Statement by the Scientific and Technological Community at the Intergovernmental Preparatory Meeting for CSD-17, New York, Monday, 23 February 2009

(Presented by Gisbert Glaser, International Council for Science-ICSU)

The Scientific and Technological Community recognizes that *meeting the world's growing food demands in a sustainable manner is an urgent global challenge*. We need to increase agricultural production, while maintaining critical ecosystem services. This will require massive public and private sector investments. The advancement and application of *agricultural knowledge, science, engineering and technology must* be at the centre of efforts to address this challenge, as well as efforts to enhance N – S and S – S knowledge sharing and technology transfer. The long trend of declining investments in agricultural research, S&T and in extension services, by many governments and by international donors must be reversed. Knowledge and technology must be better targeted to the needs of small-scale farmers in developing countries, such as those in sub-Saharan Africa, who are among the poorest in the world.

In order to be able to address the real needs of these farmers, much enhanced farm level data collection and systems research, with full involvement of social scientists, and efficient extension services are required.

Climate change has already major impacts on food systems. Urgent efforts must be made to reduce the vulnerability of the agricultural sector to climate variability and change. There are critical gaps of knowledge in this area, as well as a lack of climate-informed early warning and response systems.

Drought and desertification rank among the greatest environmental and development challenges, Enhancing knowledge and a better knowledge sharing is needed, such as on integrated land and water management, engineering, and technology suitable to drylands conditions, as well as a thorough assessment of irrigation and other technologies currently used in drought- and desertification-prone regions.

Policy makers, farmers and the scientific and the scientific and technological communities face a widespread lack of reliable data obtained through long-term observations of land and water resources, weather and climate, drought and desertification, biological diversity, and other relevant parameters

To address this information gap, countries should ensure the proper functioning of long-term environmental and land use monitoring systems at national level, feeding into regional and global scale observation systems.

Finally, the S &T community recommends that governments support multi-stakeholder action such as outlined in the Call for Action "Farming First" jointly prepared by the Farmers, Business and Industry, and the S &T major groups. We are committed to work with <u>all major groups</u> and all relevant government agencies and ministries.