## **Messages from Resilience 2014 to Resilience 2020**

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(Presented by A. Botta at "Building Resilience For Food & Nutrition Security, 15-17 may 2014, Addis Ababa, Ethiopia")

#### **Introduction:**

First I would like to thank the 2020 Resilience organizers for having invited the CIRAD to this very interesting conference.

As one of the coordinators of the Resilience 2014 conference, with François Bousquet, and in the name of the scientific committee, I'm here to report from the  $3^{rd}$  edition of international science and policy conference on the resilience of Social-Ecological Systems, associated with the RA network.

RA network is a research organization created in 1999 comprised of scientists and practitioners from many disciplines who collaborate to explore the dynamics of social-ecological systems. RA provides a foundation for sustainable development policy and practice for the last 15 years.

One of the challenges to emerge from previous SES resilience conferences was the need to reinforce and explore the multiple links between the resilience thinking and development issues. That dialog was the overarching theme of last week conference in Montpellier, France.

940 scholars and other stakeholders from more than 60 different countries attended that conference and I recognized few of them in this room today.

### 1. What we mean by SES resilience: there is more to it than bouncing back

I know that some of you may be tired of that exercise, so I will simply recall two aspects of SES resilience that partly differ from most of the definitions I have heard here.

**SES resilience** includes the multiple **links between societies with their environment**. These links may damp or increase shocks and pressures on our societies, favor or prevent adaptive or transformative capacities as for example: multi-scale food web feedbacks or long term dynamics such as those involved in soil biochemistry. And most of the time they are overlooked by development approaches.

Thinking in terms of SES resilience is about recognizing a plurality of possible trajectories, by defining the futures we don't want in term of society-environment interactions, and therefore about defining a set of acceptable futures. By **not picking a single optimal option**, one lets the possibility to the society to develop **emergent adaptation dynamics to unknown perturbations and changes to come, and potentially to decide to take a different trajectory**.

If the current situation is not acceptable, then it is about changing drastically this functioning to transform our society, our environment and theirs interactions. As it is the case with "poverty trap".

Resilience 2014 put a clear emphasis on transformation as the missing element of the current debate: cf. title Resilience & Development: Mobilizing for Transformation!

# 2. Let's move beyond advocacy; they are still some unanswered questions and resilience is not the panacea

Resilience tools and approaches have been developed with a systemic approach. We do have theories and tools that deal with **complex systems** to address certain aspects of changes such as the links between ST and LT dynamics and across spatial scales including social and ecological dynamics in order to learn from the past and envision our futures: participatory approaches to engage with the various decision levels and social networks that need to be associated (such as prospective scenarios), methods to detect early warning of tipping point ...

Other aspects of change such as social justice, equity and associated power-issues are still not fully addressed by these tools => there are some ongoing progress, and we need to cross resilience with other frames and knowledge on that matter such as those of political ecology and political economy for instance => It's one of the frontiers for future research and development.

Certain development issues have been more investigated than others: several examples of concrete application of RT has been presented addressing disaster management and adaptation to climate change but the added value of RT to address poverty issues is still to be shown.

Resilience building is not a substitute for poverty alleviation

These two first points illustrate a general debate that we had last week on two uses of resilience thinking:

- an **overarching framework** conciliating LT/ST, cross-sectorial, cross-scale, embracing humanitarian and development question. And it is also the dominant choice that I have been hearing here.
  - Very seductive as it is offering missing links
- but also potentially dangerous by making **RT the new buzz word to speak about everything**. That opens the door to potential misunderstanding, difficulty for measurement and potential instrumentation. Some sociologists and anthropologists are already accusing RT to be used to advocate the same old approaches to development. We have to be careful that RT does not to take the same path as "Sustainable Development".

# 3. Agreeing on principles is not enough and the way to implement adaptive and transformative strategies is essential!

It has to include cross-scales links (ST humanitarian /LT development, small/large scales,...), cross-sectors links (food security may be some time too narrow of a focus and it may be necessary to account other aspects to actually tackle the root of the problem), in a **democratic way including accountability and responsiveness** => cf. The **importance of the context** and the need for **adaptive governance**.

### 4. The necessity and the associate difficulty to monitor and evaluate resilience

Last week, we had several sessions addressing that issue from 2 different angles: **measuring resilience as an outcome / evaluating resilience as a process**. We need to move beyond this debate as both metrics and process evaluation are needed; they **are complementary** rather than in opposition. But we need to be clear about the aims of each set of indicators.

Ex of metrics: Christophe Bene and Luca Alinovi work presented here (when and where)

Ex of assessing approaches: the poster displayed on the screen in the corridor on the practitioner workbook of RA and the associated data base **and Community of Practice** (this approach has been institutionalized in Australia).

Several speaker last week as this week, have pointed out the importance of having a long term view on both monitoring and evaluation.

#### **Conclusions:**

- The role of Science

First one could question how we define as science: not only what happen in research center and what is done by academics. Science happens in the field, with practitioners and includes a diversity of knowledge.

Panelists pointed out the first day the lack of private sector participants to this conference but there is also a large community of scientist conceptualizing and developing tools as well as testing these concepts, tools and approaches in the field, that could bring extra insights on what is debated here. Very few people participate to both conferences.

- The risk of dogmatism and instrumentation: the tyranny of learning

Thank you for your attention.