



Assessment of national capacity for measuring and reporting on energy poverty

Case study of 5 west African countries



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CONTENT

- **BACKGROUND**
- **RATIONAL FOR THE PROJECT**
- **DESCRIPTION OF THE PROJECT**
- **EARLY FINDINGS**
- **CONTACT AND QUESTIONS**



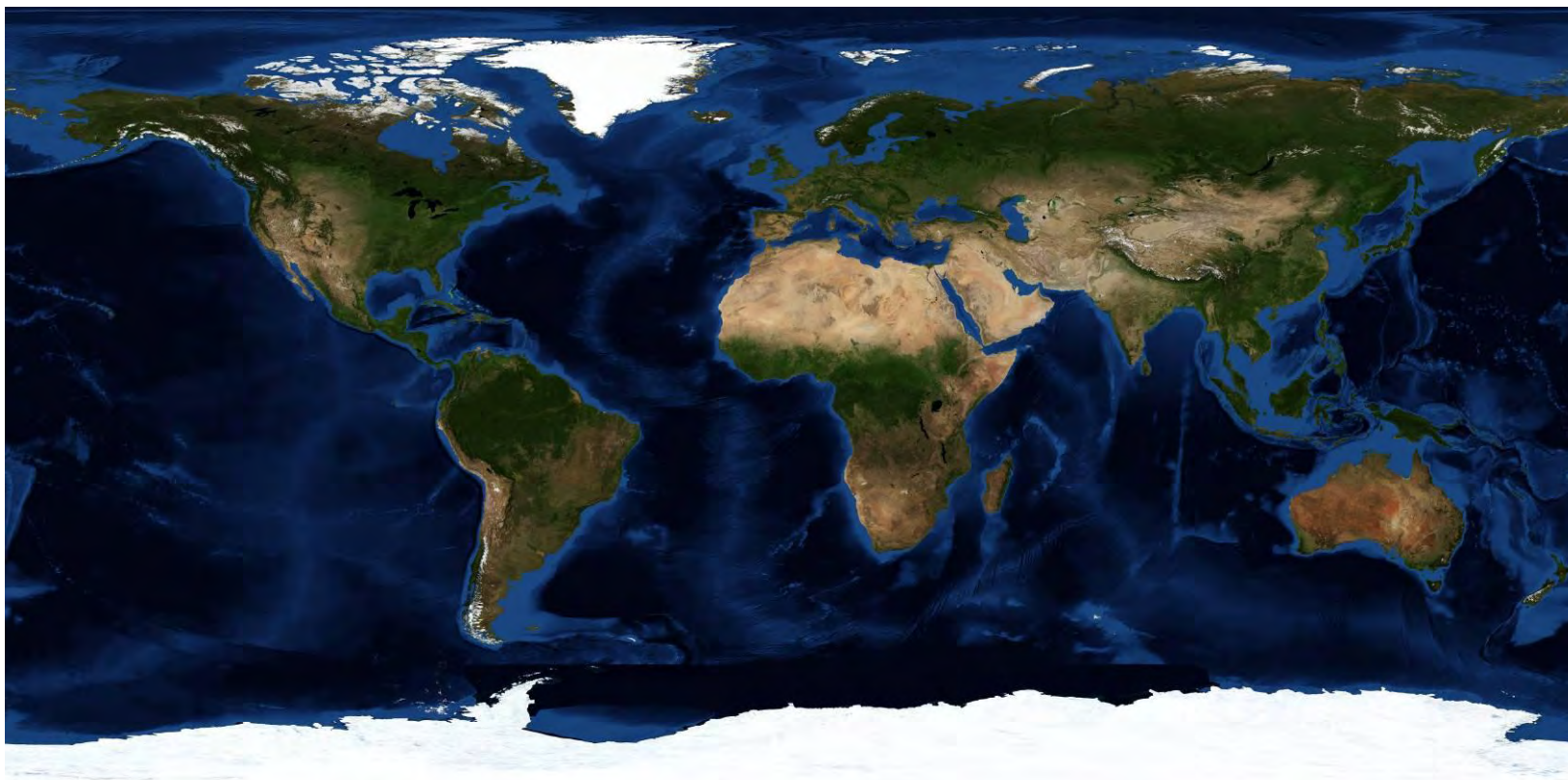
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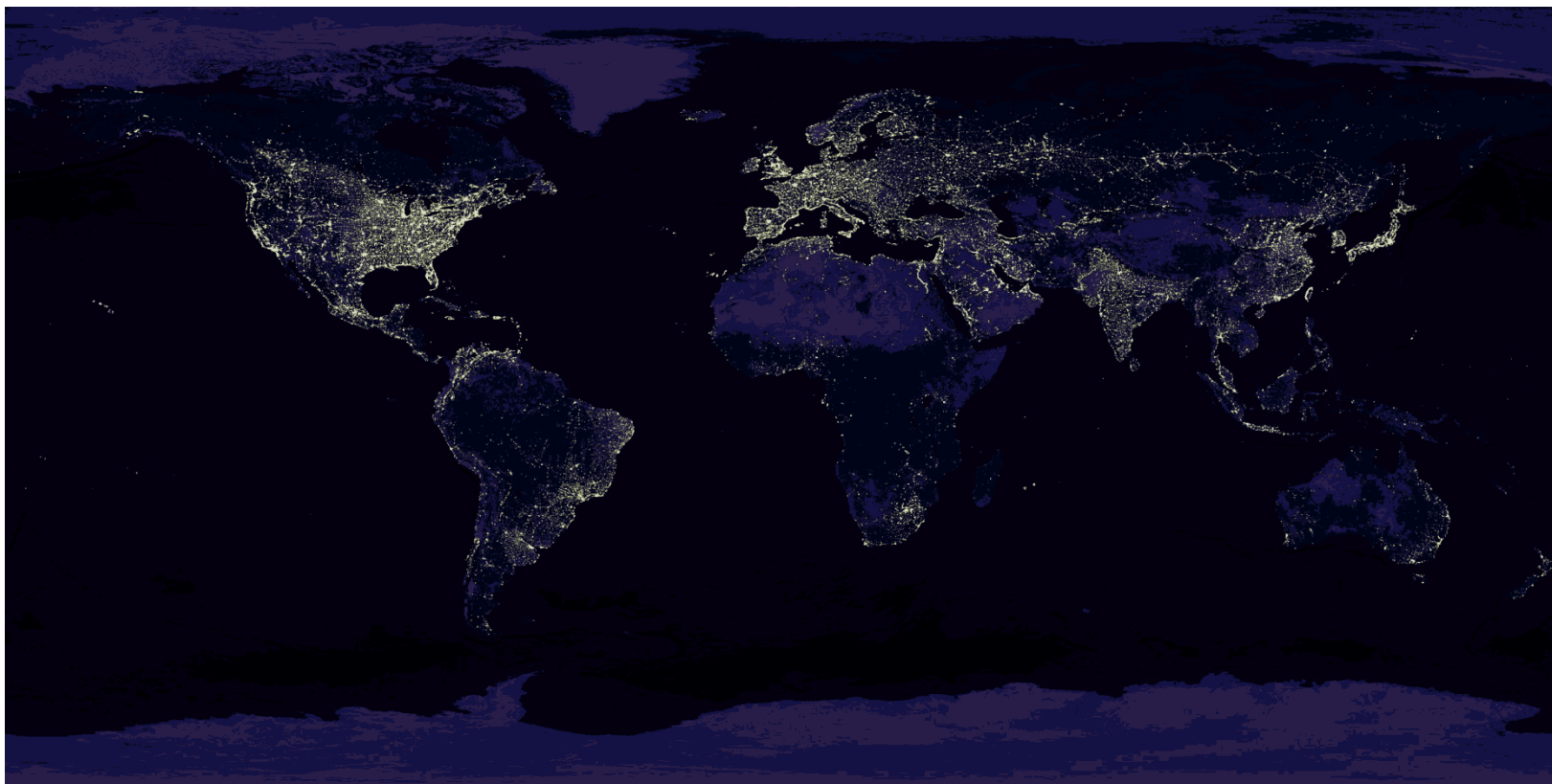
Energy Poverty



Source: <http://visibleearth.nasa.gov>



Energy Poverty



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ENERGY POVERTY

...REFERS TO THE DEPRIVATION OF
THE ABILITY TO USE MODERN ENERGY
SERVICES



IEA World Energy Outlook 2010

- **1.4 billion** people **without** access to **electricity** (85% of them in rural area); 585 million in sub-Saharan Africa
- **2.7 billion** people **relying on traditional biomass**; 653 million in sub-Saharan Africa
- Estimated **1.5 million premature deaths** per year in 2030 due to indoor air pollution
- Significant **additional efforts** on energy access **needed** to support the achievement of the **MDGs**
- USD 756 billion, or **36 billion per year**, required to reach universal energy access by 2030
- **Impact** of universal energy access on primary energy demand and global **CO₂ emissions** is modest

Source: IEA, UNDP & UNIDO 2010



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Need for Measuring Energy Poverty

- **Robust information** base **required** to inform policy formulation and project design
- Central to **monitoring progress** towards goals and targets
- **Increase awareness** among countries of policy options and best practice



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Assessing National Capacity to Measure and Report on Energy Poverty

- Adequate **national capacity** is crucial to track progress towards goals
- **Evaluating the current capacity** and **potential gaps** and **barriers** at national level in a methodical fashion
- **Pilot** in West African countries (incl. Burkina Faso, the Gambia, Ghana, Senegal, and Sierra Leone) – **national assessments**
- **Expected results:** insights on data availability and gaps; data gathering techniques; data handling and methodologies, dissemination of data; institutional capacity and additional requirements; reporting; and the role of international cooperation; etc.



Assessing National Capacity to Measure and Report on Energy Poverty: Methodology

- National consultant for each of the 5 countries
- International coordinating consultant
- Combination of methodologies: literature review, analysis, and participatory research



Assessing National Capacity to Measure and Report on Energy Poverty: Key study points

- Institutional mapping: who, what and how
- Data availability and treatment
- Data dissemination and use
- Reporting and needs assessment



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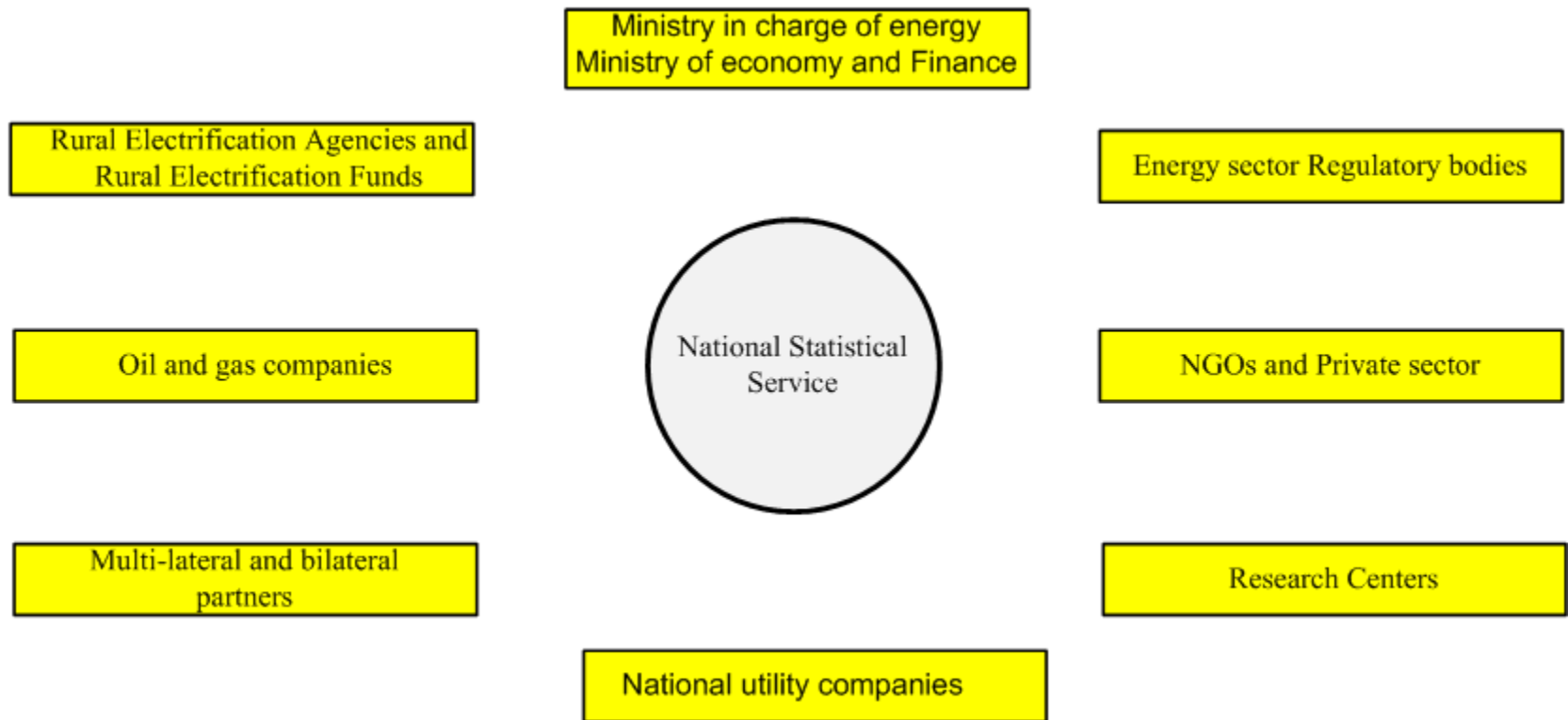
Early findings....

- Concept of energy poverty not explicitly known
- No evidence of previous work
- No specific approach for measuring energy poverty
- Energy issues incorporated into the various national poverty measuring and reporting reports

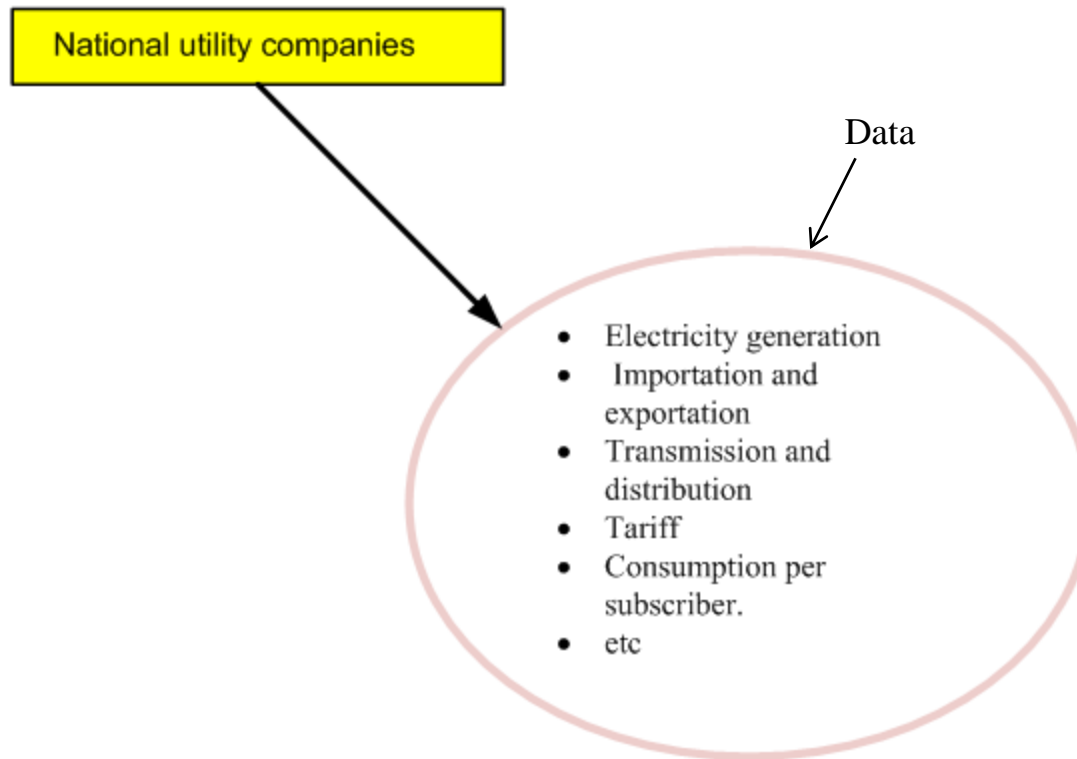
Early findings....

- Data or indicators on energy poverty are implicitly reported in “household Surveys on Income and Living Conditions”, “General Census of Population and Housing”, “Demographic and Health Surveys”
- Data and indicators are mostly quantitative
- Problem related to the quality of the data/certification

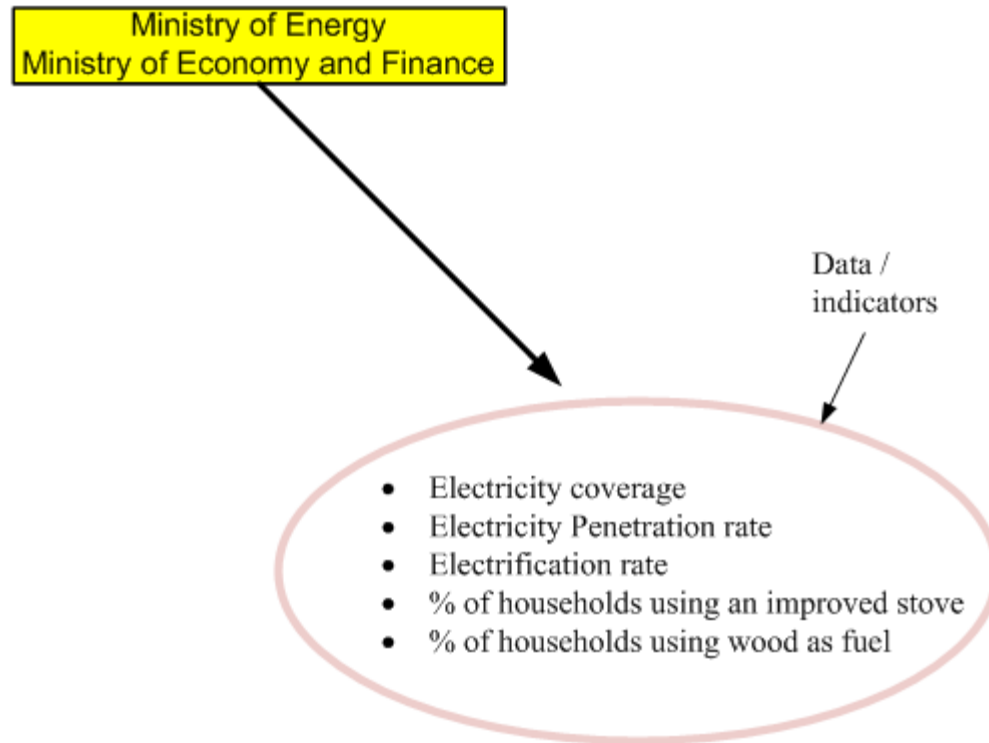
Early findings....Institutional Mapping



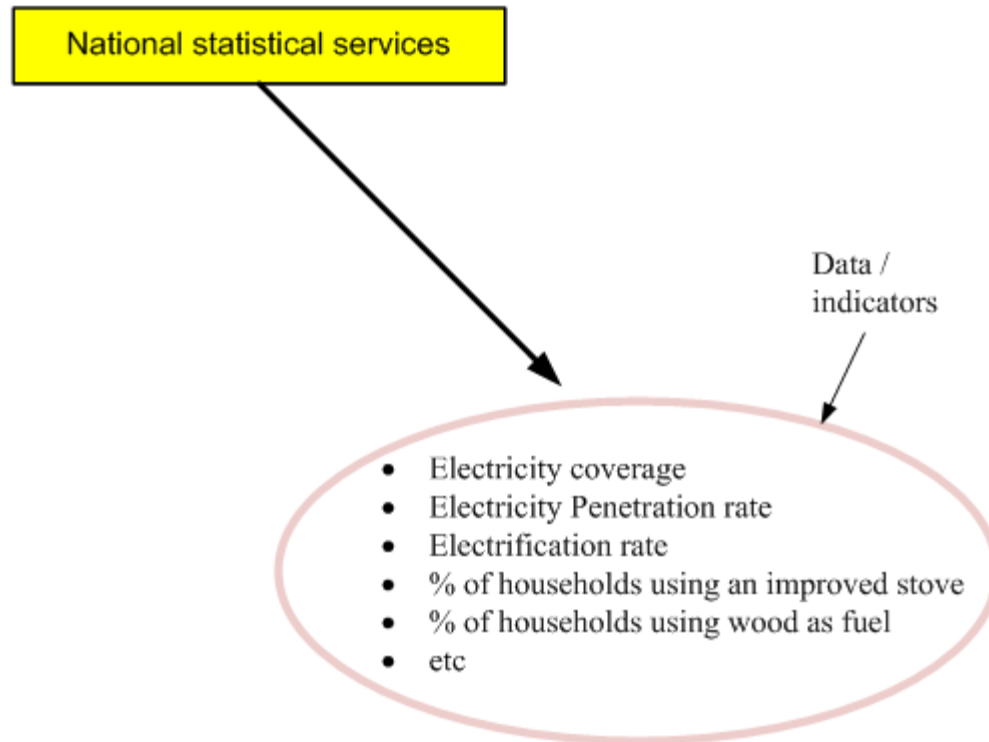
Early findings.... Institutional Mapping



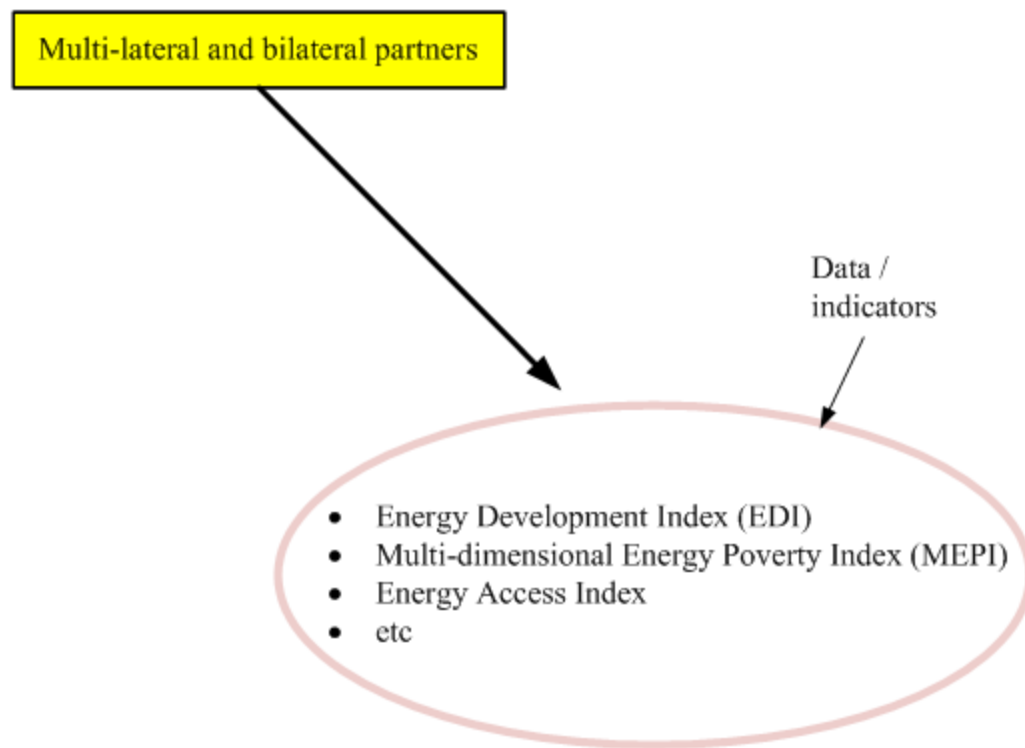
Early findings.... Institutional Mapping



Early findings.... Institutional Mapping



Early findings.... Institutional Mapping



Early findings.... Indicators for measuring Energy Poverty

...Mostly Individual indicators and mostly quantitative

- Electrification rates
- Trends in the rate of electrification
- Cost of producing electricity
- Number of villages electrified by solar systems
- Number of secondary towns electrified
- Household energy consumption by product, i.e. candles, electricity, domestic fuels etc
- Percentage usage of the respective energy sources:
 - ✓ % of rural households with access to electricity
 - ✓ % of households using an improved stove
 - ✓ % of households using wood as fuel

Early findings.... Indicators for measuring Energy Poverty

Some composite indices...

- ❑ Energy Development Index (EDI): published annually by IEA
- ❑ Multi-dimensional Energy Poverty Index (MEPI)
- ❑ Energy Access Index

Recommendations

- Sensitize decision-makers, technical institutions, research institutions on the concept of energy poverty and the need for measuring and reporting
- Adopt harmonized approaches and methodology for measuring energy poverty
- Adopt standards and common indicators/indices
- Institute centralized national and regional coordinating body

Recommendations (Ctd)

- Implicate research centres and academia, civil societies (NGOs)
- Build human capacity through training on data gathering techniques, data processing, analysis, reporting and dissemination , database development and management related to energy poverty
- Support financially the updating of databases or the setting-up of databases
- Support financially data gathering



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