Introduction

Goals of the report
The primary goal of this report is to contribute to the development of strategies to reduce rural poverty in sub-Saharan Africa (SSA) through investments in the agricultural water sector. An estimated 75 percent of the world’s poorest people – 880 million women, children and men – live in rural areas, and the majority of them depend on agriculture and related activities for their livelihoods (World Bank, 2007a). One-quarter of these rural poor live in SSA, where agricultural output has not kept pace with population growth in recent decades and where yields on land have been stagnant or declining, causing reductions in agricultural income and in per capita food production. Efforts to reduce or eradicate poverty in the region will not be successful without substantial gains in agricultural incomes.

The present report relies strongly on the view that agriculture in SSA is the most promising option for broad-based poverty reduction in rural areas, and sets the role of water improvements in a wider context of overall reforms and investments in agriculture. Several commentators have noted the high cost of developing irrigation projects in SSA, while others have described the high cost of transporting inputs and products along sub-standard roads to farms and markets located far from coasts and rail lines. In the light of these and other problems, it has been suggested that agriculture cannot provide the stimulus needed to achieve economic development in Africa with the speed and extent required to alleviate poverty in the near future. These alternative views propose public and private investments in other sectors.

While recognizing the difficulties and constraints facing the agriculture sector, there is no reason to accept that they cannot be overcome. This report holds that agricultural development is a necessary condition for achieving broad-based economic development, and that investments in smallholder agriculture will reduce poverty and improve livelihoods within a reasonable time. The population of SSA will continue to grow at a rapid rate through to 2050, with some countries doubling and tripling their current populations (Alexandratos, 2005). Successful efforts to prevent widespread deepening of poverty and large-scale, perpetual food crises on the subcontinent must begin very soon. Actions have to be taken on a number of fronts:

- to improve livelihoods in subsistence agriculture;
- to enhance smallholder competitiveness;
- to improve market access;
- to increase employment in agriculture and the rural non-farm economy.

In this package of measures, an important role has to be given to improving access to, and control and management of, water in rural areas.

The report proposes a method for identifying the locations where water constraints are a major factor in determining poverty and where interven-
tions can be made that would take large numbers of poor farmers out of poverty. These locations are determined on the basis of previous work that has divided Africa into different zones, based mainly on prevailing farming systems [FAO and World Bank, 2001]. The likelihood of implementing successful interventions in the water sector varies according to the main sources of livelihood of rural populations, dictated in large part by the predominant farming systems, themselves closely related to agro-ecological conditions. Understanding the geographical distribution of rural poor and their relation to livelihood zones helps in designing intervention strategies for improving water management and increasing both the resilience and productivity of agriculture, and for boosting agricultural incomes more generally.

**Organization of the report**

Chapter 2 reviews the state of knowledge on agriculture and rural poverty reduction, and the role of water. It focuses on the specific conditions of SSA in terms of agricultural productivity, poverty and water resources development. It identifies key challenges for the development of the agriculture sector in the region. In particular, it reviews the linkage between rural development and agriculture in the light of the “new rurality” [Cleveringa et al. forthcoming] in which the countryside of the region is rapidly evolving. It reviews the concept of a livelihoods approach to development, and analyses its implications in terms of water access control and management in rural settings. It introduces the concept of “livelihood zoning”, and stresses the need for a context-specific approach to interventions in water for poverty reduction. Finally, it stresses the need to place water interventions within the broader context of rural development, and the importance of complementary interventions, in particular in relation to institutions.

Chapter 3 provides a detailed analysis of the SSA region in terms of rural poverty, agriculture and water resources development, and the linkages between them. It demonstrates the large variability in poverty distribution across the region and enables a better understanding of major rural poverty reduction challenges. Through the adoption of a livelihood mapping exercise, the report identifies the main sources of livelihood of rural populations, based on a broad division of the region according to its main farming systems. It analyses 13 “livelihood zones” with regard to rural poverty, agriculture and water resources, and makes use of a simple and transparent criteria analysis to assess the potential for poverty reduction through water control interventions in each livelihood zone.

Chapter 4 discusses a set of typical water intervention options, and analyses their range of application and potential for poverty reduction according to the various livelihood zones. While the emphasis is on interventions that support crop and livestock production, it also considers domestic water and the importance of multiple-use water systems to support a range of productive activities. It discusses the need for a thorough analysis of different stakeholders in designing water interventions, and illustrates in particular the wide range of needs and how they vary from one category of stakeholders to another. It also presents a set of “essential conditions for success” for any water-focused poverty reduction programme and strategy.