



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## HIGH-LEVEL CONFERENCE ON WORLD FOOD SECURITY: THE CHALLENGES OF CLIMATE CHANGE AND BIOENERGY

Rome, 3-5 June 2008

### FINANCIAL MECHANISMS AND INVESTMENT REQUIREMENTS FOR CLIMATE ADAPTATION AND MITIGATION

#### ABSTRACT

1. About three-quarters of the world's 1.2 billion poor live and work in rural areas. In addition, over half of developing-country rural populations are smallholders, and one quarter is landless, including some agricultural labourers, livestock keepers, and poor people not engaged in agriculture. Smallholder and subsistence farmers, pastoralists and fisherfolks depend directly on land and water resources, and the vagaries of climate, for their livelihoods.
2. The vulnerability and food security situation of many rural poor in developing countries is expected to worsen in the face of mounting pressures on soil and water resources, continued poor socio-economic conditions and low coping capacity, and impacts from climate change. It has been suggested that, as early as the coming decades, i.e., by 2020-2030, increased climate variability and more frequent extreme events such as droughts and floods could significantly increase risk of production failures in poor regions. Particularly at risk are sub-Saharan Africa and South East Asia, already food insecure today.
3. The recognized need to implement adaptation and mitigation strategies under climate change within the United Nations Framework Convention for Climate Change (UNFCCC) framework, and the financial mechanisms that have been established within it, offer a unique opportunity for developing countries, which could use funding to help their rural poor adapt to reduce their environmental and economic vulnerability, increase resilience of production systems, while contributing to global mitigation efforts through a range of land-based activities.
4. This paper discusses the needs of poor developing countries in terms of adaptation and mitigation under climate change. In particular, it assesses the significance of the UNFCCC-related financial flows that can be directed to agriculture and forestry in these countries. It estimates the overall funding potential, current bottlenecks, and future actions necessary to maximize these funding mechanisms and their relevance to rural poverty.

For reasons of economy, this document is produced in a limited number of copies. Delegates and observers are kindly requested to bring it to the meetings and to refrain from asking for additional copies, unless strictly indispensable.  
Conference documents are available at [www.fao.org/foodclimate/](http://www.fao.org/foodclimate/)

5. By 2030, investment and financial flows from the Clean Development Mechanism (CDM) in the agriculture and forestry sectors could provide as much as 10 billion US\$ per year, with an additional 1-5 billion US\$ per year from the Adaptation Fund of the Global Environmental Fund (GEF). This contrasts with total investment and financial flows needs in 2030 for mitigation and adaptation in agriculture and forestry of non-Annex I developing countries (i.e. countries without commitments, under the Kyoto Protocol, to greenhouse gas emission reduction) of about 80-100 billion US\$ per year. CDM costs are small compared to projected agricultural GDP in 2030 (about 3 percent), but are about 20 percent of the projected additional investments in agriculture due to socio-economic development alone.
6. The projected flows for agriculture and forestry under UNFCCC mechanisms in 2030 assume no changes to the current CDM structure, but with significantly increased demand for emission reduction compliance. With a view to harness increased financial flows from CDM to developing countries, it is proposed to include new land-based sectors within post-2012 CDM mechanisms, in particular avoided deforestation, improved forest management, agro-forestry and soil carbon sequestration; this proposed expanded CDM structure could contribute much larger financial flows by 2030, up to 50-100 billion US\$ per year.