

Summary of German-funded FAO project to pilot the Global Bioenergy Partnership Sustainability Indicators for Bioenergy in Colombia and Indonesia for Bonn Nexus Conference

Please correct in previously submitted note the focal ministry for project in Colombia is (now) Ministry of Agriculture and Rural Development, not National Department of Planning.

Replies to possible questions to be raised during the announcement:

a. What is the Nexus relevance of this initiative? (i.e. how is it taking a Nexus Perspective? Or helping to improve water, energy and/or food security in a more integrated way?)

The Global Bioenergy Partnership sustainability indicators for bioenergy comprise 24 indicators, equally distributed across the environmental, social and economic pillars of sustainable development. The 24 indicators are to be evaluated holistically and enable synergies and trade-offs to be considered in light of national sustainable development goals. With special relevance to the Nexus, the indicators include water use and efficiency (taking into account watershed-level availability); water quality; price and supply of a national food basket; bioenergy used to expand access to modern energy services; energy diversity; infrastructure and logistics for bioenergy distribution; and capacity and flexibility of use of bioenergy.

As an indication of the interlinkages between indicators, it is highlighted that the core GBEP indicators relevant to food security are 1) Price and supply of a national food basket, 2) Land use and land-use change related to bioenergy feedstock production, 3) Allocation and tenure of land for new bioenergy production, 4) Change in income, 5) Bioenergy used to expand access to modern energy services, and 6) Infrastructure and logistics for distribution of bioenergy. Furthermore, it is recommended to consider water use for bioenergy in light of competing demands, including for food production.

b. What impact do you hope it to have?

Particularly given the fact that bioenergy cuts across many sectors and policy areas, there is a real need for bioenergy development to be based on a sound evidence base and on coordinated, integrated decision-making. One major objective of the pilot project is to help build the capacity of the Colombian and Indonesian governments to measure the indicators periodically in the long term. We also hope the use of the indicators will result in coordination amongst the various ministries responsible for different policy areas relevant to bioenergy policy, including agriculture, energy, environment, rural and economic development, forestry and health, and amongst different sectors and sub-sectors, such as crop production, livestock production and forestry. The project to pilot the indicators envisages cross-government and multi-stakeholder working groups to promote coordinated, inclusive and participatory decision-making. Ultimately, we hope that the availability of the required information and the increased awareness of the many aspects of bioenergy sustainability and their interlinkages will result in the realization and enhancement of the contribution of bioenergy to sustainable

development, including food, water and energy security, as well as climate change mitigation and poverty reduction.

c. What is innovative about this approach?

The GBEP indicators are unique in that they are a product of the only multilateral initiative that has built consensus among a wide range of national governments and international organizations on bioenergy sustainability. The indicators are meant to guide analysis at the domestic level and to inform decision making that encourages the sustainable production and use of bioenergy as a means towards meeting national goals of sustainable development. To do this, aspects of the analysis must be done at the watershed level. This is different from the operator-level indicators of e.g. certification schemes and regulations that already exist. This project is the first one to pilot the indicators and test their feasibility, with others being planned in West Africa, Japan, Germany and the Netherlands.

If time allows further comments:

The indicators are for an *ex post* evaluation of bioenergy production and use, but also point to a consistent approach to *ex ante* natural resource assessments and *ex post* monitoring and evaluation for bioenergy development. For example, the food basket indicator requires determination of current food consumption patterns, particularly among the poor, and is enhanced by food insecurity and vulnerability mapping. The water availability and use efficiency indicator requires the mapping of the level of water scarcity in watersheds where bioenergy production is taking place. Water use efficiency in bioenergy production is important, but not adding to water requirements in water stressed watersheds is paramount. The access to energy indicator relies on mapping areas and households lacking access to modern energy services and energy security indicators require mapping of distribution infrastructure and an assessment of the flexibility of energy infrastructure, including the ability to switch between food and energy use of raw materials.

Also innovative is the causal-descriptive assessment methodology developed to provide a simpler option for understanding the effects of bioenergy on food prices and supply.