



No. 4 – December 2013

## Beyond the Limits: Implementing a Resilient Future

**T**he publications of Limits to Growth and the first United Nations Conference on the Human Environment in Stockholm, in 1972, have become milestones for Global Environmental Policy. Forty years later, a new report to the Club of Rome, and documents for the Rio+20 Conference, depict a world facing huge challenges. Effective responses have been rare!

Are current challenges too complex to be addressed? Does this imply there are misunderstandings? Or is there a lack of institutional capacity to address these challenges using a multi-level governance regime? Can resilience serve as a creative framework for more effective responses at local, national and international levels?

**Ian Johnson**, Secretary General of the **Club of Rome** and former Vice-President for Sustainable Development at the World Bank, and Dr. **Per Olsson**, Head of the Initiative on Innovation and Transformation in Socio-Ecological Systems of the **Stockholm Resilience Centre**, addressed these questions during a Public Conference organised by GEPP on the 26<sup>th</sup> of November 2013 in Geneva.

### Exploring the limits

The world has witnessed dramatic changes over the past decades, including the collapse of the Soviet Empire, the rise of emerging countries such as China and India, the deregulation of sectors like energy and financial industries, the rise of globalization, but also of environmentalism and of our concern for global poverty.

Five pressure points can be highlighted that oblige us to think about our planet in a very new way:

- The first, and most often associated with the Club of Rome, is **ecology**: climate change, but also all kinds of pollution, loss of biocapacity, water scarcity due to rising access cost.
- Second, two recent **food price crises** might signal that the end of cheap food era has started already, while these two spikes put an extra 75m people below the poverty line.

- Linked to the previous point with the rise of speculation on food commodities, the **financial and banking crisis** is the third point. The financial sector is now disconnected from the real economy.
- Fourth, the issue of **employment**. There are probably one billion people that are underemployed, and 1.7 billion people are under the age of 15, the greatest potential resource but also the greatest risk we might face. Labour substitution is also happening as a widespread phenomenon.
- Finally, two billion people are living in **poverty**, and this is moral, economic and increasingly ecological issue.

It is important to notice that all these pressure points are interrelated: the financial crisis reduces investment in renewable energy, food commodities have become financial commodities, ecological effects have an impact on poverty, etc. There are therefore underlying causes that need to be identified and then addressed. It is also clear that these pressure points are all anthropogenic; they are not inalienable laws of Nature, so we might have the creative ingenuity to fix them. We are at an inflexion point, where there are discussions and debates, particularly in civil society.

### Addressing the underlying causes

There is first a need to address the issue of **values**, to have a normative debate on what kind of world we want for the future. We have to look at different value propositions: How much do we really care for future generations? Which relation should we have with Nature? Are we a part of Nature, or apart from Nature? What is the extent of our social conscience? Do we care about people we don't know and don't see? How this is linked to the issue of global poverty? What is our tolerance for risk and uncertainty?

Second, we have to move towards a **new economic thinking**. We have to invent an efficient economy that





reduces waste, an effective economy that creates jobs, a sustainable economy that values natural capital and a viable economy that restores the link with the real economy. We have to move from partial thinking of economics to holistic thinking where we look at all effects. Full cycle costs must be examined, like decommissioning costs for nuclear energy. Economics must also be understood as a means to an end, setting the aspirations of society by the values we have, not the economics we utilise. Economics is not Newtonian, it is not handed down by inalienable laws of Nature; it is what we make of it. In this regard, new tax policies are needed, taxing fossil fuels rather than subsidising them and rather than taxing labour. Growth economics is based on the outmoded thinking that an increase of consumption is the main driver of prosperity. It must also be rethought and replaced by an economics of well-being.

Third, there is need to reform **institutions**, especially the way society is organised. Markets must be reformed, and be linked to real-world economics; excessive speculation has to be curbed with instruments such as the Tobin tax. More transparency and accountability is also needed. Non-market goods, public goods, also need new markets, and that will require new partnerships between public and private sectors. More directive institutions are also needed: public policies and natural capital boards that should help setting the real value of nature. Standard setting is also required, for instance to increase goods longevity, and also to reduce food waste.

Fourth and last, the issue of **global governance** should be addressed, as the globality within us becomes more recognised, along with a growing sense of a global citizenship. The current framework, organised around the

UN system, is not efficient! Three types of issues must be looked at: global commons, global conscience issues and global rules.

### Implementation through transformation

Addressing the above mentioned issues requires models to think the patterns of transformation. Fig. 1 illustrates the sequence of events that leads up to a tipping point when other feedbacks start to dominate. The navigating and then stabilizing phases for building resilience of the new regime can then occur.

The transformative capacity differs in each phase:

- **Preparing for transformation:** experimenting new ideas, building networks, gaining momentum.
- **Navigating the transition** means institutionalizing, connecting to the politics.
- **Stabilisation phase:** setting up routines, building resilience.

A window of opportunity can be triggered by a crisis, or socio-political changes. Two factors are crucial for the success of the process of transformation: innovation and agency. Innovation is nothing new but it must become more demand driven, and inclusive with scaling up opportunities. Agency means that leaders are required, and above all that connecting the right bodies at all levels is crucial.

Resilience is both the existence of a transformative capacity and the result of a successful transformation process, but we must keep in mind that some negative features of our world have proved to be the most resilient over the past decades.

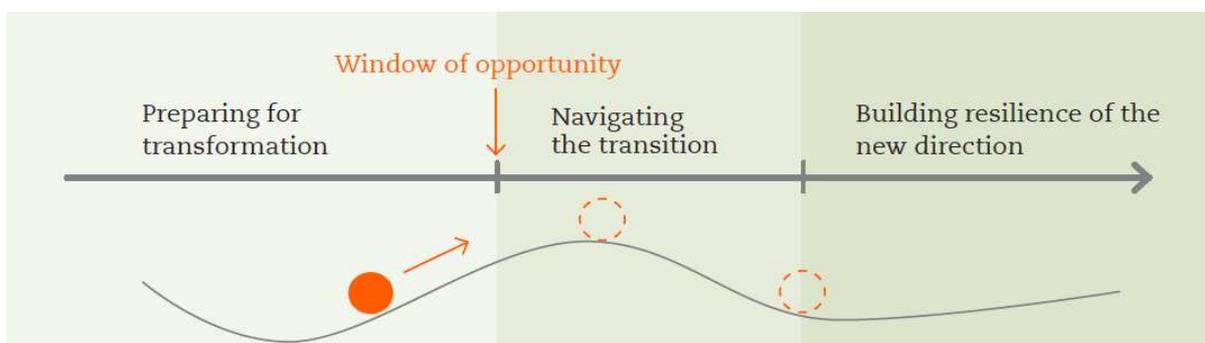


Fig. 1. Phases of transformation (Source: Olsson et al. 2004).