

## **AGENDA**

**Workshop on the Strategic Framework  
for the African Bioenergy Data Management**

**24-26 April 2023 | Lomé, Togo**

### **SESSION 4**

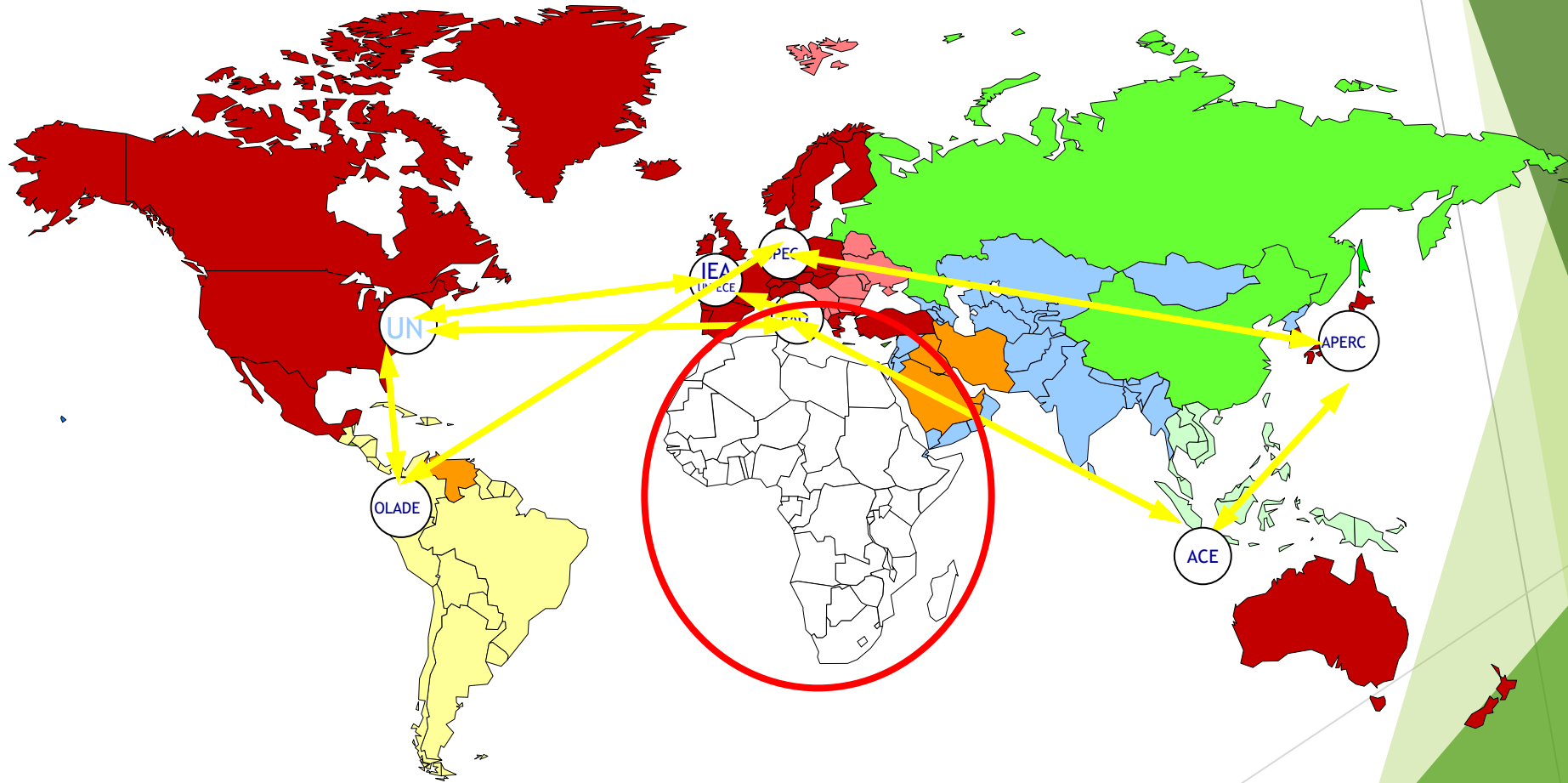
**How to best extract the right messages from the data and to convey them into the right format to the right target groups:  
Policy makers, Organisations, Other target groups.**

**AFREC**

Jean-Yves Garnier

# At the World Level

## An extensive network of contacts, **but...**



**...there was a clear lack of contact for Africa**

# The road towards an African Information System

## A long but successful process

- 1 Egypt, end 90's-early 2000's WEC Initiative on an African Energy Information System
- 2 Paris, September 2001 The African Energy Information Forum I
- 3 Johannesburg, Feb 2002 The African Energy Information Forum II
- 4 Casablanca, June 2002 Meeting of US-African Energy Ministers
- 5 Abidjan, July 2002 WEC Regional Meeting
- 6 Ouagadougou, October 2002 UEOMA-ENDA-IEPF Meeting
- 7 Cairo, October 2002 WEC Executive Assembly
- 8 Addis Ababa, December 2002 UN-IEA Training Workshop
- 9 Algiers, April 2003 The AFREC Seminar on Energy Information System
- 10 Paris, September 2003 IEA-WEC-AFREC Meeting



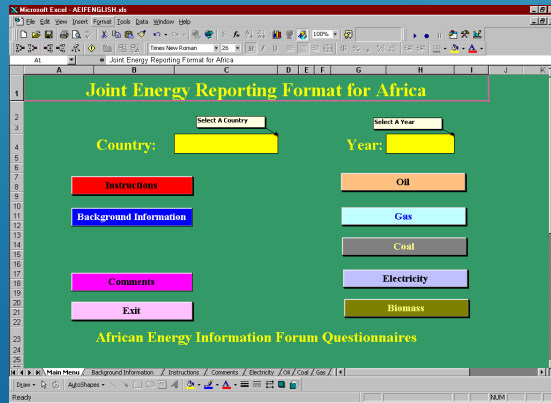
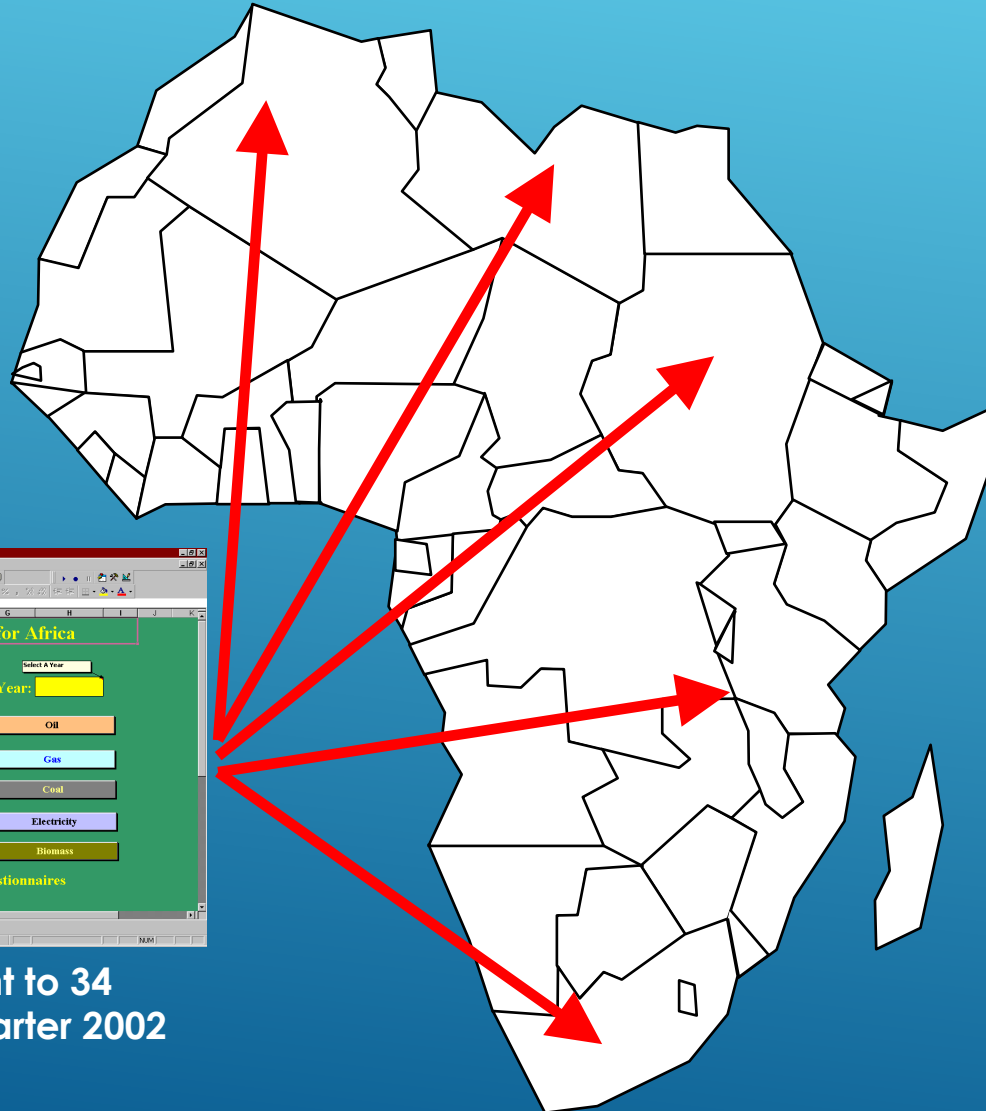
As a consequence it was decided to adopt a five-in-one approach

The screenshot displays a Microsoft Excel spreadsheet titled "Joint Energy Reporting Format for Africa". The interface is set against a green background and includes the following elements:

- Title:** "Joint Energy Reporting Format for Africa" (row 1, columns A-G).
- Input Fields:** Two dropdown menus labeled "Select A Country" and "Select A Year" (rows 2-3, columns C and G).
- Energy Sources (List 1-5):**
  - 1 Oil (row 7, column G)
  - 2 Gas (row 10, column G)
  - 3 Coal (row 13, column G)
  - 4 Electricity (row 16, column G)
  - 5 Biomass (row 19, column G)
- Menu Options (List 1-5):**
  - Instructions (row 7, column A)
  - Background Information (row 10, column A)
  - Comments (row 16, column A)
  - Exit (row 19, column A)
  - Biomass (row 19, column G)

The "Biomass" button and its corresponding number "5" are circled in red. The entire interface is also enclosed in a larger red oval. The spreadsheet's status bar at the bottom shows the "Main Menu" tab is active, and the status is "Ready".

# Step 3: Once a draft questionnaire was finalised the Questionnaire was disseminated for Beta testing



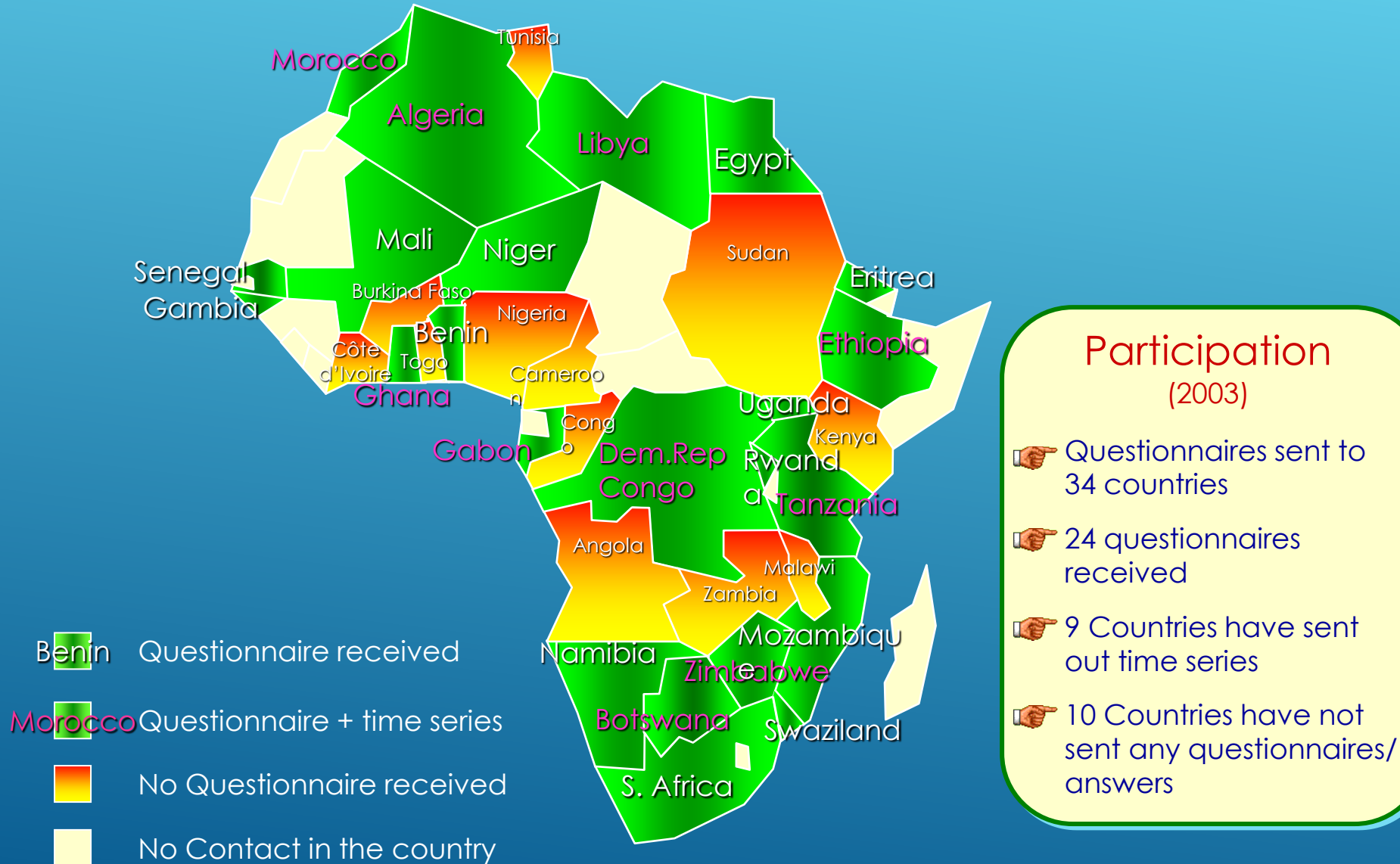
Questionnaires sent to 34 countries in 2<sup>nd</sup> quarter 2002

## Objectives

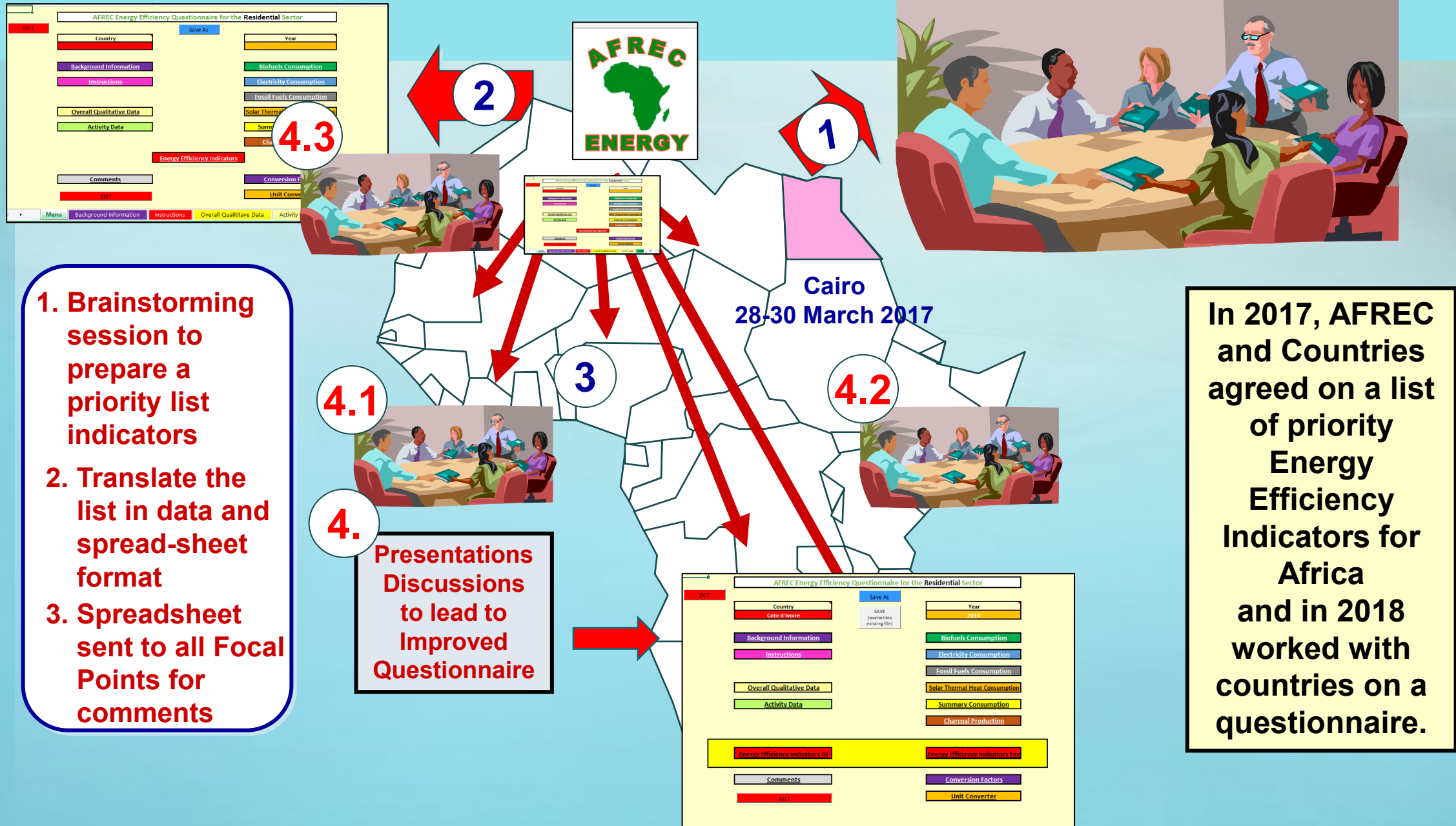
- How many countries would be able to **complete** the questionnaire
- How many countries would be able to send **timely** data and time series
- What are the main **difficulties** encountered
- What **improvements** could be brought to the questionnaires
- To assess **commitment**
- To start building a **database** on the energy situation in Africa



# What were the results of the first year (2003)?



# How AFREC reacted to fill the gap on energy efficiency indicators





# AFREC Energy Efficiency Questionnaire for the Residential Sector

EXIT

Save As

Country

Year

Background Information

Biofuels Consumption

Instructions

Electricity Consumption

Overall Qualitative Data

Fossil Fuels Consumption

Activity Data

Solar Thermal Heat Consumption

Summary Consumption

Energy Efficiency Indicators

Charcoal Production

Comments

Conversion Factors

EXIT

Unit Converter

Menu

Background Information

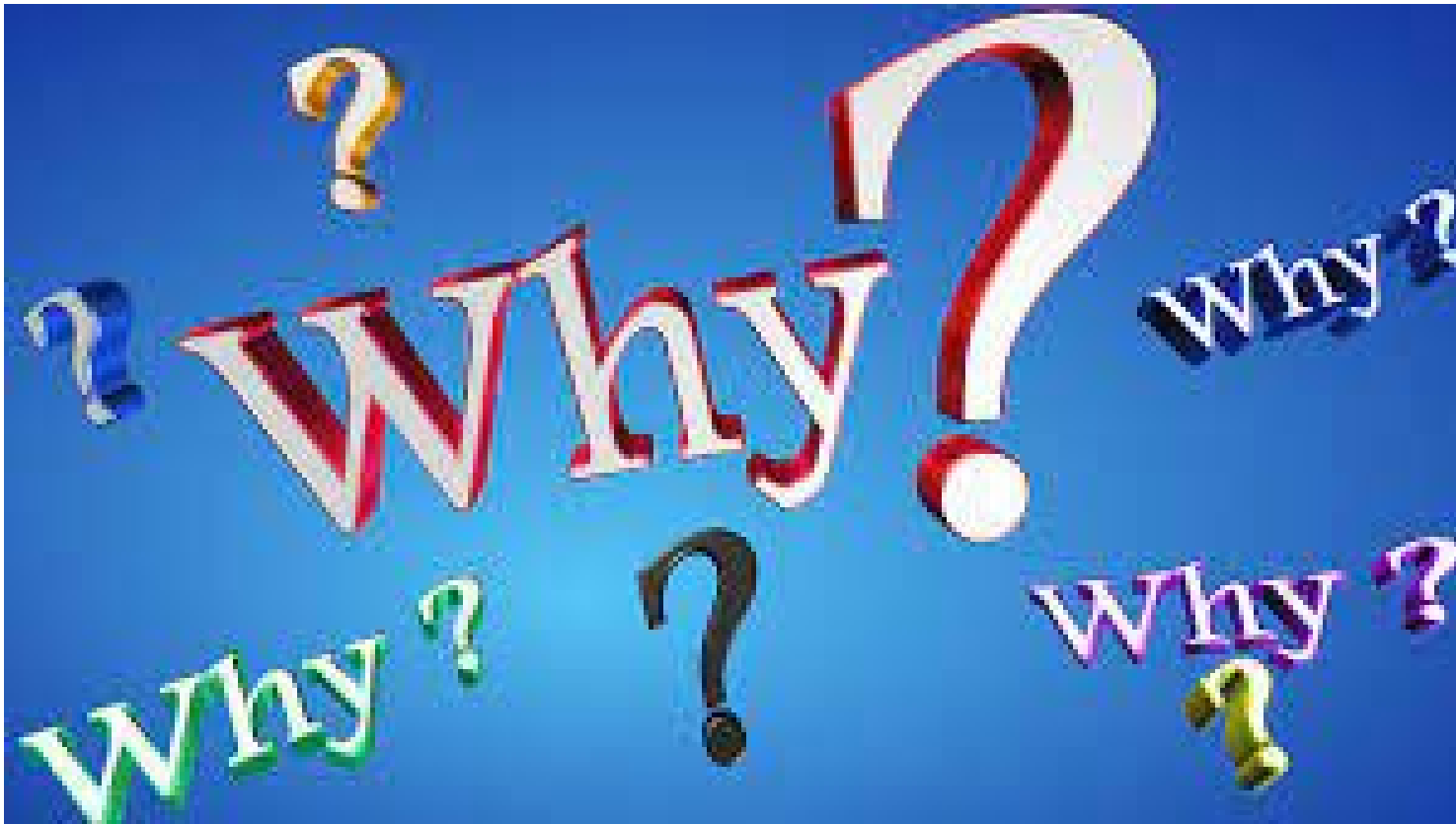
Instructions

Overall Qualitative Data

Activity Data

Biofu...





**Why** does biomass which is so important in terms of **energy**, **health**, **desertification** and **many other socio-economic aspects** not draw more the attention of African policy makers?

The bioenergy situation in Africa is often considered as 'Business As Usual':  
« *It has always been like that and that there is enough resources, so why changing...* »

Biomass does not have a well structured market. No major national or private companies (and unions) **to put pressure** on policy makers and people for pushing actions and policies.









In fact, the situation might not be as good as a quick glance at the balance could show it...

Thousand Tonnes of Oil Equivalent (ktoe)	Coal and Coal Products	Crude oil	Oil products	Natural Gas	Biofuels waste	Hydro	Solar	Wind	Electricity	Total of all energy sources
Production	-	1 890.8	-	1 861.7	6 691.0	299.3	-	-	-	10 741.8
Imports (+)	-	3 674.4	435.4	-	-	-	-	-	8.0	4 117.9
Exports (-)	-	-1 885.2	-1 742.7	-	-	-	-	-	-107.3	-3 735.1
International Marine Bunkers (-)	-	-	-99.7	-	-	-	-	-	-	-99.7
International Aviation Bunkers (-)	-	-	-181.2	-	-	-	-	-	-	-181.2

Preparing an energy balance is far from being enough to understand the energy situation and the impacts linked to the situation, especially for the biomass. There is a need for a **better dissemination** feeded by **more data** than the balance ones. And a **wider dissemination** to more **target groups**.

Non-Energy Use

- - 103.7 - - - - - 103.7



There are many signs of desertification

Women spends hours in collecting wood. It is not time spent in educating their children



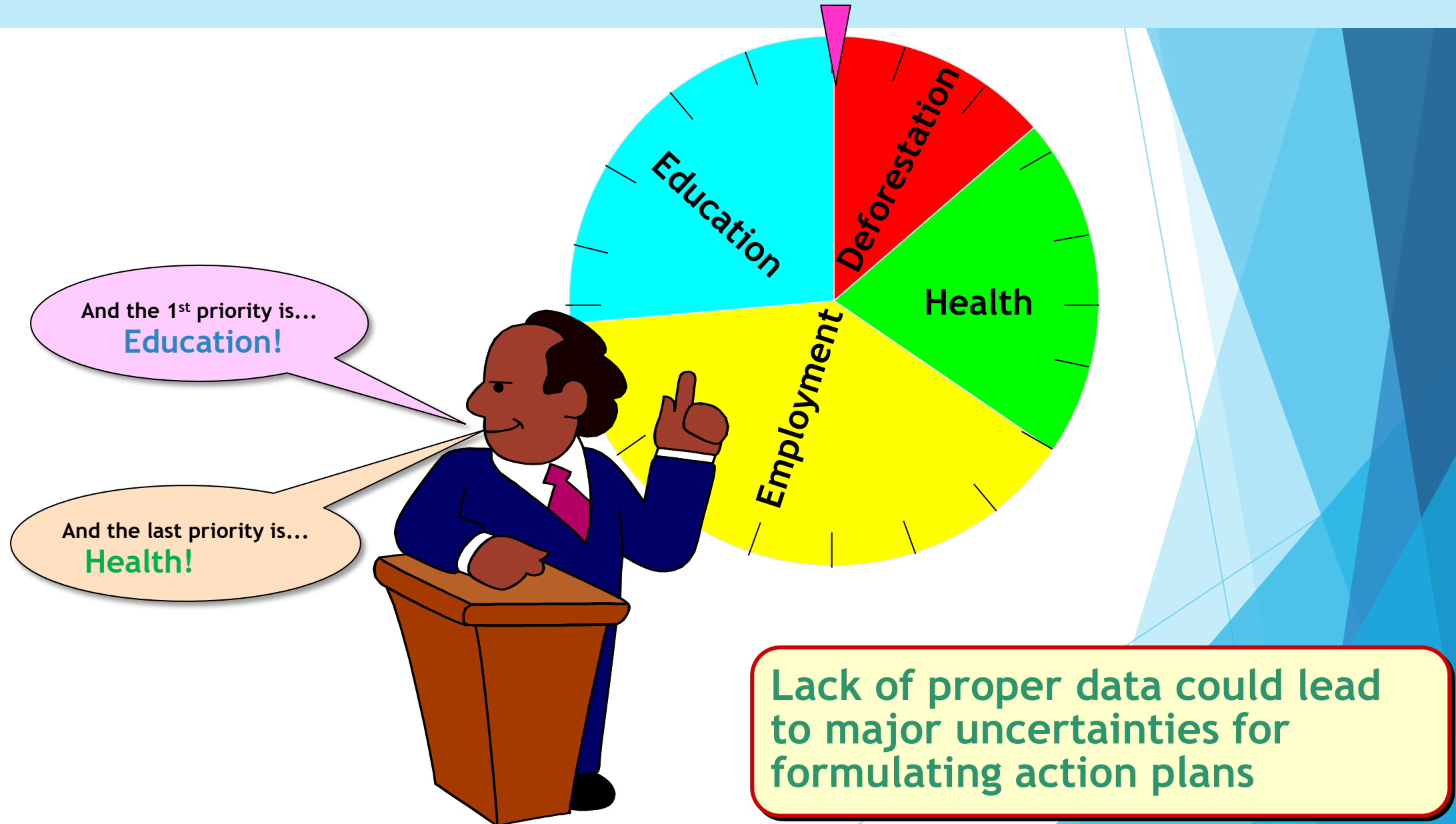
Very low efficiency in charcoal production compared to neighbouring countries

Many women and children die every year from the smokes

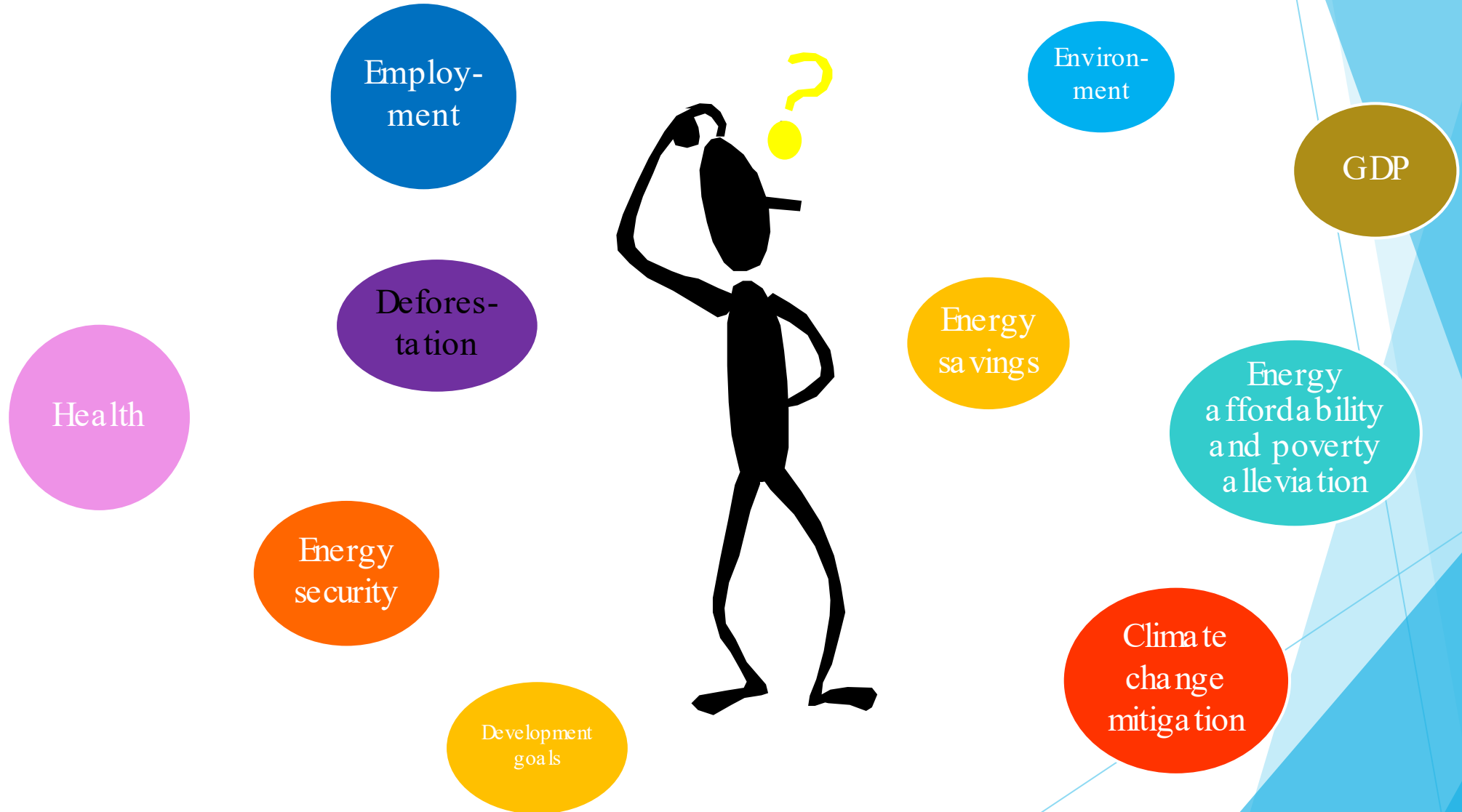




# Impacts on several sectors are a necessity for policy makers for taking proper measures in terms of biomass energy policy



# What sectors to cover as a priority?



# What sectors to cover as a priority?

- ▶ Collecting any data has a cost

# Getting data are often considered expensive

There are ways to reduce costs: example of surveys

**Make use of students**

**Involve local authorities** (facilitate contact with households, also facilitate accommodations)

**Work with statistics offices**

# Statistics Offices but not only...

- ❑ Ministry of energy
- ❑ Ministry of agriculture/forestry
- ❑ Statistics office
- ❑ Electricity utilities
- ❑ Oil and gas companies
- ❑ Taxes office
- ❑ Other ministries: health, education, women

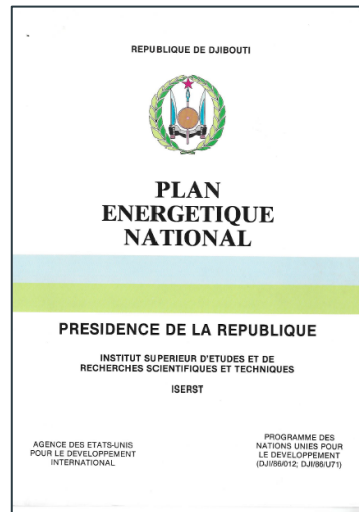
# How to collect necessary data

Djibouti



INSTITUT SUPERIEUR D'ETUDES ET DE RECHERCHES SCIENTIFIQUES ET TECHNIQUES

Other ministries



électricité de djibouti  
votre énergie quotidienne

Other companies

Others





# The difficulty is that many services have data



If there is only one service in charge of collecting the information  
**There is a danger of missing many essential data and too much work**

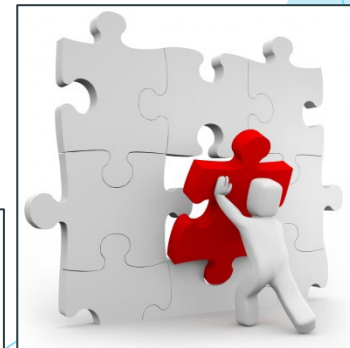


If there are several services collecting data  
**There is a danger of bad communication and double reporting**

**Now that we have the data, what to do with them and to whom release them**



The urgency and the importance to meet together  
**Identify where there are gaps in data**

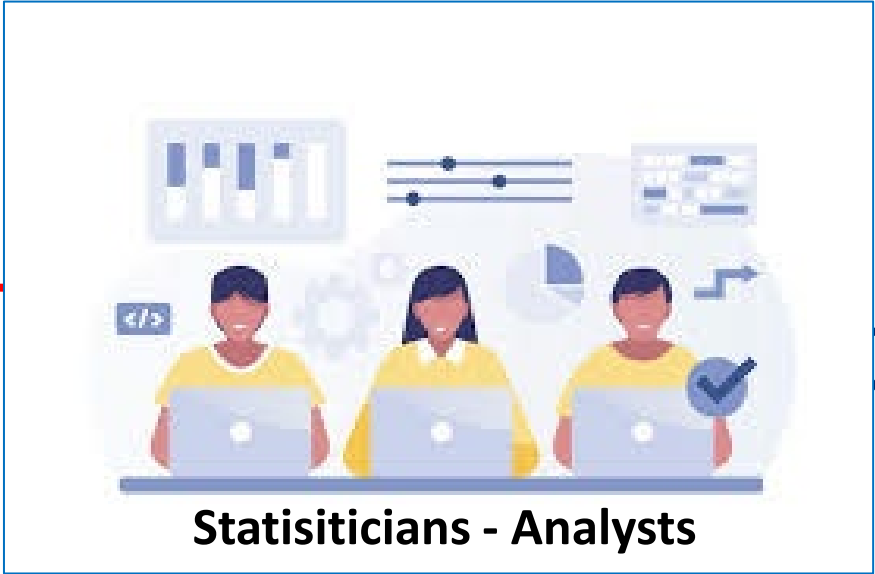


**And try to fill the gaps**

Researchers, companies



People



Statisticians - Analysts

Medias



Selected target groups



Policy makers





Policy makers because they **make policies** but also they need to be convinced to **allocate more resources** to biomass statistics and biomass impacted sectors statistics



Researchers, analysts, companies because they need data for their work which ultimately feed the debate and help policy makers in their decision making process



Journalists because TV, radios and newspapers are very powerful media to put pressure on both policy makers and people



And, of course, people because they are the ones who ultimately make a final choice in their uses if **well informed.**

# THE EXAMPLE OF IVORY COAST

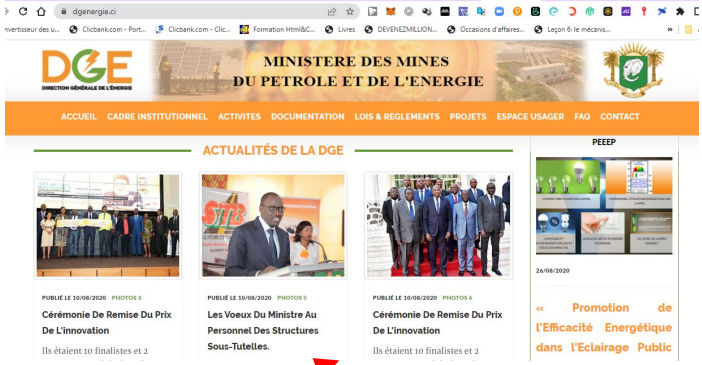
Séminaire annuel



Livret de statistiques



Site web



Statisticians - Analysts

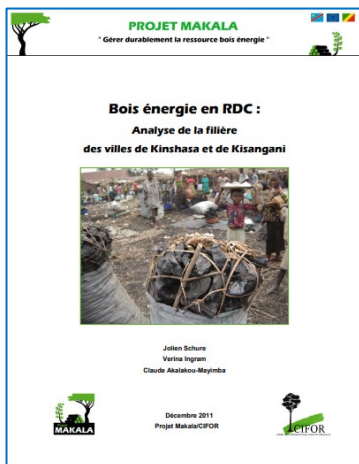


## Preface

Accurate information and statistics of fuelwood consumption globally and in Nigeria is problematic and providing solutions to reduce adverse impacts of its consumption on both the human and environment is equally difficult. Many scenarios including that of IEA,

estimation of fuelwood consumption and policy recommendation is primary to this work and has enabled the study to arrived at a number of targeted policy recommendations. Over 1600 completed responses of multiple questions on socio-economy and energy consumption, supply and pricing were processed; the volume of information was considerably large and hence, challenging. Therefore, passion and focus on the main objectives of the study assisted the team to painstakingly laboured to produce this report.

At the end, policy directions for firewood consumption reduction, charcoal market regularization, kerosene pricing and access, LPG access, targeted incentives, energy-environment nexus communication were recommended as instruments for effective mitigation of environmental degradation resulting from fuelwood consumption. Areas of improvement for future survey were also recommended.



## Recommandations clés

### At the producers level:

- Acknowledge the sector in terms of contribution to revenues (GDP)
- Improve the efficiency in charcoal production
- To make people sensitive to the deforestation
- Etc...

### Au niveau des transporteurs

- Cibler la tracasserie le long de la route et proposer des pistes d'amélioration ;
- Organiser le transport plus efficacement en partageant les coûts parmi les producteurs.

### Au niveau des vendeurs :

- Promouvoir les ventes de bois énergie de plantation plutôt que le bois énergie issu d'espèces d'arbres à haute valeur ou en voie de disparition.

### At the consumers level:

- Acknowledge the importance of fuelwood for households and some industries
- Promote and help the dissemination of improved cook stoves



# CONSOmmATIONS

## 1. Consommations par habitant

Le bilan énergétique de 2016, (voir en annexe) présente la consommation finale d'énergie par type de produit et par secteur d'activité. La consommation d'énergie par habitant au Togo s'élève à 0,27 tep pour 2016, en légère baisse par rapport à 2011 (0,29 tep) puisque la population a augmenté de 13% pendant que les consommations ont augmenté de 5%. Ce taux reste très nettement inférieur aux moyennes de la CEDEAO (0,52 tep/hbt), africaine (0,46 tep/hbt) et mondiale (1,3 tep/hbt), comme le montre la Figure 3 ci-dessous.

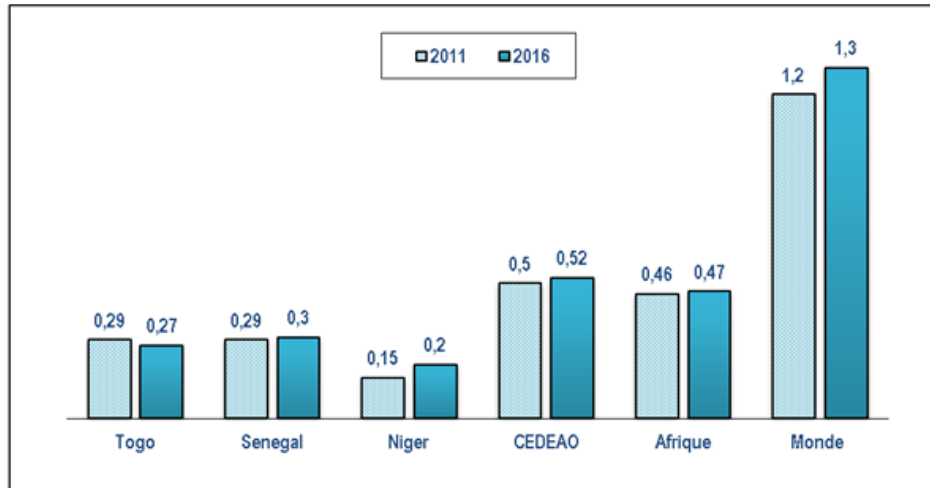


Figure 3 - Comparaison des consommations finales d'énergie (tep/hab)<sup>3</sup>

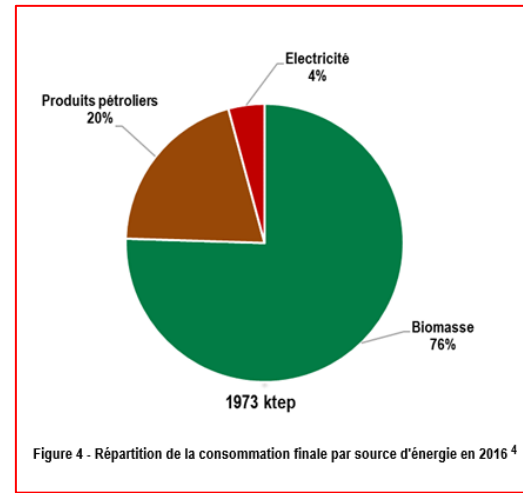


Figure 4 - Répartition de la consommation finale par source d'énergie en 2016<sup>4</sup>

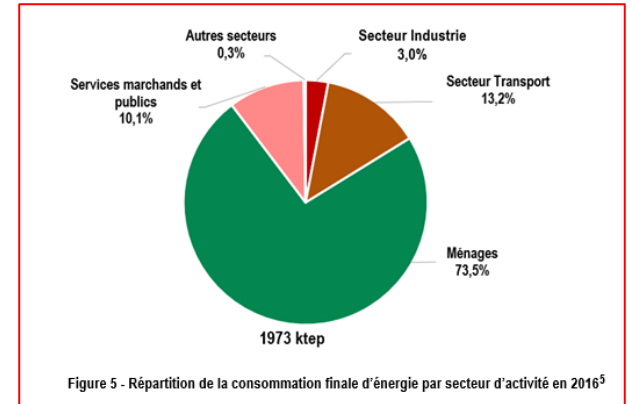


Figure 5 - Répartition de la consommation finale d'énergie par secteur d'activité en 2016<sup>5</sup>

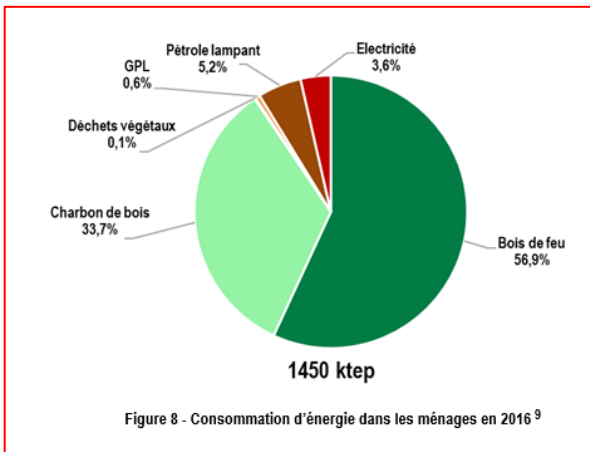


Figure 8 - Consommation d'énergie dans les ménages en 2016<sup>9</sup>

# SECTEUR ENERGIE

Au vu de la situation énergétique actuelle de notre pays et face à une demande énergétique croissante, une analyse approfondie est à faire afin d'identifier, connaître et disposer des voies et moyens institutionnels, juridiques, techniques, scientifiques, financiers et humains nécessaires pour y faire face. La dynamique actuelle des politiques énergétiques s'oriente vers l'élaboration de programmes et projets d'atténuation et d'adaptation aux changements climatiques dans le domaine de l'énergie. La maîtrise de l'énergie en ces moments où les impacts négatifs des changements climatiques perturbent le processus classique de développement ; la mise en place d'une régulation et d'un mécanisme approprié pour l'utilisation efficiente et efficace fait partie maintenant des solutions à entreprendre

Conscient du rôle que joue l'énergie dans le développement, le Gouvernement a fait de ce secteur l'une de ses priorités dans la mise en œuvre des actions de développement économique, social et culturel.

L'énergie étant aujourd'hui au cœur des préoccupations et un paramètre indispensable pour nos pays en développement dans l'atteinte des Objectifs du Développement Durable (ODD), le plus grand souci du Gouvernement est d'assurer un service énergétique à moindre coût aux populations tant en milieu urbain que rural. Cette préoccupation répond non seulement au souci de préserver l'environnement mais aussi à la mise en œuvre de l'axe 3 du Plan National pour le Développement (PND) afin d'assurer un développement durable.

L'accès à l'énergie suppose des choix énergétiques résultant des considérations ou d'arbitrages techniques, économiques, sociopolitiques et environnementaux en tenant compte des atouts et des contraintes. De telles démarches nécessitent des analyses précises, fondées sur des données disponibles et fiables. Le rôle de l'énergie dans les émissions des gaz à effet de serre et les effets néfastes des changements climatiques sont désormais largement examinés à travers la mise en place des mesures d'adaptation et d'atténuation. Ce sont là, autant d'éléments qui rendent l'existence du Système d'Information Énergétique (SIE), incontournable.

Le SIE-Togo, est un outil de référence pour servir l'ensemble des acteurs du secteur de l'énergie et leur permettre d'avoir une vision claire de la situation énergétique. C'est un outil d'aide à la décision et il permet de faire le suivi et l'évaluation de la politique énergétique du pays.

J'exhorte donc tous les acteurs du secteur à poursuivre et renforcer cette franche collaboration, sans laquelle rien ne pourra se faire pour relever les grands défis du secteur énergétique.

**SIE TOGO**

MINISTRE DES MINES ET DES ENERGIES  
DIRECTION GENERALE DE L'ENERGIE

**The Government has made energy one of its priorities in terms of economic, social and cultural actions.**

**One concern of the Government is to ensure a least cost energy service for both rural and urban populations. Axis 3 of the National Plan of Development.**

**Importance of a robust Energy Information System not only for energy but also for various impacts starting with environment, GHG, socio-economic, etc...**

**A strong call on all people and administrations of the sector to actively cooperate with people in charge of EIS.**

# FOREWORD

Bioenergy plays an important role in the domestic and industrial energy needs of Kenyans. It is renewable energy created from natural biological sources, and can be classified into

The Government of Kenya is committed to achieving the target of its population enjoying access to modern bioenergy services, including 100% access to clean cooking, by 2028, two years ahead of the schedule set out in the Kenya Sustainable Energy for All (SEforAll) Action Agenda. Improvements in the bioenergy sector will play a critical role in achieving these targets through sustainable production and efficient use of biomass waste to generate

of energy. The strategy, therefore, aims to address the strengths, gaps, opportunities and foreseen challenges to enhance sustainable exploitation of bioenergy. This strategy will go a



despite numerous efforts that have been made in the past 50 years to address issues touching on its sustainable production, efficient conversion/processing and use.

of energy. The strategy, therefore, aims to address the strengths, gaps, opportunities and foreseen challenges to enhance sustainable exploitation of bioenergy. This strategy will go a

and modern energy for all by 2030.

Hon. Charles Keter, EGH  
Cabinet Secretary  
**MINISTRY OF ENERGY**



Why does biomass which is so important in terms of energy, health, desertification and many other socio-economic aspects do not make the titles of African medias?

And do not draw the attention of policy makers?





Why can't we see Big titles like these ones

Why charcoal cannot be produced more efficiently

What has happened to our forest?

Could we still let our children die from the cooking fumes?



A young child in a green shirt and orange shorts is running through a dusty, polluted environment. The air is thick with dust and smoke, obscuring the background. The child is in the center-left of the frame, moving towards the right. The overall scene is one of hardship and environmental degradation.

unicef   
for every child

**Better Data**  
For  
**Better Communication**  
For  
**Better Policies**

*A large part is in your hands*

## **Silent Suffocation in Africa**

Air Pollution is a Growing Menace, Affecting the Poorest Children the Most

**Thank You**