## Thematic Debate on Rural Development

## Roundtable 1: "Bioenergy, sustainable livelihoods and the rural poor"

## Background

The panel was co-organized by the International Fund for Agricultural Development (IFAD), the Food and Agricultural and Organization (FAO), the World Food Programme (WFP), the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the Department of Economic and Social Affairs (DESA), the Economic Commission for Africa (ECA) and the Office of the High Representative for Least Developed Countries/Office of the Special Adviser for Africa (OHRLSS/OSAA). The panel was chaired by Mr. Anthony Severin, Permanent Secretary in the Ministry of External Affairs of St. Lucia and moderated by Mr. Abdoulie Janneh, Executive Secretary of the Economic Commission for Africa. The panelists include:

- Alexander Mueller, Assistant Director-General, FAO;
- Sonja Vermeulen, Programme Director, Business and Sustainable Development, International Institute for Environment and Development (IIED);
- Lionel Lopez, Director, Technoserve (Guatemala);
- Suzanne Hunt, Biotechnology Expert, Independent Consultant ;
- Mr. Cheick Sidi Diarra, High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (OHRLSS/OSAA) as lead discussant.

## Overview

Bioenergy has generated an enormous amount of interest and more recently, controversy in the context of rising energy costs and demand and increasing food prices, along with growing awareness and concern about climate change. Recent attention has focused in particular on liquid biofuels, which are mainly used for transportation. In theory, these biofuels have the potential to mitigate climate change by reducing greenhouse gas (GHG) emissions and enhancing the energy self-reliance of oil-importing countries.

Under certain circumstances, cultivation of feedstocks for liquid biofuels may benefit rural poor people and smallholder farmers by increasing access to energy, farm incomes, and rural employment and, thus, have the potential to contribute to poverty reduction and rural development. However, concerns have been raised regarding the actual impact to date of expanding cultivation of biofuel feedstocks, including the role this may have played in the sudden increase in food prices. There are calls for thoughtful reflection about safeguards related to biofuel production to ensure their contribution to climate change mitigation and avoid negative effects on food security, rural communities, and the environment.

The thematic roundtable discussion on "Bioenergy, sustainable livelihoods and the rural poor," chaired by H.E. Anthony Severin, Permanent Secretary of the Ministry of External Affairs of St. Lucia, provided an opportunity to discussed the above issues. Moderated by Mr. Abdoulie Janneh, Executive Secretary of the Economic Commission for Africa, the

meeting was informed by panel presentations from Alexander Mueller, Assistant Director General of FAO, Sonja Vermeulen, Director of Programme on Business and Sustainable Development of IIED, Lionel Lopez, Director of Technoserve in Guatemala, and Suzanne Hunt, an independent consultant. Mr. Cheick Sidi Diarra, High Representative of OHRLSS/OSAA, served as lead discussant.

The panel discussion centred on the complexities and interconnectedness of the issues of food, fuel, agriculture and climate change. **Some of the key messages were:** 

- Biofuels are neither savior nor scourge. In reality, they can be beneficial socially and environmentally or detrimental depending on how they are developed; "one size does not fit all".
- Safeguards are required to ensure that the production and use of biofuels is sustainable, contributing to climate change mitigation, energy security and poverty reduction and avoiding negative effects on food security, rural communities, and the environment.
- Bioenergy production can contribute to a country's development by reducing poverty, providing opportunities for rural employment and income generation, strengthening gender equality and diversifying a country's energy sources;
- Governments should play a role in developing policy frameworks to ensure that poor people benefit from biofuels, both for their energy needs as well as to increase their incomes;
- Biofuels are only part of the solution to rural development and should be integrated into an overall poverty reduction strategy. Similarly, it is only one in a range of strategies to address energy and climate challenges.
- There is a complex relationship between rising food prices and biofuel production and there are many contributing factors to the current rise in food prices.

The debate addressed the following key points of the debate:

*Key challenges to global food and energy security* result from population growth and increasing urbanization in the coming decades. With world population expected to grow by 3 billion people by 2050, food and energy needs will significantly increase in the first half of the 21<sup>st</sup> century. Already today, 5 billion people in low-income countries with rapid economic growth rates are seeking greater access to energy resources and energy demand is expected to almost double by 2050. Those trends are putting added pressure on agriculture and some areas of the world are already reaching the limits of their land and water-use capacities. In many parts to the world, governments and private investors have turned to the production of bioenergy, in particular liquid biofuels, to augment fossil fuel consumption. However, while total world wide use of bioenergy accounts for just over 10%, the share of biofuels is with 0.5% significantly lower than its more established cousin biomass. This suggested that, even if that share were to be increased, biofuels might still be the proverbial drop in the bucket of the global energy crisis. The food systems themselves are highly dependent on energy (and thus vulnerable to rising energy prices), so the agricultural system needs to reduce its dependence on fossil fuels..

Safeguarding food security and protecting the resource rights of poor people, while promoting rural employment and addressing energy needs is at the core of the policy debate surrounding biofuel production. There is evidence that biofuel production provides opportunities for rural development through the establishment of new markets and higher prices for crops, employment in agriculture and processing, infrastructure development and the possible development of localised energy systems. But increasing commodity prices run the risk of driving up land values. History shows that these trends tend to lead to acquisition of land among wealthier owners, increased land privatisation and land concentration, increased exclusion of poor people from secure land tenure. Women, pastoralists, forest dwellers and indigenous people are particularly vulnerable as they are less likely to have land titles or other secure land access.

Governments have a number of *tools available to support the twin goals of rural development and biofuel production* by applying a mix of safeguards against the threats to people's access to land and promote specific support measures for innovative business models to make the most of the opportunities from biofuel production for small-scale farmers, communal and smallscale private landowners and poor rural people. Safeguarding the rights and choices of poor people includes protecting local food system, consultating with local communities, establishing and enforcing mechanisms for appeal, arbitration and review. Of particular importance in this context is to ensure that that small scale producers are integrated in the economic value chain. Imaginative models are needed for ensuring that small-scale farmers have better access to the high-value biofuels markets (e.g. by being able to sell directly into a certified export-led processing chain rather than to intermittent local traders) and shareownerships in downstream processing, where start-up capital costs are very high and tend to exclude any small players.

Experiences with biodiesel production on marginal lands in Guatemala demonstrate *how the livelihoods of poor rural people can be improved with the help of biofuels*. In Guatemala, jatropha, a shrubby plant with few needs and the ability to flourish in poor and depleted soils, is used to produce both vegetable oil and biodiesel. Traditional crop and livestock farming among the countries' small scale rural producers does not generate enough income to lift rural families out of poverty. Structured in three phases of implementation along the value chain for the product, small producers are linked with large scale investors through an income diversification and leveraged biofuels programme that combines biodiesel and fish production. The introduction of jatropha in marginal areas generates additional income for poor rural families without jeopardizing their food production and food security. Scale is important, and the potential of organized small farmers can rival that of large-scale production. (see http://www.technoserve.org/work\_impact/locations/guatemala.aspx)

Overall, national *governments have an important role to play* in developing policy frameworks, providing financial incentives and local services, setting biofuel standards that take into account environmental and social considerations such as land tenure, and promoting research and development to ensure that biofuels benefit poor rural people and promote rural development. Policy makers with an interest in promoting biofuel programs need to follow a balanced approach by which economic viability and sustainability are assessed from the beginning and evaluated along-side considerations for food security, and social and environmental impact to avoid displacement, environmental degradation (i.e. impacts on

biodiversity, soil and water resources), deforestation, and increases in incidents of hunger and poverty. As biofuel production gains in prominence, more examples – positive and negative – are available to governments and policy makers to learn from each other. There are lessons learned available from all regions: Performance-based policies, such as the emissions standards introduced in California, seem to work better than mandate-based policies. Environmental and social sustainability needs to be factored in from the get-go. Land use, access to land and tenure security are key considerations in all countries that engage in biofuel production and land use mapping is an important tool in determining the best land policies for a given context. The importance of research and development, as well as South-South cooperation, was also underscored.

The key challenge for each government is to *promote both food and fuel production* in a way that promotes energy security, mitigates climate change, alleviates poverty, supports food security and rural development, and does not deplete natural resources or negatively impact biodiversity. The social and environmental sustainability of bioenergy will depend on whether its production is efficient, well-planned and managed, and if the rights of poor rural people are recognized and respected. This requires a careful consideration of sectoral policies related to forests, land-use and land tenure change issues, water use change, as well as pro-poor sustainable development strategies in a rapidly changing global context. It will also require efforts to strengthen governance and rights regimes related to natural resources and strategies and polices on biofuels are needed for both developed and developing countries to ensure ecosystems maintain their functions and resilience. A comprehensive set of policies or even an international agreement on bioenergy is needed to assure that bioenergy is produced in a sustainable manner and in accordance with environmental and social laws and regulations.