GBEP sustainability indicators for bioenergy. Implementation and lessons learned

Workshop of the GBEP Task Force on Sustainability

"Linkages between the Sustainable Development Goals (SDG) and the GBEP Sustainability Indictors for Bioenergy (GSI)"

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Andrea Rossi
Programme Officer
Global Bioenergy Partnership
Food and Agriculture Organization of the United Nations (FAO)

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GBEP SUSTAINABILITY INDICATORS FOR BIOENERGY

ENVIRONMENTA	ECONOMIC
1. Lifecycle GHG emissio	roductivity
2. Soil quality	et energy balance
3. Harvest levels of wood resources	ross value added
4. Emissions of non-GHG pollutants, including air toxics	hange in consumption of ssil fuels and traditional use biomass
5. Water use and efficien	raining and re-qualification the workforce
6. Water quality	nergy diversity
7. Biological diversity in th landscape	frastructure and logistics for stribution of bioenergy
8. Land use and land-use change related to bioer feedstock production	apacity and flexibility of use bioenergy

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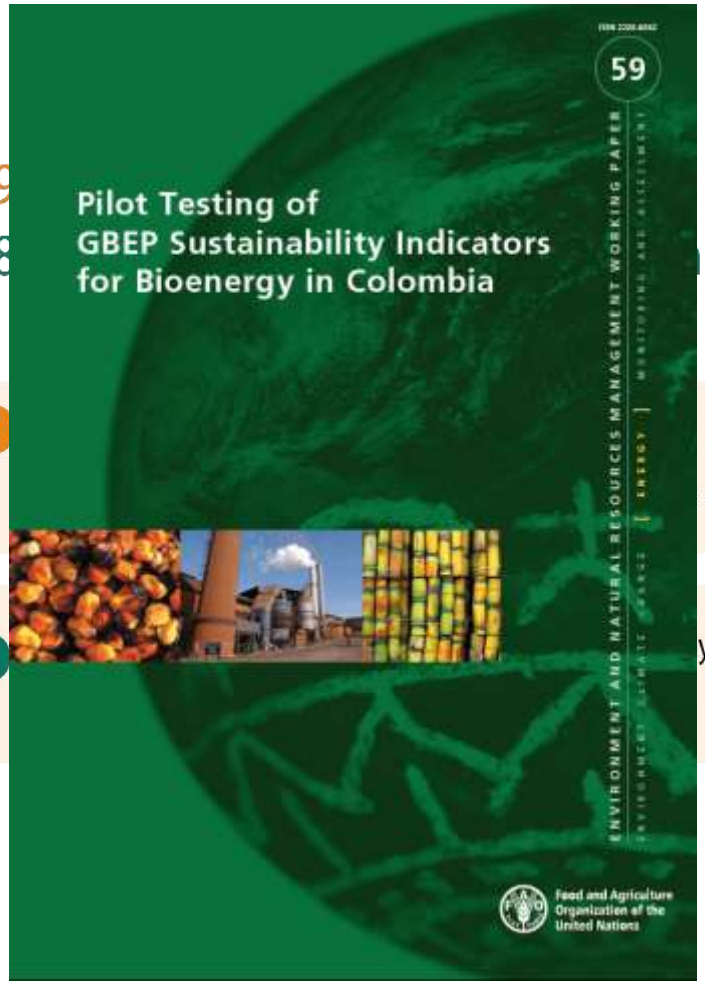
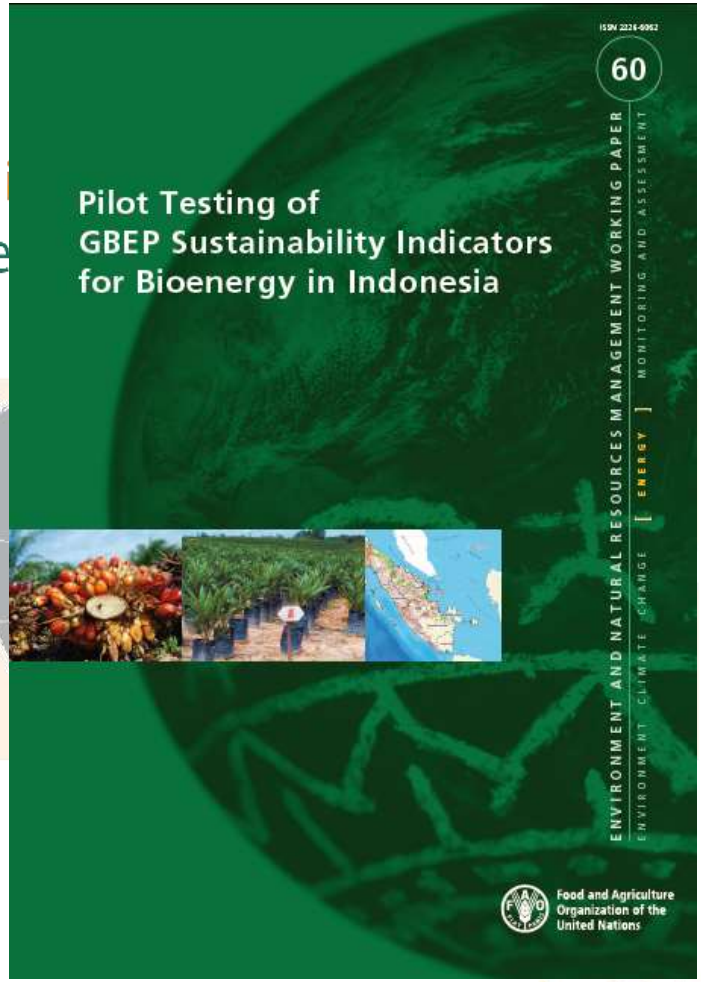
IMPLEMENTATION OF THE SUSTAINABILITY INDICATORS





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LESSONS LEARNT: RELEVANCE

- The indicators have proved to be a useful tool to **inform policymakers** about the environmental, social and economic **sustainability of bioenergy**. Periodic monitoring of the indicators would certainly **enhance** the **understanding** of this sector among domestic **stakeholders**.

- Indicator **methodologies** need to be **adapted** to reflect **local conditions** and the **results** of the indicators need to be **evaluated and interpreted** based on such conditions and on the specific **concerns and priorities** of the users of the indicators.

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LESSONS LEARNT: PRACTICALITY - DATA

- The GBEP indicators are rather **data intensive**. For a number of them, only **partial data** was available, especially for the **social indicators**, for which **surveys** might be necessary. Part of the data could not be obtained, e.g. due to commercial sensitivity.

- It is important to **engage all relevant stakeholders** in the data collection process. **Mechanisms** to facilitate a systematic flow of data/information from the **private sector** to the entities measuring the GBEP indicators could be explored.

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LESSONS LEARNT: PRACTICALITY – CROSS-CUTTING

- Where possible, **empirical information** is preferred to model estimates. **Assumptions** about the data and underlying conditions need to be made **clear**.

- The **spatial extent of the assessment** needs to be carefully defined, and care needs to be taken in **extrapolating site-level information to national-level indicators**.

- When indicators cannot be measured or as a complement to their measurement, the implementation of relevant **good practices** in bioenergy production and use could be assessed, including regarding their coverage and (if possible) their quality.

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LESSONS LEARNT: PRACTICALITY - SKILLS

- The GBEP indicators cover a **broad range** of **complex** environmental, social and economic **issues** and some of the indicator **methodologies** are rather **sophisticated**.

- A **multidisciplinary** team of experts with an in-depth knowledge of the **national** context and bioenergy sector is needed. **International experts** on **complex issues** such as GHG and food security might be needed as well.

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LESSONS LEARNT: MULTISTAKEHOLDER ENGAGEMENT

When the GBEP indicators are measured, it is crucial to **engage all relevant stakeholders** from government agencies, private sector organizations and civil society organizations, in order to:

- get access to the necessary **data** and **information**;
- receive **inputs** and **feedback**;
- discuss and interpret the **results**; and
- inform policy **discussions** and **decisions**.

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LESSONS LEARNT:
NEED FOR FURTHER GUIDANCE

- In light of the lessons learned from the application of the indicators, it has been decided to develop an **Implementation Guide**, which will provide guidance on **methodological** and **practical issues** related to the implementation of certain indicator methodologies

  → new scope of the GBEP TF Sustainability.

- Further guidance is needed especially on the **attribution** of impacts to bioenergy production and use, identifying a range of suitable approaches for each indicator. A paper is being prepared on this complex issue.

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LESSONS LEARNT: IMPROVING THE PRACTICALITY AND FACILITATING PERIODIC MONITORING

In order to significantly reduce the **time, skills and cost** required to measure the GBEP indicators, an **Excel and/or web-based application** could be developed, allowing users to:

- Collect **data** more easily;
- enter all **data** required for the 24 indicators into one single data entry sheet and get a set of **results** for each indicator based on the related methodologies;
- easily save and share the **results**; and
- re-run the **tool** over time with up-to-date information.

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THANK YOU!

GBEP-Secretariat@fao.org

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