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High-level Conference on World Food Security: the Challenges of Climate and Bioenergy**

Roundtable 2: Climate change and food security

Dal 3 al 5 giugno 2008 si è svolto, alla FAO in Roma, sul tema della «Sicurezza alimentare mondiale, cambiamenti climatici e bioenergia», la «Conferenza internazionale ad alto livello» cui hanno partecipato – in rappresentanza dei 181 paesi aderenti alla FAO – 42 Capi di Stato e di Governo, un centinaio di Ministri e sessanta organizzazioni sociali e non governative.

La conferenza si è sviluppata in: *sessioni plenarie*, con discorsi di Capi di Stato e di Governo (i primi, anche come ospitanti in Roma, il Presidente della Repubblica, Giorgio Napolitano, e il Primo Ministro Silvio Berlusconi) e di Ministri (fra i quali i Ministri degli Esteri e dell'Agricoltura); e in *tavole rotonde* (Panels) dedicate a specifici argomenti, nel corso delle quali molto spazio è stato riservato agli interventi di esponenti e studiosi dei Paesi in transizione o economicamente arretrati.

La Tavola Rotonda 2 è stata dedicata ai mutamenti climatici e sicurezza alimentare. Vi ho partecipato, a nome dell'Accademia Nazionale delle Scienze e dei Lincei, e riporto la sintesi dell'intervento.

I would say a few words, and to recall your attention, on one of the fundamental natural resources: Biodiversity, which, although not very frequently quoted in this Conference, has been brought up during the Panel discussion by the President of the Panel, the Minister of the International Development of Norway.

Biodiversity includes all species and varieties of plants and animals, of macro- and micro-organisms living on the planet, all of them having in common the universal molecule of life: DNA. Therefore, in biodiversity, or better agrobiodiversity,

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in the wealth of genetic variability among the genomes of agricultural plants and animals, it is possible to find genes, gene complexes expressing useful characters, f.e. for adaptation of plants and animals to climate changes or for resistance to diseases and so on.

Moreover, the genetic richness, which unfortunately is in danger of erosion and therefore must be protected, can be increased by spontaneous mutations and by minute changes obtainable also through man's action. Consequently biodiversity can give rise – through plant or animal breeding – to new plants and animals more suitable to climate changes as well as to a more sustainable and competitive agriculture.

Therefore, biodiversity is really the unique, vital, natural resource.

Of course, such a natural treasure must be well and very urgently disposed for, because, as it is been said by many speakers, the world necessitates improved productivity, adaptation to climate changes, increasing amount of different commodities, resistance to biological and environmental stresses, etc.

Ultimately, scientific, technical, operative and direct participation and co-operation between experts of advanced and developing countries must be strongly supported and developed. Work can be performed jointly (it is my opinion) and directly on the spot, on the fields of rural communities together with farmers and experts of both developed and developing countries, f.e. analysing the presence of biodiversity and of varieties of plants more adapted to climate changes. In this way knowledge is shared in a bottom-up process, in bottom-up programs built together by local, national, and international institutions and research centres. Thank you.