FAO Support Package to Decision-Making for Sustainable Bioenergy

Making Bioenergy Work for Climate, Energy and Food Security

The rapid development of bioenergy, and in particular liquid biofuels, has generated considerable debate regarding their sustainability, in particular the so-called *"food versus fuel"* competition. The links between bioenergy and food security are complex and multi-faceted.

Making bioenergy development sustainable becomes even more challenging when trying to capture its potential benefits for rural development, climate and energy security. A sound and integrated approach is required in order to address these links and promote both *"food and fuel"*, and ensure that bioenergy contributes to sustainable development. This approach requires:

- An in-depth understanding of the situation and of the related opportunities, risks, synergies and trade-offs;
- An enabling policy and institutional environment, with sound and flexible policies and effective means to implement these;
- Implementation of good practices by investors and producers in order to reduce risks and increase opportunities; and
- Proper impact monitoring, evaluation and response.

In order to promote this sound and integrated approach, over recent years FAO, partly in collaboration with partners, has developed the **FAO Support Package to Decision-Making for Sustainable Bioenergy**.

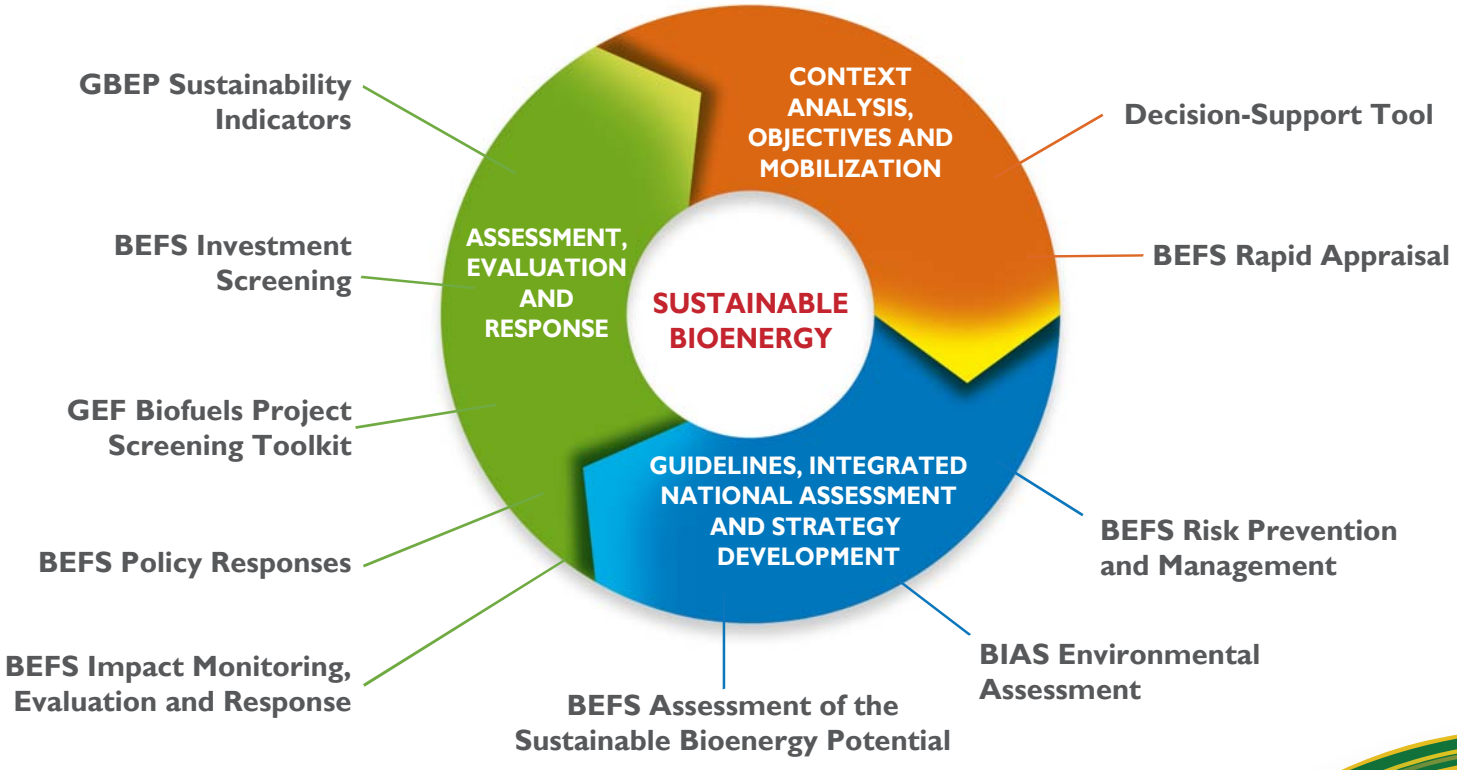
The support package includes different elements, which can be used independently or together at different stages within the decision making and monitoring processes of bioenergy development:

- The UN-Energy **Decision Support Tool for Sustainable Bioenergy (DST)**, prepared jointly by FAO and UNEP, proposes step-wise guidance for both strategy formulation and investment decision-making processes, and offers a repository of technical resources and links to existing tools, guidelines and information resources. The DST can be seen as providing a comprehensive framework under which the other elements of the FAO support package fit.
- The **Bioenergy and Food Security (BEFS) Approach** of FAO supports countries in developing evidence based policies derived from country level information and cross institutional dialogue involving relevant stakeholders. More specifically, the BEFS Approach consists of a multidisciplinary and integrated set of tools and guidance that can support countries throughout the following key steps of the bioenergy policy

development and implementation process: assessment of the sustainable bioenergy potential, based on an assessment of land suitability and production costs, and through an analysis of the environmental and socio-economic dimensions and implications of different bioenergy development pathways, with particular emphasis on food security; risk prevention and management, through good environmental and socio-economic practices and related policy instruments; investment screening and appraisal through the web-based BEFS Operator Level Tool; and impact monitoring, evaluation and response at both national and project levels. Integrated Food Energy Systems (IFES) is one type of good practice being promoted by FAO.

- The **Global Bioenergy Partnership (GBEP) Sustainability Indicators for Bioenergy**, developed with the significant contribution of FAO, and agreed upon in 2011 by 23 countries and 13 international organizations (with the involvement of a further 22 countries and 10 international organizations as observers) provide a comprehensive yet practical means of evaluating the impacts of bioenergy production and use in a country.
- The **Bioenergy Environmental Impact Assessment Framework (BIAS)**, developed to give a brief overview of the main environmental issues and to examine methodological options, platforms and databases and their limitations for evaluating environmental impact of bioenergy projects and policies. Issues covered include water, soil, biodiversity, gaseous emissions, land use changes and the bridging of data and knowledge gaps.
- The GEF **Biofuels Project Screening Toolkit**, to which FAO contributed, has been developed for use by the Global Environment Facility (GEF) and other actors to evaluate, screen for and address sustainability issues during the design, approval and implementation phases of liquid biofuel projects.

The diagram below illustrates the FAO Support Package to Decision-Making for Sustainable Bioenergy.



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