

AN OUTLOOK ON RIVER RESTORATION IN ITALY: STATE OF THE ART, TRENDS AND PERSPECTIVES

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BACKGROUND

About two thirds of Italian fluvial water bodies will not achieve *good ecological status* by 2015. At the same time severe floods and droughts occur with increasing frequency all over the country. Although some of the major pressures having led to this situation have been stopped or at least limited (e.g.: in-stream sediment mining, point discharge of untreated pollutants), many others are still widely impacting on river ecosystems (e.g.: excessive water abstraction, flood defence works, diffuse agricultural pollution) and even increasing in the last few years (e.g.: hydropower, urbanization of floodplains), entailing potential continuing deterioration of many rivers. As a result Italy seems far away to accomplish the ambitious goals of the Water Framework (WFD) and Floods (FD) directives.



UP LEFT: flooding in Veneto in 2010; UP RIGHT: point pollution along a Piedmont stream; BOTTOM: Tagliamento river

STATE OF THE ART

At the moment, in Italy, River Restoration (RR) cannot be considered as a well established approach in public administrations for river basin planning and management. Concrete experiences are usually limited in terms of scale and typology (i.e. restoring longitudinal continuity mainly for fish fauna, local habitat reconstruction) and the very few wider scale morphological restoration schemes were all carried out in the same geographical area. At the same time the legislative and institutional frameworks are still not well suited to foster more sustainable river management, with a tangled overlap of plans and authorities dealing with river issues. Among the WFD River Basin Management Plans (RBMPs) adopted in 2010 (of which five fully approved only in the first half of 2013), few go beyond rather traditional measures to improve physico-chemical water quality and just a minor part of the Programmes of Measures (PoMs) shows a clearly integrated approach (e.g.: ecological restoration measures targeting also other goals, such as flood risk management). Moreover, only sporadic public funds are addressed toward ecological restoration measures, therefore the actual implementation of the very few good PoMs appear at this stage very uncertain.

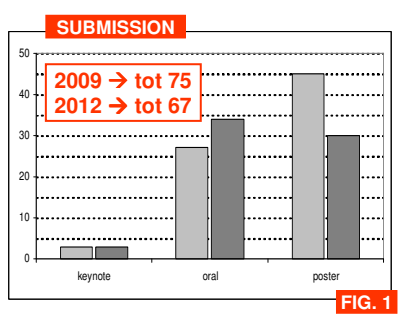


FIG. 1

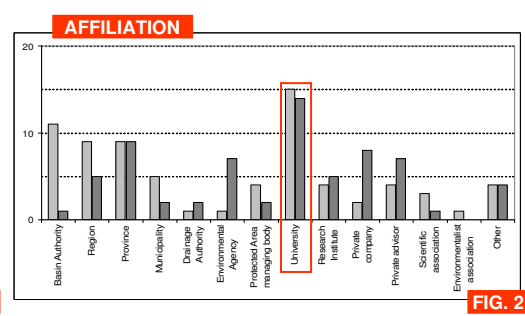


FIG. 2

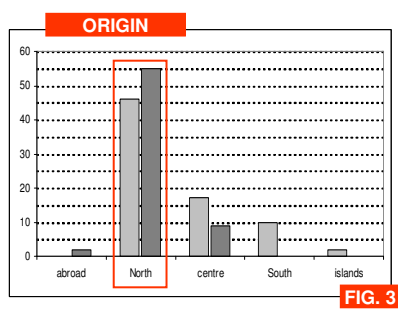


FIG. 3

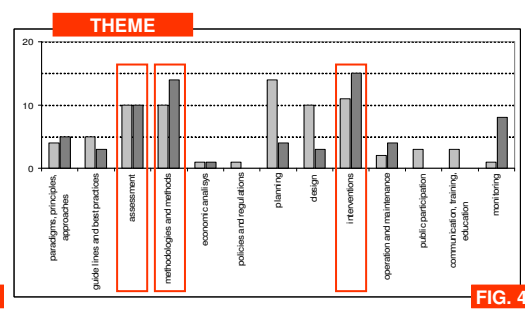


FIG. 4

TRENDS

However, an increasingly wide array of river restoration related academic research, field investigations, methodological advances and planning processes (including participatory practices) have been developed in the last few years, as shown by an analysis of contributions to the two national conferences on river restoration organized by CIRF in 2009 and 2012 (fig. 1 to 4). Although academic research is still predominant (fig. 2) and the increase of tangible measures implemented is still limited (fig. 4), there is a growing interest in RR from different public and private sectors (fig. 3). Anyway a number of case studies (significant but still low at national scale) has been acknowledged, including new appraisal and methodology approach ones. Nevertheless Italy still appears as a two speed country, with Central and Southern regions showing a very poor range of experiences.

PERSPECTIVES

As in many other countries, synergies with flood risk management can be the key driver to foster river restoration in Italy. With approaching deadlines of both WFD and FD, a change of pace is expected by the end of 2015. However, stronger and more explicit engagements are needed, through a broader empowerment of local communities but also at Government level. Launching a **National Strategy for River Restoration** with the definition of ecological restoration measures as a strategic tool to implement EU and national strategies (on biodiversity, flood protection, water issues), would surely help speeding up the pace. Especially if accompanied by legislative streamlining and dedicated funding, with a fast track dedicated to measures providing multiple benefits, recognizing the importance of the ecosystem services supplied. This Strategy would not be an additional plan, but rather it would provide River Managers (at every level) a clear scheme-process for exchanging information, setting measurable targets, dealing with conflicting objectives through effective participatory processes and implementing innovative solutions, including administrative-financial ones.