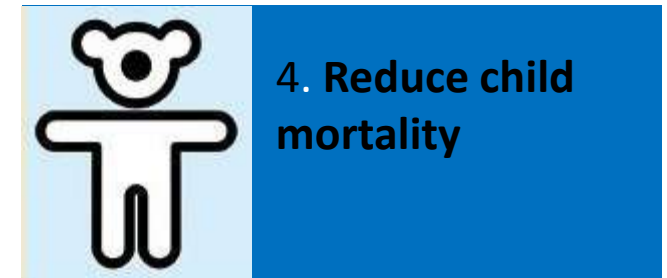


III. Millennium Development Goals (MDG)

Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015



Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate



Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio



III. Millennium Development Goals (MDG)

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

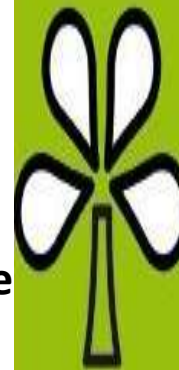
Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases



6. Combat HIV/AIDS, malaria and other diseases

Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water



7. Ensure environmental sustainability

Target 11 By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

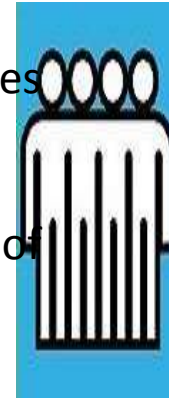
III. Millennium Development Goals (MDG)

Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Target 13: Address the special needs of the least developed countries

Target 14: Address the special needs of landlocked countries and small island developing State

Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term



8. Develop a global partnership for development

Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth

Target 17: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries

Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communications

IV. Access to Energy and MDGs

4.1 Access to energy: definitions

- “Access” is sometimes measured simply as the provision of a connection to an electricity grid.

- The UN Advisory Group on Energy and Climate Change breaks down energy access into incremental levels of:

- 1) Basic human needs;
- 2) Productive uses;
- 3) Modern society needs. ‘



IV. Access to Energy and MDGs

- The International Energy Agency (IEA) estimates that 1.5 billion people lacked access to electricity in 2008, more than one-fifth of the world's population. Some 85 percent of those without electricity live in rural areas, mainly in Sub-Saharan Africa and South Asia
- OECD have virtually universal access.
- North Africa has an access rate of 99 percent,
- Latin America 93 percent,
- East Asia and the Pacific 90 percent,
- The Middle East 89 percent.
- South Asia has an electrification rate of 60 percent, and
- Sub-Saharan Africa only 29 percent.

IV. Access to Energy and MDGs

Access to Energy in 2009

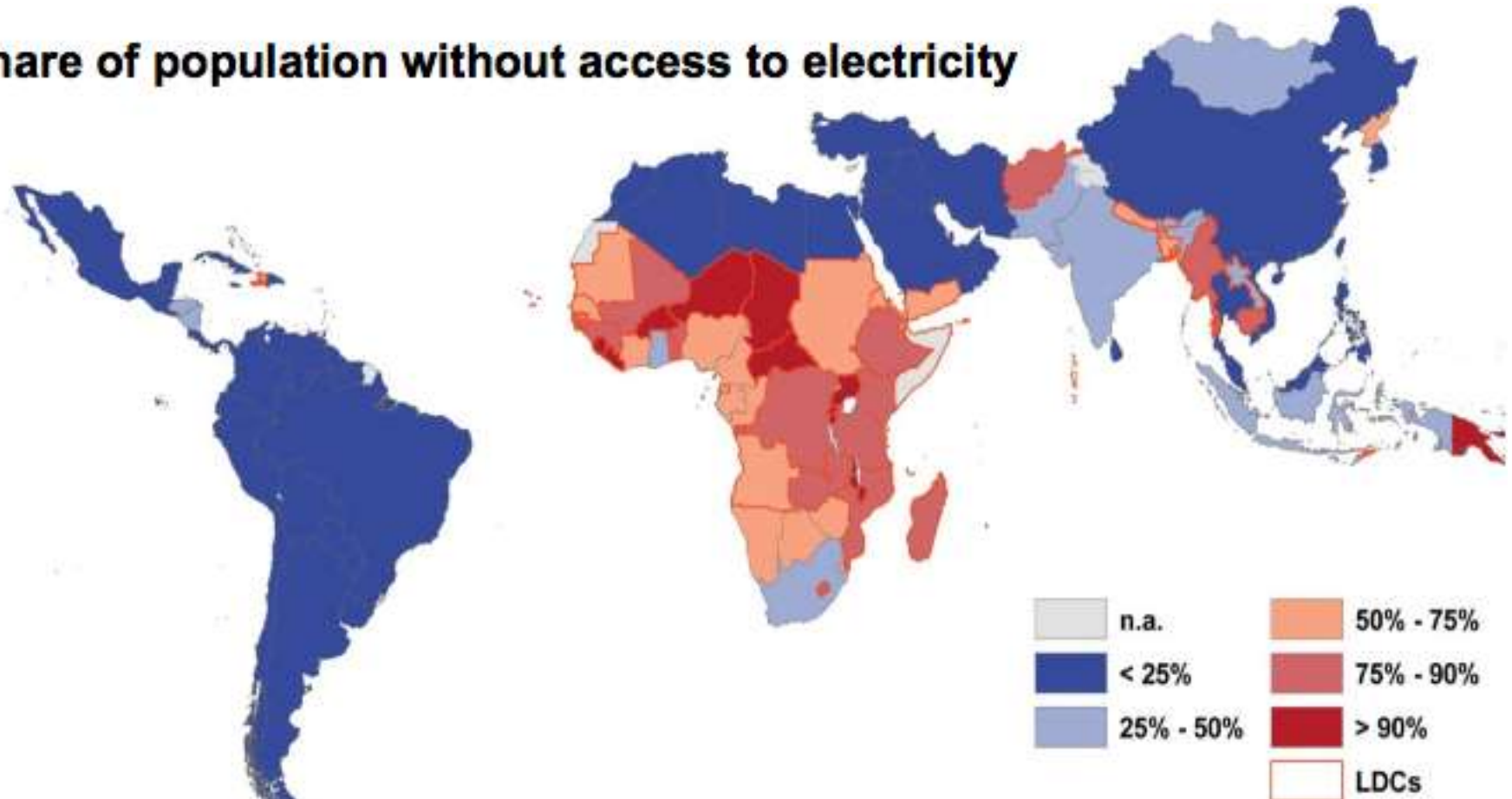
	Number of people lacking access to electricity;(million)	Number of people relying on the traditional use of biomass for cooking;(million)
Africa	587	657
<i>Sub-Saharan Africa</i>	585	653
Developing Asia	799	1 937
<i>China</i>	8	423
<i>India</i>	404	855
<i>Other Asia</i>	387	659
Latin America	31	85
Developing countries*	1 438	2 679
World**	1 441	2 679

*Includes Middle East countries. **Includes OECD and transition economies.

Source:IEA Databse

IV. Access to Energy and MDGs

Share of population without access to electricity



Source: UNDP, and WHO 2009

IV. Access to Energy and MDGs

4.2 Access to energy and MDGs Targets

4.2.1 Access to electricity and poverty eradication

- Modern energy services help **drive economic growth** by improving productivity and enabling local income generation through improved agricultural development and non-farm employment
- Modern fuels and electricity, for example, **help boost household income** by providing lighting that extends livelihood activities beyond daylight hours.
- modern energy services contribute to economic growth is by **reducing unit costs**



- Energy in the form of heat is **required to cook** 95 percent of the basic staple foods that form the basis of human nutrition.

- Modern cooking fuels can also **indirectly increase farm productivity** by freeing up women's time and effort, in particular by reducing the work required for biomass collection, which is particularly detrimental to the health of childbearing women.



IV. Access to Energy and MDGs

4.2.1 Access to electricity and poverty eradication

- Access to affordable energy services from gaseous and liquid fuels and electricity enables enterprise development
- Lighting permits income generation beyond daylight hours



- Machinery increases productivity
- Local energy supplies can often be provided by small-scale, locally owned businesses creating employment in local energy service provision and maintenance, fuel crops, etc.

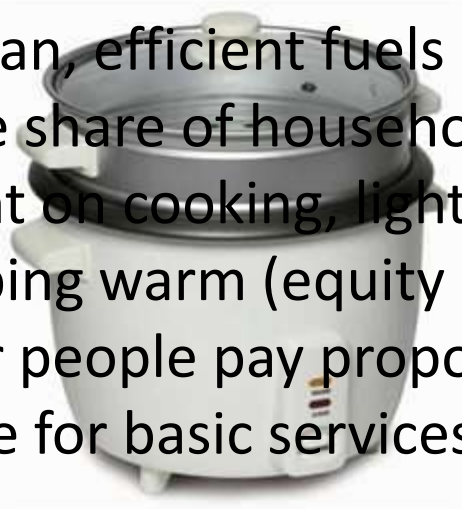
- Privatization of energy services can help free up government funds for social welfare investment



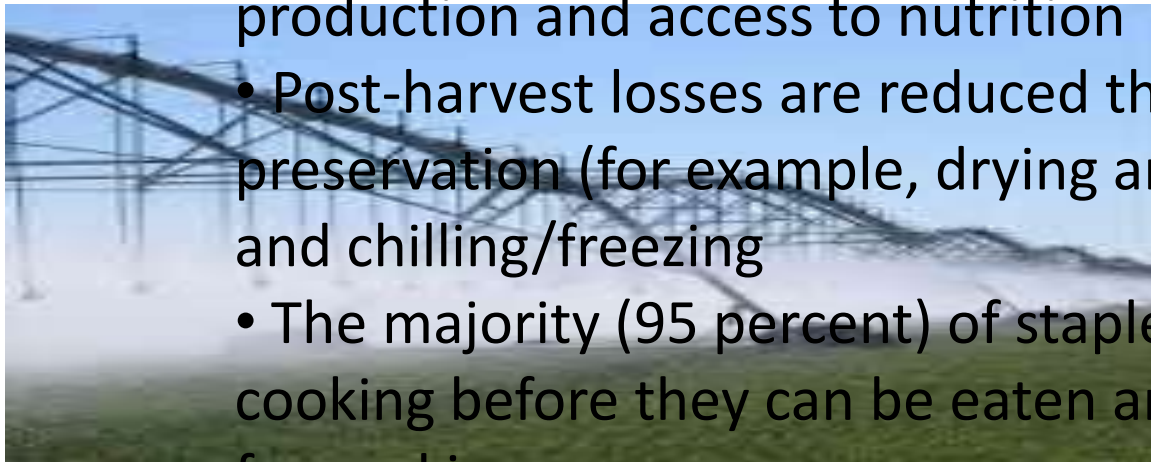
IV. Access to Energy and MDGs

4.2.1 Access to electricity and poverty eradication

- Clean, efficient fuels reduce the large share of household income spent on cooking, lighting, and keeping warm (equity issue—poor people pay proportionately more for basic services)



- Energy for irrigation helps increase food production and access to nutrition
- Post-harvest losses are reduced through better preservation (for example, drying and smoking) and chilling/freezing
- The majority (95 percent) of staple foods need cooking before they can be eaten and need water for cooking



IV. Access to Energy and MDGs

4.2.2 Access to electricity and complete primary education



- Particularly for school-age girls, improved access to modern energy services can **free time for going to school and for after-school study**

- **Energy scarcity creates** time pressure on children to collect fuel, to fetch water, and to participate in agricultural work, and contributes to low school enrollment.

- Energy and ICT in schools can also enable **access to educational material, distance learning, and continuing education for teachers.**



- The use of electricity and refrigeration could **reduce households' dependence on the labor of girls.**

IV. Access to Energy and MDGs

4.2.2 Access to electricity and complete primary education

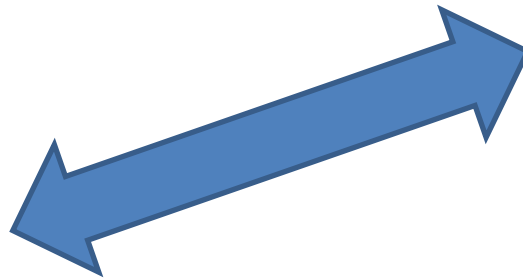
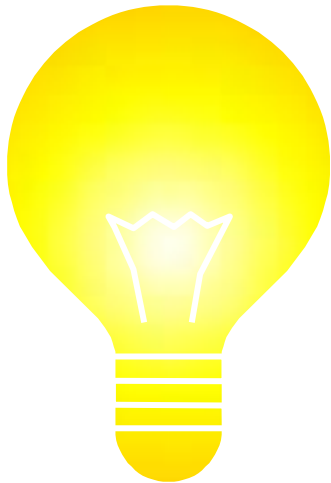
- Energy can help **create a more child-friendly environment** (access to clean water, sanitation, lighting, and space heating/cooling), thus improving attendance at school and reducing drop-out rates
- Lighting in schools **helps retain teachers**, especially if their accommodation has electricity
- Electricity enables access to educational media and communications in schools and at home that **increase education opportunities and allow distance learning**
- Access to energy **provides the opportunity to use equipment for teaching** (overhead projector, computer, printer, photocopier, science equipment)
- Modern energy systems and efficient building design reduces heating/cooling costs



IV. Access to Energy and MDGs

4.2.3 Access to electricity and gender equality

- Access to energy services affects men and women differently, and the specific energy services used by men and women differ based on the economic and social division of labor in the workplace and at home.



- Modern energy services facilitate ICT and ease political engagement for those unable to travel far from the home and village.
- Women also directly benefit from public health facilities closer to home, and with modern energy services the functioning of health clinics in rural areas is improved, as discussed in the following section.

IV. Access to Energy and MDGs

4.2.3 Access to electricity and gender equality



- Availability of modern energy services **frees girls' and young women's time from survival activities** (gathering firewood, fetching water, cooking inefficiently, crop processing by hand, manual farming work)

- Clean cooking fuels and equipment reduces exposure to indoor air pollution and improves health

- Good quality lighting permits home study and allows evening classes

- **Street lighting improves women's safety**

- Affordable and reliable energy services **offer scope for women's enterprises**

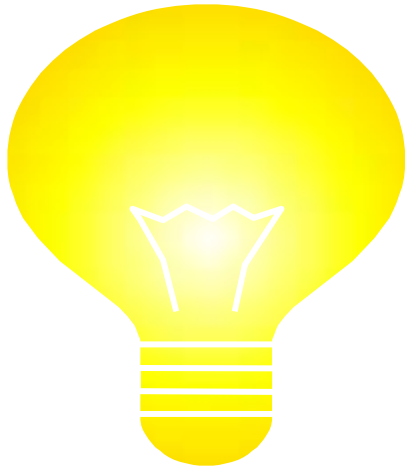


2007 WBENC Women's Business Enterprise Stars

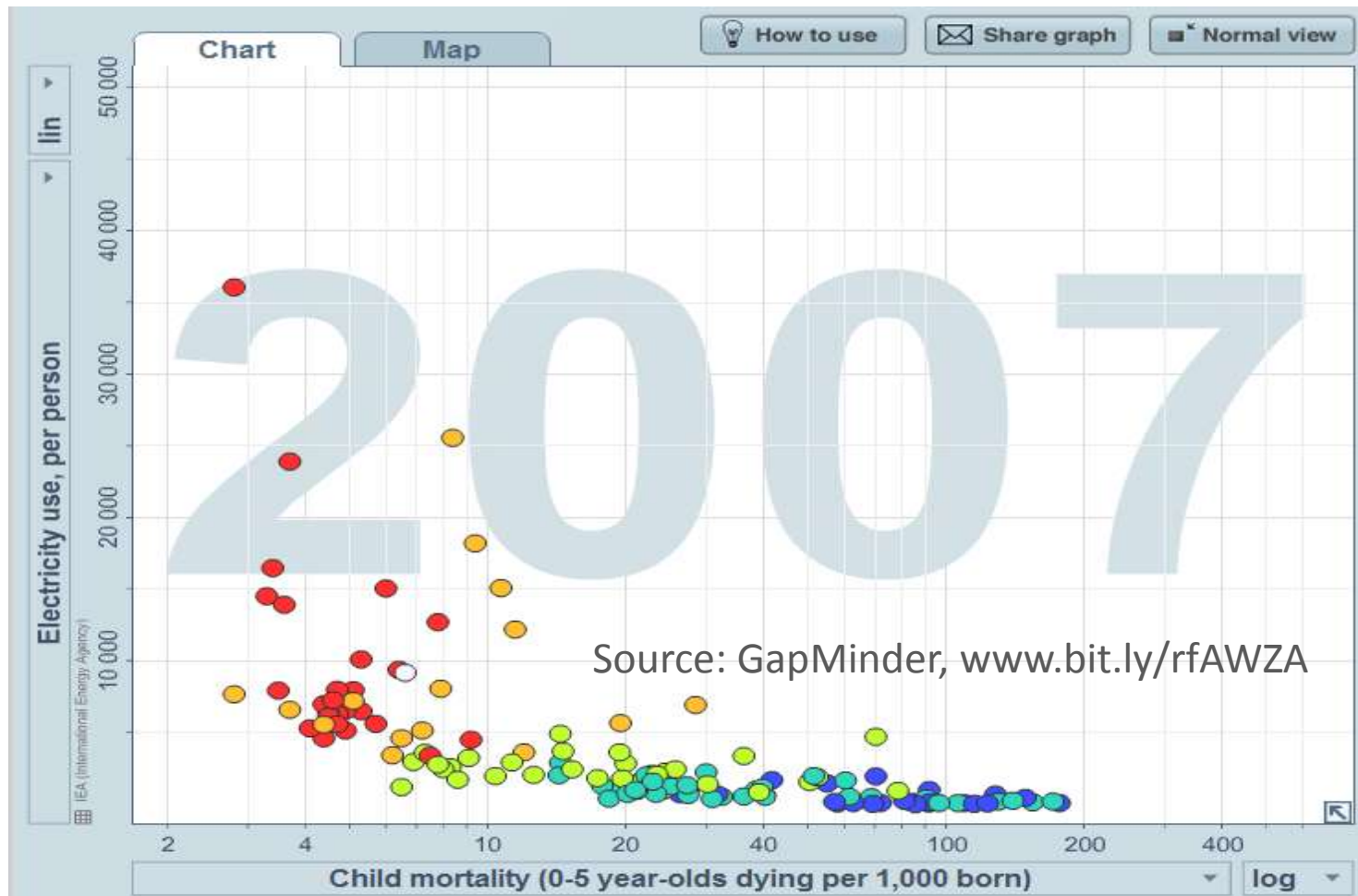
IV. Access to Energy and MDGs

4.2.4 Access to electricity and child mortality reduction

- There are close linkages between health issues and energy use, and between the quality of health services and the availability of quality energy services.



- **Indoor air pollution contributes to respiratory infections** that account for up to 20 percent of the 11 million child deaths each year (WHO 2002, based on 1999 data)



➔ World Bank researchers have concluded that investments targeted at improving environmental conditions, including access to piped water, electricity and separate kitchens with clean cooking fuels, can substantially reduce child mortality (van der Klaauw and Wang 2003).

IV. Access to Energy and MDGs

4.2.4 Access to electricity and child mortality reduction



- Gathering and preparing traditional fuels exposes young children to health risks and reduces time spent on child care

- Provision of nutritious cooked food, space heating, and boiled water contributes towards better health



- Electricity enables pumped clean water and purification



IV. Access to Energy and MDGs

4.2.5 Access to electricity and maternal health cares



- Smith et al.(2003) report evidence from China that exposure to coal smoke in the home markedly **increases the risk of lung cancer, also particularly in women.**

- Illumination for patient care after dark, for operating theaters, and for public safety surrounding hospitals **increases the health systems' ability to serve poor populations. Improved lighting and hygiene from clean water would help reduce women's mortality rate at childbirth.**



IV. Access to Energy and MDGs

4.2.5 Access to electricity and maternal health cares



- Electricity is essential for many medical instruments, illumination, medical record keeping, communications facilities for reporting medically significant events, and medical training.

- Energy services are **needed to provide access to better medical facilities for maternal care**, including medicine refrigeration, equipment sterilization, and operating theatres



- Excessive workload and heavy manual labor (carrying heavy loads of fuelwood and water) may **affect a pregnant woman's general health and well being**

IV. Access to Energy and MDGs

4.2.6 Access to electricity and prevention of HIV/AIDS, malaria and other infections

- Electricity in health centers enables night availability, helps retain qualified staff, and allows equipment use (for example, sterilization, medicine refrigeration)
- Energy for refrigeration allows vaccination and medicine storage for the prevention and treatment of diseases and infections



Hepatitis hiv aids resource prevention service fixed

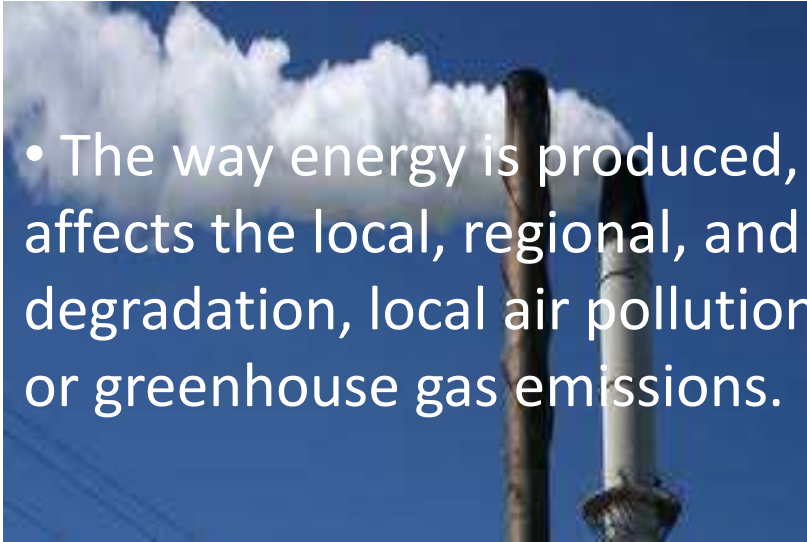


- Safe disposal of used hypodermic syringes by incineration prevents re-use and the potential further spread of HIV/AIDS
- Energy is needed to develop, manufacture, and distribute drugs, medicines, and vaccinations
- Electricity enables access to health education media through information and communications technologies (ICTs)

IV. Access to Energy and MDGs

4.2.7 Access to energy and Sustainable Environment (SE)

- The way energy is produced, distributed, and consumed affects the local, regional, and global environment through land degradation, local air pollution, acidification of water and soils, or greenhouse gas emissions.



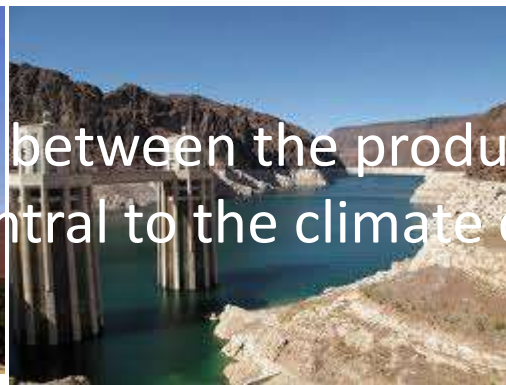
- Biomass harvesting without sustainable agroforestry management can lead to land degradation, including soil and water resources, and vegetative cover

IV. Access to Energy and MDGs

4.2.7 Access to energy and Sustainable Environment (SE)



• Fossil fuel use, exploration, transportation, transformation, and distribution will have some unavoidable detrimental effects on the environment.

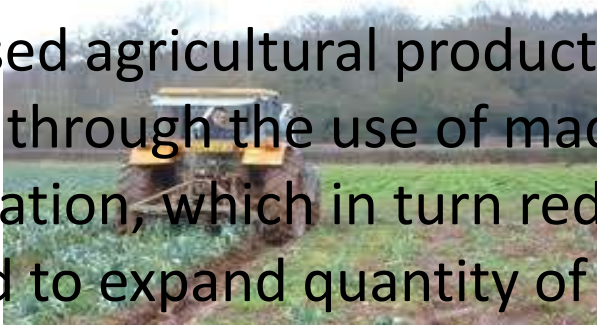


• The strong linkages between the production and use of all energy forms are central to the climate change debate,

IV. Access to Energy and MDGs

4.2.7 Access to electricity and Sustainable Environment (SE)

- Increased agricultural productivity is enabled through the use of machinery and irrigation, which in turn reduces the need to expand quantity of land under cultivation, reducing pressure on ecosystem conversion



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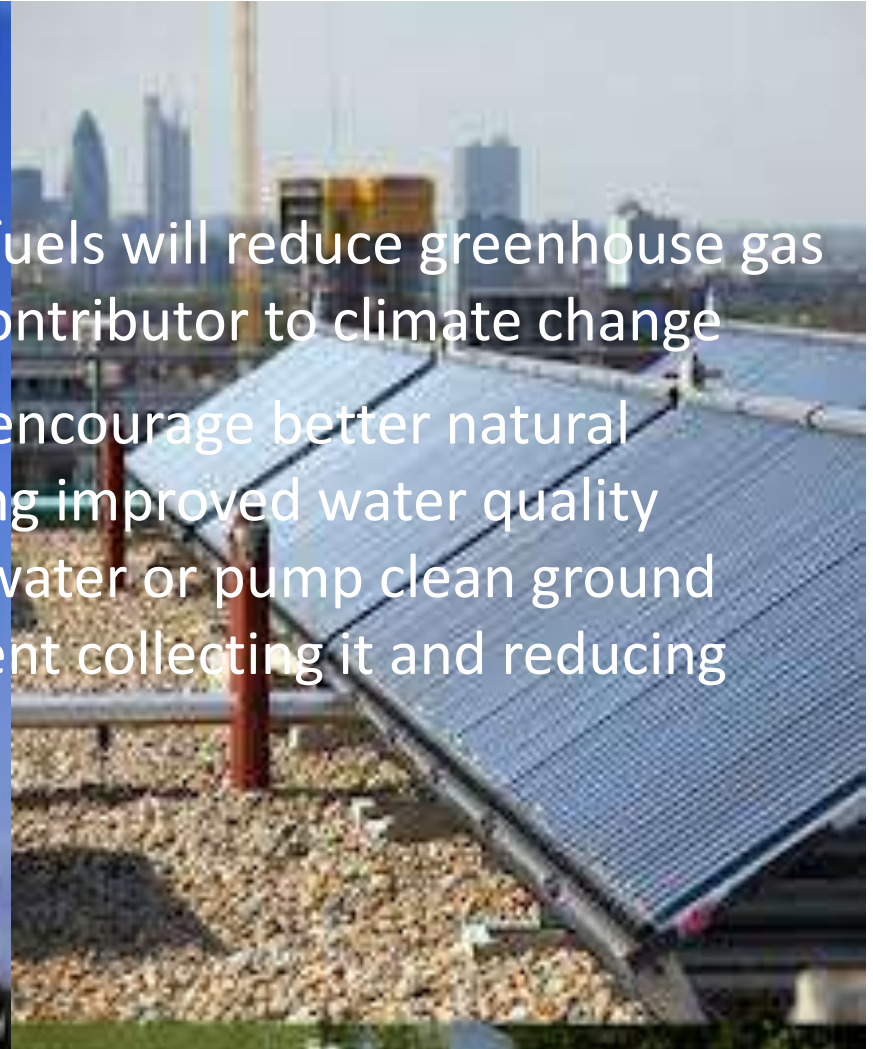
- Traditional fuel use contributes to erosion, reduced soil fertility, and desertification. Fuel substitution, improved efficiency, and energy crops can make exploitation of natural resources more sustainable



III. Access to Energy and MDGs

3.2.7 Access to energy and Sustainable Environment (SE)

- Using cleaner, more efficient fuels will reduce greenhouse gas emissions, which are a major contributor to climate change
- Clean energy production can encourage better natural resource management, including improved water quality
- Energy can be used to purify water or pump clean ground water locally, reducing time spent collecting it and reducing drudgery



IV. Access to Energy and MDGs

4.2.8 Access to electricity and establishment of global discussion groups

• Innovative collaboration mechanisms between governments, civil society and the private sector can ensure that the benefits of new energy technologies are widely shared and practiced in an affordable manner.



- Support cities in improving energy efficiency;
- Help countries undertake mapping of renewable energy resources
- Strengthen RE industry and markets
- Technology transfer

V. Access to Energy and Lao MDGs

5.1 Access to energy in Lao PDR

5.1.1 Electricity generation and consumption

Electricity statistics in 2010 of Lao P D R

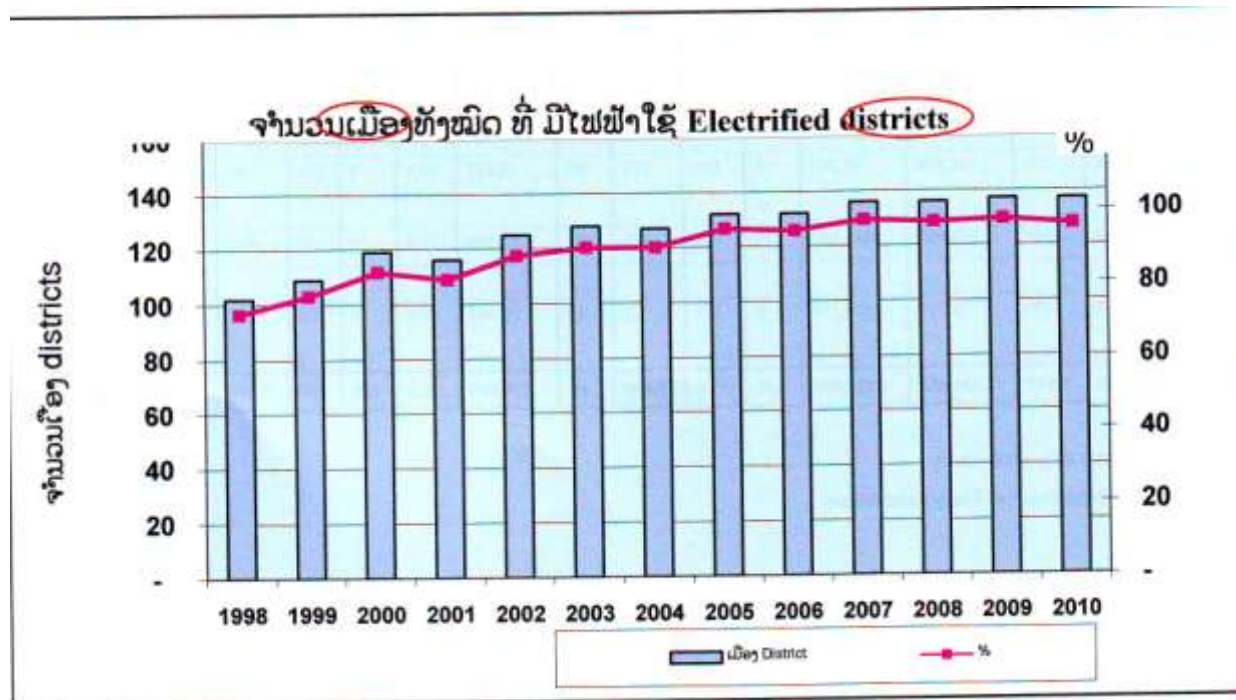
Items	Total	Unit	%
1. Electricity Generation	8,449	GWh	
2. Country's Electricity consumption	2,441	GWh	
2.1 Electrified	137	Districts	96
2.2 Electrified	5,686	Villages	64
2.3 Electrified	738,065	Houses	71
2.1 Electrified (EDL)	129	Districts	90
2.2 Electrified (EDL)	5,03	Villages	56
2.3 Electrified (EDL)	711,829	Houses	69

Source: Dept. of Electricity ministry of Energy and Mines; 2010

V. Access to Energy and Lao MDGs

5.1.1 Electricity generation and consumption

Statistics of electrification ratio in Lao P D R from 1998 to 2010



Electrified districts

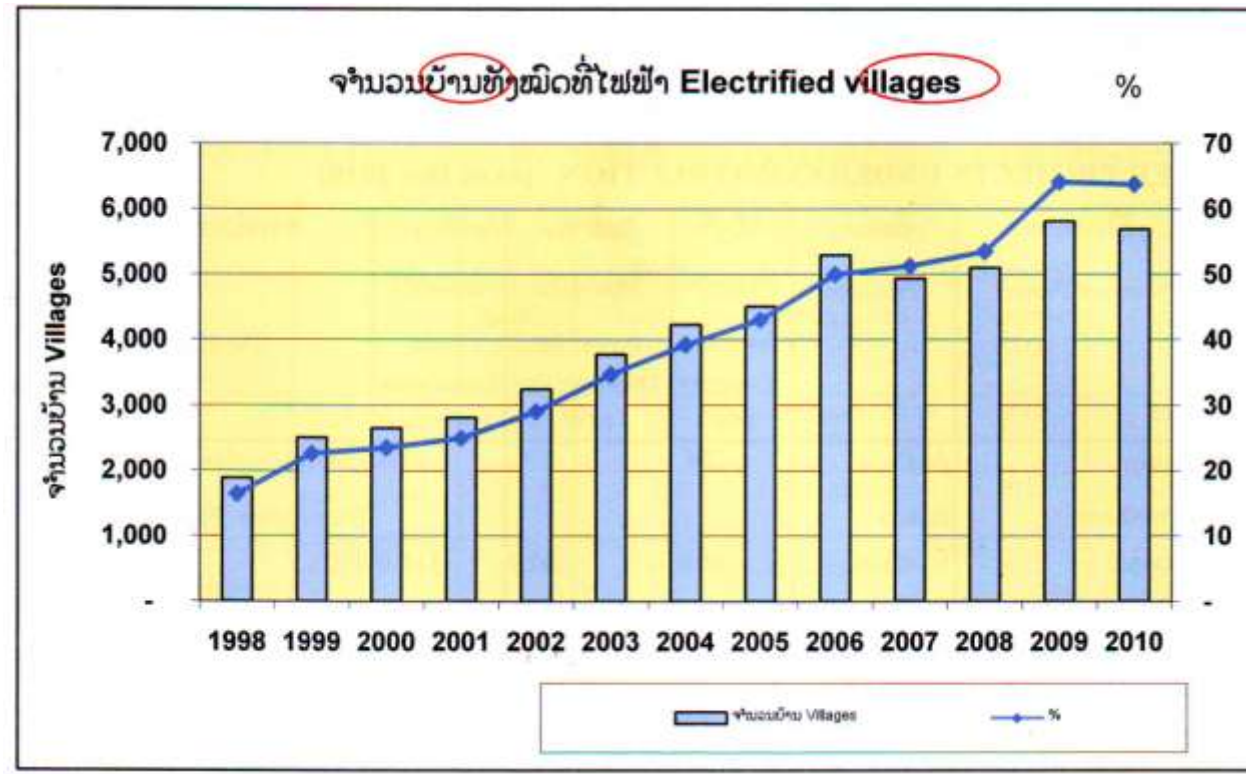


Electrified districts increase from 74% to 95%

V. Access to Energy and Lao MDGs

5.1.1 Electricity generation and consumption

Statistics of electrification ratio in Lao P D R from 1998 to 2010



Electrified villages

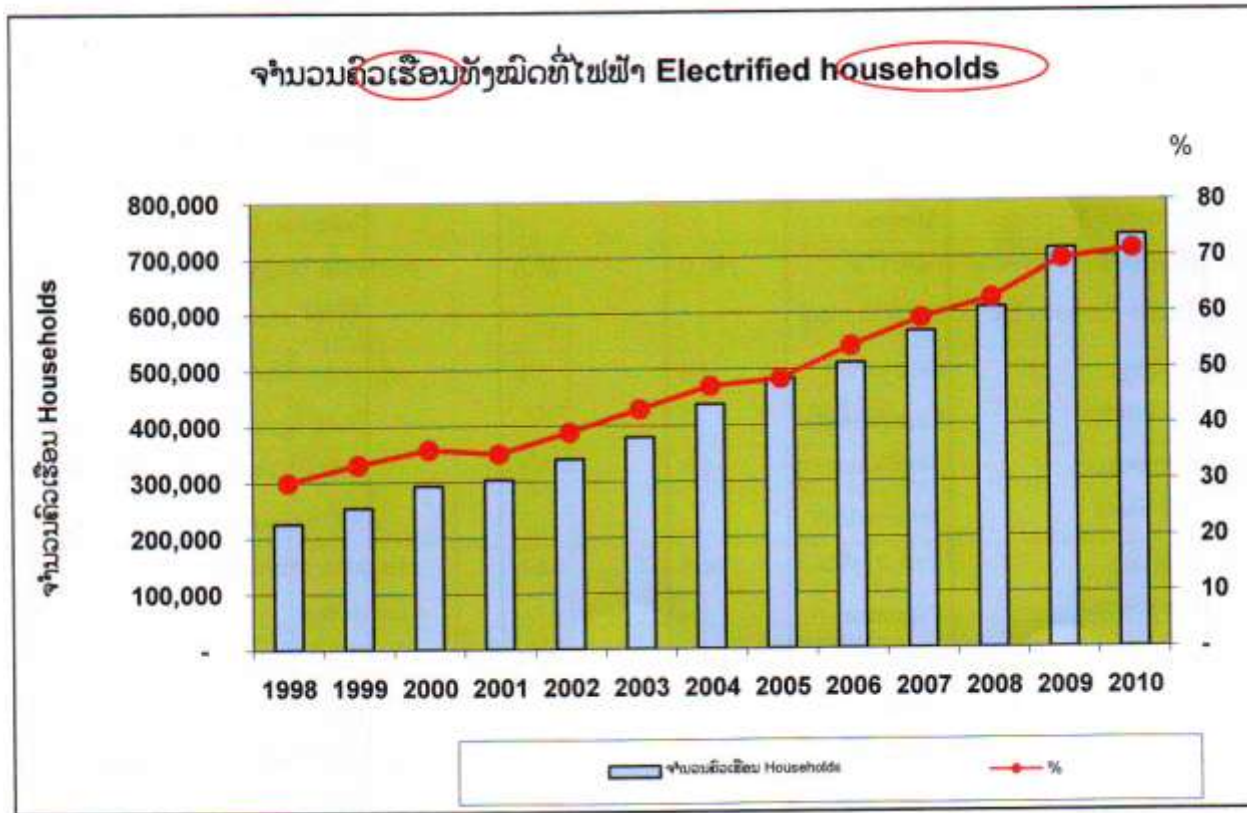


Electrified villages increase from 18% to 65%

V. Access to Energy and Lao MDGs

5.1.1 Electricity generation and consumption

Statistics of electrification ratio in Lao P D R from 1998 to 2010



Electrified households

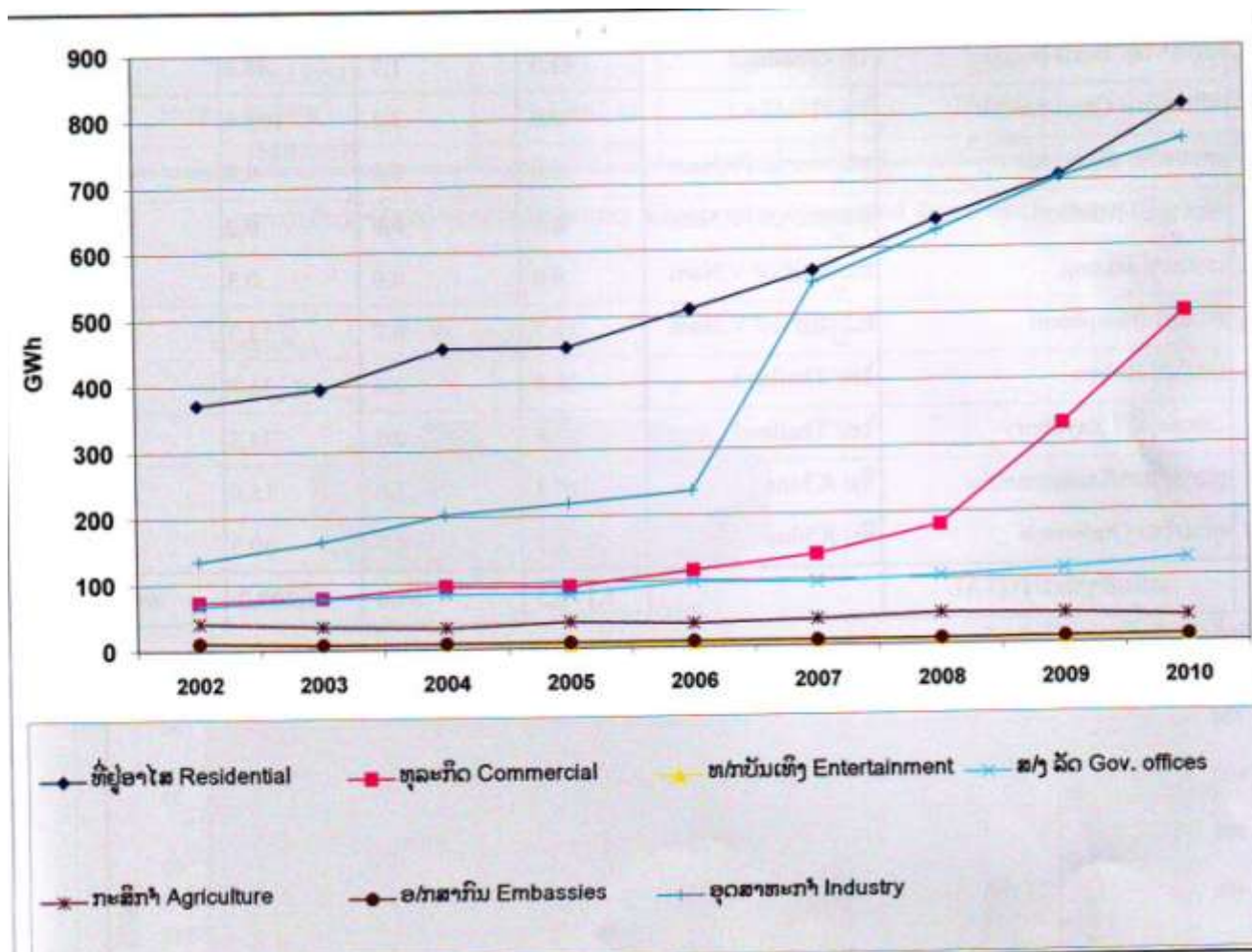


Electrified households increase from 30% to 73%

V. Access to Energy and Lao MDGs

5.1.1 Electricity generation and consumption

Electricity consumption in all categories from 2002-2010



Source: EDL; for industry including energy consumption of Xepon Mining and Cement factory; 2010

V. Access to Energy and Lao MDGs

5.1.2 Access to electricity in rural area



second phases of **rural electricity** expansion project

- Rural electrification is one of the major achievements in Lao PDR,
- The connection rate increasing from approximately 16% in 1995 to 38 % of all households by the end of 2003.

- Government has promoted off-grid delivery models, favoring renewable technologies.
- 60 % in 2005 and 70 % in 2010,
- 10% of these are electrified by renewable energy.



V. Access to Energy and Lao MDGs

5.1.2 Access to electricity in rural area

- Southern Province Rural Electrification Project (SPRE I) provided an Off-Grid systems supply for isolated areas
- To date 5300 households participate in this “hire-purchase” system.



- Five provincial ESCOs are now registered and in operation, and these have a network of village electricity managers – there are about 130 of such managers throughout Laos.

V. Access to Energy and Lao MDGs

5.1.2 Access to electricity in rural area



- Sunlabob Rural Energy System Co. provides renewable energy solutions to remote areas.

- Since 2000 the project has commercially marketed and installed over 5600 systems in more than 450 villages and locations all over Laos.

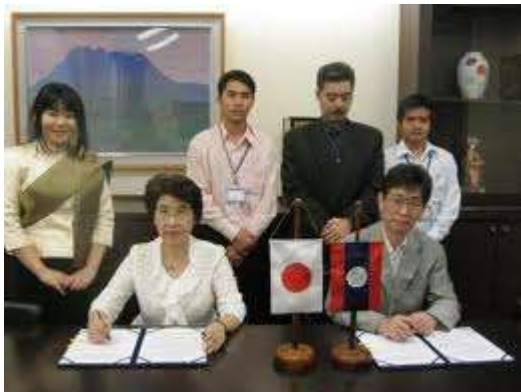


V. Access to Energy and Lao MDGs

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.1 Eradicate extreme poverty and hunger

- GDP growth averaging 6.4% per year between 2000 and 2006, and 7.7% between 2006 and 2009.
- GDP per capita of \$906 in 2009.



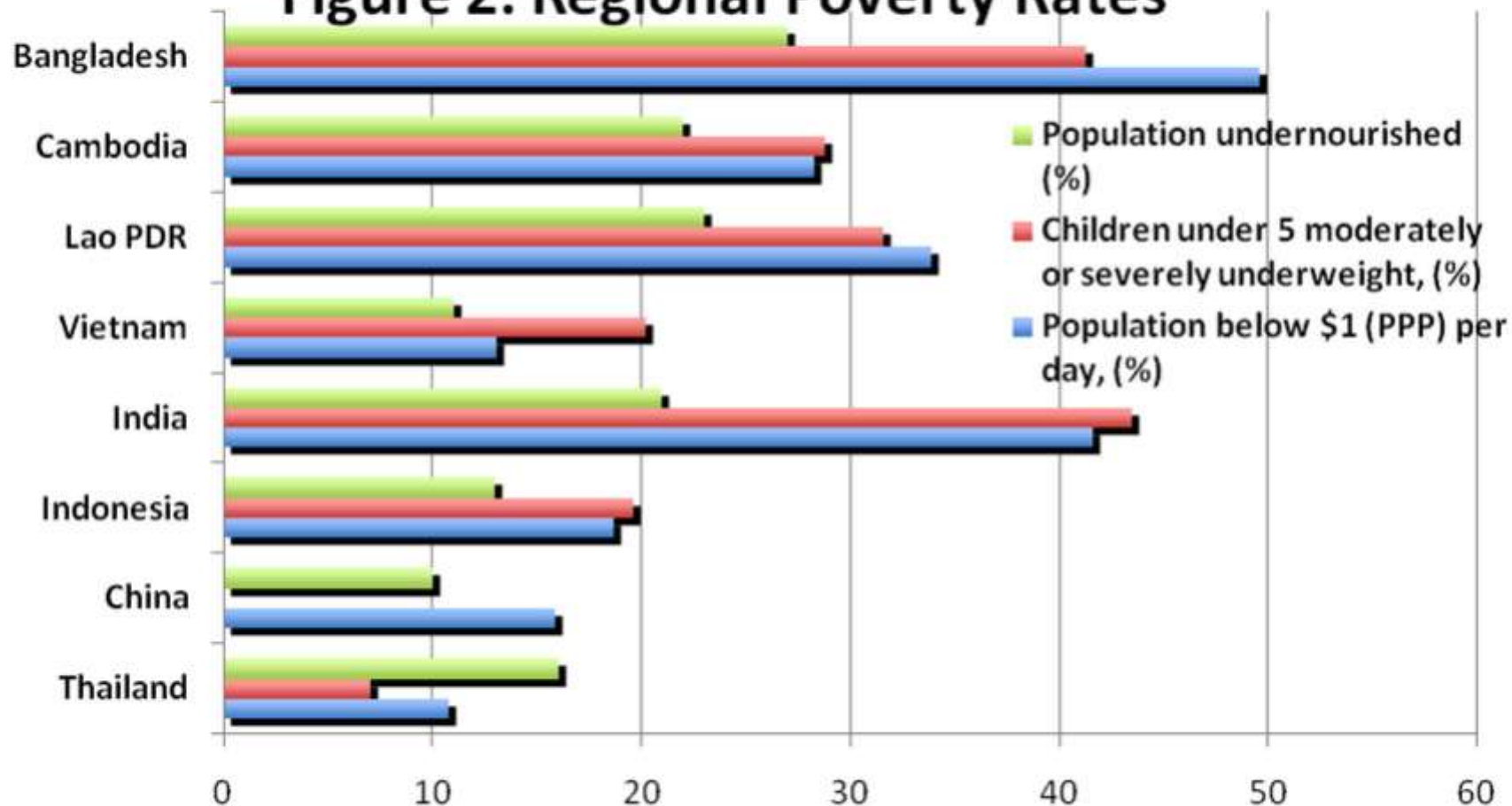
- The national poverty rate has consistently fallen,
- 46 % in 1992 and 26 % in 2010.
- 19 % in 2012

- Urban areas and districts along the western border have experienced rapid growth and poverty reduction,
- Remoter groups continue to lag behind.
- Poverty rates vary according to ethnicity



5.2 Access to MDGS in Lao PDR (Achievements)

Figure 2: Regional Poverty Rates



Sources: Annual Round Table Implementation Meeting (RTIM)
Vientiane Capital, 22 November 2011

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.2 Achieve universal primary education



- Participation rates and survival rates to Grade 5 steadily improving.
- The survival rate to grade 5 increased from 66.8% in 2007/08 to 71% in 2009/10,
- Decreased to 68% in 2010/11.

Table 1: MDG2 - Achieve Universal Primary Education

	1990	FY 2007-08	FY 2009-11
Net enrolment rate (primary school)	58 %	85 %	94 %
Survival rate (completion) to Grade 5	48 %	69 %	68 %
Literacy rate 15-40 years	69 % (1995)	79 % (2005)	87 % (2009-10)

Source:
Education SWG

5.2 Access to MDGS in Lao PDR (Achievements)

- The introduction of block grants and abolition of informal fees for basic education beginning in the financial year 2011-2012

5.2.3 Promote gender equality and empower women

- The Government recognizes that progress has been slow is committed to increase its effort to achieve the MDG target
- Primary net enrolment rates for girls in the districts that MoES considers a priority is only 85.6 % (for boys, 90%), while enrolment rates for girls in other districts stands at 94% (for boys, 95%).
- The share of women in wage employment increased from 38 % to 44 % between 1995 and 2005.
- Eliminate gender disparity in primary and secondary education, in 2005, and to all levels of education by 2015



5.2 Access to MDGS in Lao PDR (Achievements)

5.2.3 Promote gender equality and empower women



Lao PDR is committed to the promotion of equality between men and women

- *Law on Women's Development and Protection* (2004)
- Institutions like the Lao Women's Union (LWU, 1955)
- National Commission for the Advancement of Women (NCAW, 2003).

Lao PDR has also ratified a number of international conventions

- The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW 1981)
- The Beijing Platform for Action (1995)



5.2 Access to Energy and MDGS in Lao PDR (Achievements)

5.2.3 Promote gender equality and empower women

- A much better-performing indicator for MDG3 is women's political representation (the proportion of seats held by women in the National Assembly is 25 %)



7th Asia-Europe Parliamentary Partnership Meeting (**ASEP-7**)

Table 2: Women's participation in Government administration

Items	2005	2011
Women as members of Party Secretariat Committee, Party member, and district governor or vice district governor	155	363
Women as members of Party Secretariat Committee and Partymember, or village chief	145	321
Female district governors	5	11
Female Minister or equivalent	1	5
Female Vice Minister or equivalent	3	16

Source: LWU 2010

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.4 Reduce child mortality

- The Under-5 Mortality Rate and Infant Mortality Rate have both been gradually reduced over the last 10 years, with the latter declining more rapidly.



- Improvements in both measures:
 - + availability of vaccinations
 - + increase access to primary health care services, family planning, wider distribution of bed nets, and access to clean water supply.



5.2 Access to MDGS in Lao PDR (Achievements)

5.2.5 Improve maternal health



The **health** and nutrition of mothers, babies and young children in remote

- A national average of 37 % for skilled birth attendance, a sizable increase from 23 % in 2005
- According to 2005 data, in the contraceptive prevalence rate (38 %) and the age- specific fertility rate (76 %)



- Progress in antenatal care coverage has been somewhat satisfactory, increasing from 21 % to 28.5 % between 2000 and 2005.



5.2 Access to MDGS in Lao PDR (Achievements)

5.2.5 Improve maternal health



Oudom M. National strategy
on **maternal** and infant
mortality reduction

- Initiating the implementation of the Strategy and Planning Framework for Integrated Maternal, Neonatal and Child Health (MNCH) Services 2009-2015.
- Implementation of Skilled Birth Attendance (SBA) Development Plan (2008-2012) to expand access to basic and comprehensive obstetric services aiming to reduce maternal mortality.

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.6 Combat HIV/AIDS, malaria and other diseases

- The health indicators associated with combating HIV, malaria and TB remain on course for reaching related MDG6 targets by 2015



SEAL 2012: **LAOS** - Health related to **HIV/AIDS**

Items	2010
HIV prevalence among general population (age 15 to 49) %	0.2%
Most-at-risk population who are HIV infected (%) - <i>Sex Workers</i>	1.2 %
Most-at-risk population who are HIV infected (%) - <i>Men who have sex with Men</i>	2.8 %
Most-at-risk population who are HIV infected (%) - <i>Drug users</i>	1.5 %
Adult and children with advanced HIV infection receiving antiretroviral therapy (%)	92 % (2009)

Source: CHAS

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.6 Combat HIV/AIDS, malaria and other diseases

1) The national response to HIV and AIDS :

- + The 100% Condom Use Programme (100%CUP),
- + Harm Reduction,
- + STI Services and HIV Volunteer Counseling and Testing.
- The Harm Reduction Programme, which has only been initiated late last year in two target provinces namely Phongsaly and Houaphan provinces, has reached 47% of the total number of 47 IDUs.

2) Treatment, Care and support to People living with HIV

- + The cumulative number of PLHIV under ARV treatment as of June 2011 is 1,819, out of which 813 are female and 123 are children (72 female).
- + The survival rate of PLHIV under ARV treatment over the last 6 months was above 95% in adults and 100% in children.



5.2 Access to MDGS in Lao PDR (Achievements)

5.2.6 Combat HIV/AIDS, malaria and other diseases

- The infant mortality rate (IMR) has been reduced significantly **in the last 10 years in the whole country.**
- The country has endorsed and signed a commitment to strive for: (1) maintenance of polio-free status; (2) measles elimination by 2012; (3) strengthening of routine immunization and hepatitis B control by 2012; and (4) elimination of maternal and neonatal tetanus by 2012.
- **Increasing coverage of basic vaccinations** (vaccination for diphtheria–tetanus–pertussis [DTP] increased from 49% in 2005 to 74% in 2010; vaccination for measles climbed from 41% in 2005 to 64% in 2010).
- **The provision of vitamin A for children under 5 years old**

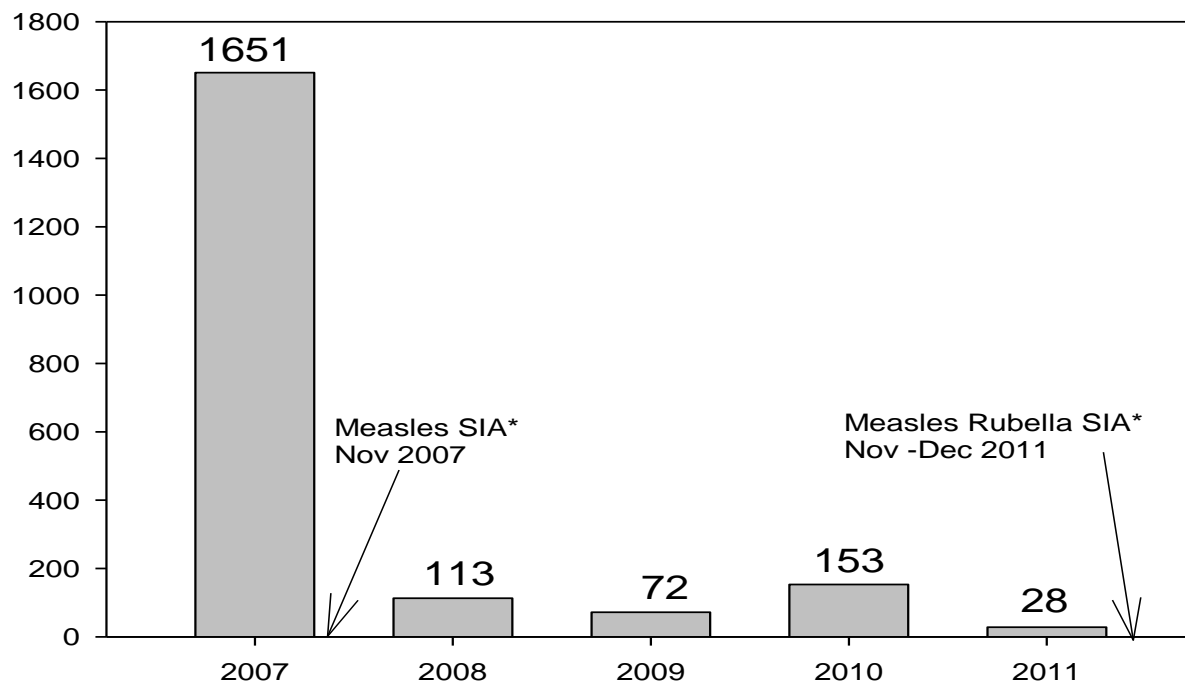


5.2 Access to MDGS in Lao PDR (Achievements)

5.2.6 Combat HIV/AIDS, malaria and other diseases

- successful implementation of the National Plan for Emerging Infectious Diseases 2007–2010;

Measles confirmed cases and Measles vaccine coverage, 2007-2011 (up to September 2011)



** SIA: Supplementary Immunization Activities*

Source: WHO EPI and NIP programme, 2011

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.7 Ensure environmental sustainability (ES)

- Application of natural resource management and sound macroeconomic policies are important



minimizing negative consequences

- The Government is carefully considering global and regional climate change scenarios and their impact on the people of Lao PDR.



Water and sanitation project in
Laos. Photo: AusAID

- Access to water sources and sanitation facilities is a further component of MDG7
 - + Access to safe drinking water improved from 52 % to 72 % between 2002 and 2007.
 - + Access to basic sanitation (86 % in urban areas; 38 % in rural areas)

5.2 Access to Energy and MDGS in Lao PDR (Achievements)

5.2.7 Ensure environmental sustainability (ES)



- In 2011 the new MoNRE was established, and a Sector Plan 2011-2015 was approved, along with an Action Plan.

- Protection of the quality of the environment (water, land and air) in 25 towns with development projects within the national environmental standards;



- Setting up of models for managing green environments; and establishment of clean development and carbon credit mechanisms to maximize benefits for the country.



5.2 Access to Energy and MDGS in Lao PDR (Achievements)

5.2.7 Ensure environmental sustainability (ES)

- Revision of the environmental protection law, due in 2012



- National Water Resources Policy and the Strategy and Action Plan 2011-2015 also have been issued
- IWRM at the river basin level is being promoted through management committees, and integration with hydropower development plans is being improved.

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.7 Ensure environmental sustainability (ES)

- Recognizance by the NSEDP in The 7th National Socio-Economic Development Plan (2011-2015),
“Ensure sustainability of development by emphasizing on the links and balances between economic development, cultural and social progress, natural resources preservation, and environmental protection »



- Lao PDR has also highlighted its commitment to environmental issues as well as international participation in the fight against climate change;

5.2 Access to MDGS in Lao PDR (Achievements)

5.2.8 Develop a global partnership for development

- Partnerships between rich countries and Lao P D R
- Partnerships between ASEAN Countries and Lao PDR
 - Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
 - ODA received in Lao PDR as a proportion of national incomes
 - Average tariffs imposed by developed countries on agricultural products and textiles and clothing
 - Proportion of ODA provided to help build trade capacity



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THANK YOU FOR YOUR ATTENTION

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