

Unbreathable air, rivers used as dumps, and uncontrolled urbanization: the environment is paying a very high price for the remarkable growth of the Chinese economy. Aware of this, Beijing has begun to ask other countries, including Italy, for help, as Corrado Clini, General Director of the Italian Ministry of Environment and head of the task force of experts working in China, explains in this interview.

## Environment: Italy comes to China's aid

COOPERATION

edited by Silvia Sartori



**C**orrado Clini, General Director of the Ministry of Environment and Territory, handles international cooperation programmes for the protection of the environment, the promotion of renewable energy sources, the fight against desertification and sustainable development. The areas of the world at which the programmes are aimed include the China of the new millennium, the China known for its sensational two-figure annual growth rate – and also the China in which the deterioration of the environment is swallowing up an alarming share of this very growth (economic

estimates vary from 5 to 10% of GDP). Mr. Clini has led the Ministry's task force, which has a permanent headquarters in Beijing and an office in Shanghai, since it was set up. This group of experts is helping China in its attempt to partially reverse its course and draw up amore environment-friendly model of development.

### **How did the Sino-Italian cooperation come about?**

In 2000, the Ministry of Environment and Territory started a Programme for Environmental Cooperation together with



the Chinese State Administration for the Protection of the Environment (SEPA), the Beijing Academy of Social Sciences (CASS), the Chinese Ministry for Research and Technology (MOST), the Chinese Ministry for Water Resources, the State Forest Administration, the National Reforms and Development Committee and the town halls of Beijing, Shanghai, Tianjin, Suzhou and Lanzhou.

The then Italian Prime Minister Silvio Berlusconi and Messrs Xie Zhenhua and Altero Matteoli, respectively the Chinese and Italian Environment Ministers, presented the programme, which the United Nations has included in its list of Partnership Initiatives for sustainable development, at the Johannesburg World Summit in September 2002. In 2005 the Chinese government recognised the value of the Italian

\_In China, the deterioration of the environment is swallowing up an alarming share of economic growth. A group of Sino-Italian experts is trying to alter that course by formulating a more environment-friendly development model

collaboration with the prestigious International Prize for Science and Technology.

#### **Who are the key players on the Italian front?**

Other than the Ministry of Environment and Territory, the Italian side involves the National Council for Research (CNR), the Environment and Energy Agency (ENEA), the National Geophysics Institute (INGV), the Universities of Bologna, Pavia, Turin, Tuscia and Venice, Bocconi University, Venice International University, the Mattei



Foundation and the Inter-University Consortium for Managerial Economics. The Ministry of Environment and Territory has entrusted the role of project manager for the cooperation programme to the Beijing office of the Italian Trade Commission so as to involve Italian companies in the cooperation programme and exploit the potential of our technologies.

**What are the areas involved in the projects carried out to date?**

The projects were identified in the context of the objectives and programmes envisaged by the international conventions and protocols of the United Nations on climate change, the protection of the ozone layer, the protection of biodiversity, the elimination of persistent organic chemical substances and the fight against desertification. In addition,

the projects on energy efficiency, renewable energy sources, exploiting waste for energy generation, forest management and reducing emissions of fluorine gas are aimed at generating carbon credits and emissions credits in accordance with the procedures envisaged by the Kyoto Protocol's Clean Development Mechanism (CDM).

**The Italian task force therefore proposes to work alongside Chinese institutions to carry out projects for environmental protection and sustainable development.**

Exactly. We have started over 56 projects in the context of the programme, aimed at monitoring and managing the environment, strengthening Chinese institutions at the national and local levels, protecting and preserving natural resources, managing water resources, exploiting waste for energy

generation, developing renewable sources and energy efficiency, sustainable urban planning, developing low-emission transport technology and systems, sustainable agriculture, protecting biodiversity and forest management.

### **What is the importance of training in this scenario of joint research?**

Training is undoubtedly one of the fundamental elements to consolidate and extend environmental cooperation. A training programme on environmental management and sustainable development directed at public administration officials and Chinese private-sector company experts was started in 2003 in collaboration with Venice International University. The programme has so far involved over 1,800 Chinese managers and experts, who have participated in Venice University's "classroom" training programme and site visits to Italian institutions and companies. The programme is placed in a long-term perspective with the objective of facilitating the active and responsible insertion of the new Chinese managerial class into the global dimension of development and environmental protection.

### **A new agreement was also signed last year to strengthen the Sino-Italian partnership in Shanghai.**

The Ministry of Environment and Territory and Shanghai's Tongji University signed a Memorandum of Understanding in April 2006 to set up an Italo-Chinese Centre for sustainable urban transport and the transfer of environmentally compatible technologies. In particular, the first high-output micro-turbine generator for trigeneration, a result of cooperation between scientific institutions and Chinese and Italian companies, which will provide an innovative and clean response to China's rising demand for energy, is to be installed on the Tongji University campus in Shanghai in the context of this agreement. The Ministry of Environment and Territory and Tongji University, together with Venice International University, have also signed a cooperation agreement to promote training in the field of sustainable development for Tongji University students and professors, who will be invited to attend seminars and

pursue Ph.Ds at Venice International University.

With the signature of this agreement, the Ministry of Environment and Territory has committed to financing a total of up to 27 scholarships over the next three years to support the participation of students and professors from the Chinese university in courses and lessons held at Venice International University.

### **Considering your involvement in the Shanghai area, will you also be participating to some extent in the initiatives related to the 2010 Universal Exhibition?**

The 2010 Expo is dedicated to the quality of life in urban environments, as its slogan "Better City, Better Life" indicates. In the context of the cooperation programme started with Shanghai's Tongji University, Italian and Chinese academic and business experts will draw up feasibility studies for the production and future sales of innovative hybrid vehicles with drastically reduced levels of emissions as compared to conventional vehicles. Italian technology for the production of extremely advanced two wheeled vehicles will be integrated into the Chinese transport network and tested in the context of Shanghai's World Exhibition in 2010.

### **Are there ongoing programmes in the agricultural field as well?**

One of our projects undertakes to transfer Italian technology and know-how for the development of sustainable agriculture on the island of Chongming to the north of Shanghai, at the mouth of the Yangtze River. The achievement of the pilot project will encourage reduced use of chemical fertilizers and the development of a cultivation system compatible with the characteristics of the soil. Actually, this project is part of a larger programme aimed at making Chongming an island of sustainable development where urban and infrastructural growth take place while taking into account the preservation of natural resources, energy production using renewable sources and a clean transport system. The substantial and symbolic meaning of the project is also demonstrated by the involvement of the United Nations Environment and Development Programmes (UNEP and UNDP).

**Only a few weeks ago, you presented the results of the environmental analysis of the General Plan for the sustainable development of the island. Chongming's Deputy Governor, Mr. Hu Jun, expressed great appreciation for the contribution of this co-operation and also hoped for continued help and support from Italy during the application of the Plan.**

The analysis we presented to our Chinese colleagues on 11 November 2006 evaluated the objectives of the Master Plan for the island in the lights of the principles of environmental sustainability and offered indications and proposals for efficient,

sustainable and harmonious growth on the basis of the best experiences and technologies tested in Italy and Europe. Environmentally compatible agriculture is among the principal areas of interest, as can also be seen from the creation of an experimental rice field for which our Chinese partners have requested Italian technical consultancy. As regards water treatment, China has shown interest in Italian technology for filter purification. We have also received invitations to supply technical consultancy as regards waste disposal and treatment as well as the production of clean energy.

On a wider scale, the Deputy Governor has also investigated opportunities for Italian intervention in another two major objectives for the island's development, i.e. the planning of a geological park and that of a model for environmental tourism on the island.

**These proposals from the Chinese side, as well as Mr. Hu's suggestion for the creation of an Italo-Chinese working group, would appear to demonstrate the significant and fruitful impact of Italian cooperation in the environmental field.**

I believe that what we are currently doing in China is a very important contribution to the healthy growth of this great country and, conversely, to a more balanced growth in the context of an ever-increasing globalisation. China, on the other hand, is well aware of the boomerang effect that a model of development that ignores the principles of safeguarding the environment and the health of its citizens would inevitably engender. Italy is making a noteworthy contribution in its institutional as well as its corporate capacities by supplying advanced and innovative technological assistance and drawing up feasibility and research studies that analyse the impact of economic growth on the environment.

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