



## **Ethiopia's water security and the state of Water Resource Management**

Tena Alamirew

Land and Water Resource Center, Ethiopia

Ethiopia pushes to emerge from livelihood that is characterized by marginal struggles for survival to prosperous middle income country. The push for economic growth and development is land and water centered. One of the positive outcomes of such push is the fact that Ethiopia has just attained the MDG goal on water supply. The strong tie between hydrological variation and GDP in Ethiopia means water security is the principal environmental risk for Ethiopia's economic endeavor.

Against the public perception that 'Ethiopia is endowed with water resources', guaranteeing water security for the poor and for productive enterprise is hampered by multiple factors including:- a) extreme climate variability, b) competition on water resources, c) 'fragile' institutional capacity to plan, execute programs and to factor complex environmental and social dimensions and climatic variability in investment programs, d) intricate past and current socio political landscape that leads to water resources management challenges and e) low storage capacity of the hydrologic compartments such as aquifers, soil water, surface water courses and lakes.

The external climate and population pressures and the intrinsic vulnerability of the socio-economic-environmental systems have led already to remarkable negative outcomes. Remarkable among them are a) massive famine and population displacement in 1970's and 80's b) depletion of water sources and related consequences, c) erosion of 'cultural landscapes' and customary water management institutions in pastoralist regions, d) 'stationary emergency' in water supply of major urban and pre urban centers, e) massive land degradation, pollution, and salinization of soils and abandonment of farming, f) low sustainability of water infrastructure etc.

The aims of this paper are a) to demonstrate water security as the principal environmental risk in Ethiopia and the horn of Africa and b) to provide key examples and features of the risk defining elements (hydro climatic hazards, social-political-environmental vulnerability) the various outcomes. Some element of needs as well as opportunities for technological innovation and institutional strengthening as a way of mitigating risk will be briefly discussed. Furthermore Ethiopia's ongoing programmatic efforts to curb the risks (eg Sustainable Land Management Program) shall be discussed in terms of the results they deliver. Although the topic is largely based in cases emerging from Ethiopia its implication is wider than the geographic scope covered here.