

Italy-China Meeting on Soil degradation Beijing 1-6 June 2014

Soil degradation is the main emergency in Italy and China, that damages soil structure leading to losses of soil nutrients, fertility and ecosystem functioning through wind and water erosion. Though degradation is largely anthropogenic, and hence its rate is governed by the intensification of land use, extreme natural events, such as droughts or rainfall events of high intensity, exacerbate the situation. In addition to the direct damages such events have on populations, long term environmental losses are always present. Understanding and reducing the main causes of soil degradation may help in limiting inappropriate land use, unsustainable agricultural practices, overgrazing, and deforestation. Soil degradation was the topic of a meeting held in Beijing on 1-6 June 2014 at the Chinese Academy of Sciences between Italian and Chinese researchers. This meeting gave the opportunity to participants to discuss the most important causes of soil degradation at different scales, from surface reactions to soil components, from rhizosphere to soil horizons, from soil profile to landscape. The first day the meeting was held at the Institute of Geology and Geophysics of the Chinese Academy of Sciences and emphasis was given to instrumental and modelling approaches that can help in the evaluation of soil contamination and remediation. The relationships between soil, microorganisms and vegetation were instead the main topic of the second day, at the Research Centre for Eco-Environmental Sciences of the Chinese Academy of Sciences. Presentations were about the effects of soil contamination on soil microorganisms, including Archaea, the insights that can be reached by the evaluation of rhizosphere processes, the problems of erosion estimates under different land use, the new frontiers of agricultural management. The meeting was organised by prof. Claudio Colombo, from the University of Molise and sponsored by the RTD office of the Italian Embassy in Beijing with the supervision of the Science and Technology Counsellor Prof. Plinio Innocenzi. Presentations were given by 5 Italian researchers: Fabio Terribile, Elenora Bonifacio, Giuseppe Corti and Giuseppe Lo Papa and by 5 Chinese researchers: Haibin Wu Qingzhen Hao ; Qinsong Liu; Jizheng He, Chuanyong Jing.

