### INTERNATIONAL YEAR OF SOILS AND NICOLE

Two years ago, the 68th UN General Assembly declared 2015 the International Year of Soils (IYS 2015), with a programme of events implemented by the Food and Agriculture Organization (FAO) of the United Nations in collaboration with governments, professional bodies and other related organisations. The IYS 2015 aims to increase awareness and understanding of the importance of soil for food security and essential ecosystem functions. In particular, it aims to serve as a platform for raising awareness of the importance of sustainable soil management. Sustainable soil management is not only the basis for food systems, fuel and fibre production, and preserving essential ecosystem functions, but provides the key to adaptation to climate change for present and future generations.

The objectives of the year are to;

- Raise awareness among society and decision makers about the profound importance of soil for human life;
- Educate the public about the crucial role soil plays in food security, climate change adaptation and mitigation, essential ecosystem services, poverty alleviation and sustainable development;
- Support effective policies and actions for the sustainable management and protection of soil resources;
- Promote investment in sustainable soil management activities to develop and maintain healthy soils for different land users and population groups;
- Strengthen initiatives in connection with the SDG process (Sustainable Development Goals) and Post-2015 agenda;

"Land planning at present is based on very simple

considerations of what is practical in terms of

infrastructure. There is no consideration of soil quality

and its ability to perform different functions. It could

be a major improvement if soil quality was considered

in land management. A very simple example: building

on polluted land could be more reasonable in many

areas. Land planners need a better understanding of

soil functions. Better characterization of soil quality

would promote sustainable land management." Claire

Chenu - Head of the scientific council for France's national

research programme on soils, Professor of soil sciences with

AgroParisTech, and Special Ambassador for the International

Year of Soils 2015."

 Advocate for rapid capacity enhancement for soil information collection and monitoring at all levels

(global, regional and national).

NICOLE's work over the last 19 years has aligned with all these goals through its continual advocacy of sustainable land management and remediation practises.

# SUSTAINABLE LAND MANAGEMENT

NICOLE first publicly addressed the issue of sustainable land management in a 1997

joint statement with CARACAS, "Towards a Better Future: Establishing Fitness for Use and Sustainable Development of Contaminated Land in Europe". In 2001, NICOLE co-sponsored a Special Edition of Land Contamination and Reclamation Magazine entitled "The sustainable management and remediation of contaminated Land". This was followed

by a 2001 discussion paper on the need for sustainable Land Management which looked at the role of a risk assessment based approach that could deliver sustainable land management with an open and robust methodology to ensure land restoration was suitable for use.

"The Nation that destroys its soil destroys itself."

Franklin D Roosevelt

#### SUSTAINABLE REMEDIATION

NICOLE's advocacy of sustainable remediation has spread far and wide over the past eight years. NICOLE's approach was to look at the prospect of land remediation and restoration from a wide and early perspective in considering how to treat a piece of land. The Sustainable Remediation Roadmap pointed to the fact that the greatest sustainability gains could be made by considering a remediation project in the context of landuse planning. The key point is that land should be restored to a suitable for use standard, thus encouraging re-use of land by removing the need for restoration to unreasonable standards. By encouraging the re-use of land, the pressure to build on pristine land and thus destroy valuable soil resources should be removed. The work was endorsed in a joint position statement between the Common Forum and NICOLE, sending a very strong policy endorsement for sustainable land management in the EU.

## SOIL AS WASTE?

Of the many important issues that NICOLE has spoken out on in relation to soil was the 2004 Van Der Walle European Court of Justice ruling that polluted soil was waste, rather than retaining its soil definition. NICOLE worked hard to gather evidence from around Europe and provide a position paper on the proposed changes to the Waste Framework Directive (WFD) to allow a more flexible and sustainable approach to excavated materials and allow a risk based approach in

determining the level of clean up required. This proposed breaking the precedent of the linkage between treated contaminated soils and their classification of waste, and supported the reuse, recycling and recovery of contaminated soils as a future resource. This also addressed the Van Der Walle issue and was implemented in the revised WFD.



### **SOIL LEGISLATION**

Over the duration of NICOLE's existence, there have been many attempts to introduce an overarching Soil Framework Directive at a European level. Whilst blocked by certain member states who felt they had adequate and proportionate legislation in place to protect soil and supported by others who felt somewhat exposed in this area, NICOLE has paid great attention to the detailed wording of every draft and revision as it has unfolded. Always commenting to advocate a sustainability based approach to land use and management, NICOLE has captured a wide range of views of both industry and consultants across Europe on this contentious subject. 2014 saw the final withdrawal of the Draft Soil Framework Directive by the EU.

Although there are no direct proposals currently active, the Seventh Environment Action Programme (2014), recognizes that soil degradation is a serious challenge and provides that by 2020 land is managed sustainably across EU. To this end, proposals have been laid to change the strategy to deliver sustainable use and management of land-soil-water-sediment system (soil ecosystem services).

The European Commission is establishing an EU expert group on soils, intended to inform the Commission's

"It takes half a millennia to build two centimetres of living soil and only seconds to destroy it"

**Ann Glover** – former chief scientific advisor to European Commission

thinking on how to progress EU action on soils.

NICOLE will continue to track and comment making sure sustainable land management is at the forefront.

### INTO THE FUTURE

Potentially the biggest issues facing Europe are climate change and its associated impacts on the soil and water system. Storage of water is one of the key functions of a healthy soil system. In Europe, where we typically face an abundance of water rather than scarcity, ensuring we have enough storage in soils is paramount. Reducing the sealed areas is very important. This also has implications in how soils have been remediated historically. For some areas, soils have been sealed to prevent exposure to pollutants. Changing priorities means that this practise may be considered as unsustainable, as having a sealed surface may

increase flood risk. Continued soil sealing cannot continue unabated. NICOLE members have the ability to deal with this quantitatively and sustainable by looking at a wider range of technologies to achieve a sustainable remediation or restoration. And to take into account the wider benefits of the soil system in doing so.

Better characterisation of soils is also important. We need a better understanding of the baseline

Essentially, all life depends upon the soil... There can be no life without soil and no soil without life; they have evolved together.

**Charles Kellogg** 

condition of soils before we develop land to make sure that whatever we do we don't degrade the soil functions. NICOLE has a wealth of knowledge on soil characterisation that could contribute to this area and has a role to play in this.

NICOLE reaches its 20th year next year. In looking back at how NICOLE has contributed to the sustainable land management agenda and how that safeguards soil, we have also seen that there will be changes in the future as the climate changes and NICOLE will look forward to participating in the development of such an important area of policy and practice.



Sarah MacKay -ERM

NICOLE is a network for the stimulation, dissemination and exchange of knowledge about all aspects of industrially contaminated land. NI-COLE has more then 100 members from 18 European countries. Members include industrial companies and trade organisations (problem holders), service providers/technology developers, universities and independent research organisations (problem solvers) and governmental organisations (policy makers).

The network began in February 1996 as a concerted action under the 4th Framework Programme of the European Community, but with strong support quickly became self supporting, financed by the fees of its members, in 1999.

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