

THE TIP OF THE ICEBERG

LEARNINGS FROM SUSTAINABLE REMEDIATION IN SOUTH AMERICA

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1. Introduction

Brazil is a challenging country when it comes to overcoming environmental issues and proposing innovative ideas to deal with recurring problems. The same applies to all developing regions, where most of the world's population lives. They suffer from serious environmental conditions but lack on solutions on how to deal with them. Contaminated lands and the lack of access to clean drinking water and sanitation comprise some of the key environmental concerns that negatively impact these communities. Increasing global awareness on these issues encourages emergent nations and organizations to develop sustainable solutions to these environmental dilemmas. Latin America represents one region that recognizes, and is currently addressing, these important concerns and is a region that has a lot to benefit from preventative practices associated with major disruptive tendencies and initiatives like the circular economy.

On the whole there is little, if any, understanding of the complexity of contaminated lands and the impact on regional groundwater and the societies that surround them. In developing regions, remediation of contaminated land and the protection of groundwater entails major social challenges, often more significant than financial and economic obstacles.

2. Methodology

In order to access knowledge from specialists on the remediation area, promote the confrontation of visions on the subject and foment a brainstorming of ideas, the Ekos Brasil Institute and NICOLE Latin America organized in 2018 the XI edition of its traditional bi-annual Ekos Brasil Seminar as a joint event with the International Sustainable Remediation (SustRem) Conference, a first of its kind in Latin America. The event brought together more than 400 international and national experts from industries, service companies, universities and public institutions, addressing environmental and social challenges based on four main themes as shown here.



Main themes of Sustrem 2018

At the end of the Conference we organized a poll to document the participants' views on how to achieve solutions in the remediation area, especially on complex projects. Participants voted online using their cellphones and the results were displayed in real time. Afterwards, the results were discussed among participants and specialists. Images from the XI Ekos Brasil Seminar/SustRem 2018 are shown below.



XI Ekos Brasil Seminar/SustRem 2018

3. Results

For **Solutions**, 65% of the audience voted for "Simple approach to decision making as the most viable option", 48% for implementing innovative technologies as a key action, and 75% asking for implementing international standards like ISO18504.

On creating **Trust**, "a frequent and transparent dialogue" came unanimous for "developing trust among stakeholders", and 98% of voters saw a need to have effective risk communication training.



Coming to **Value** creation, 80% felt they can be "transparent with the public, the government and clients while working on contaminated sites", 95% intended to pursue the opportunity to "utilize waste as a viable resource in project management strategies and consider circular economy as part of the solution", and the number one word thinking about sustainable value was "**FUTURE**".

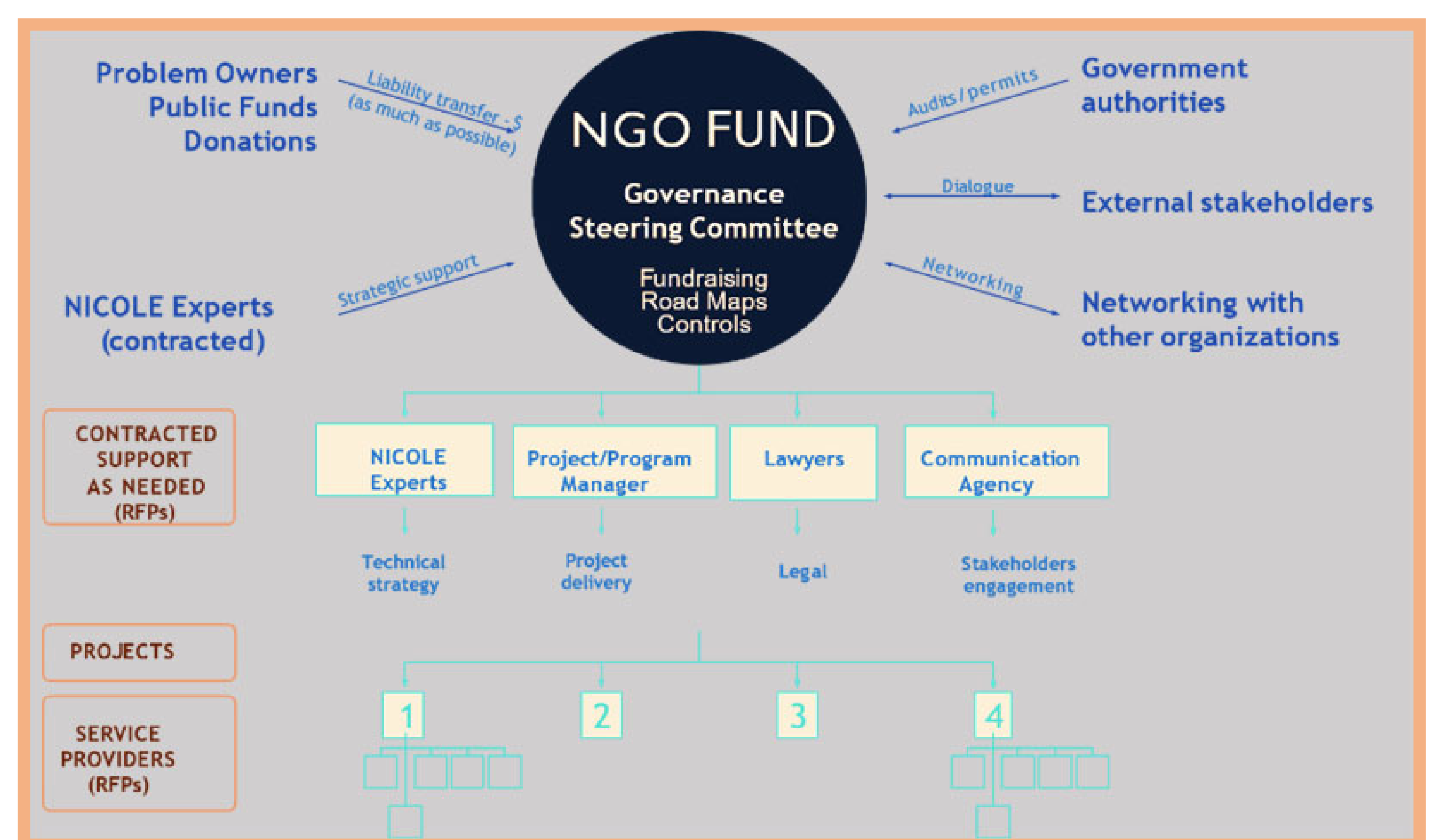
Coming to **Transforming** the way we operate, 41% voted for "transforming our mindsets", 36% for "transforming communities", and 23% for "young professionals". The most important goals of remediation for generating value were in order of importance, human health, risk mitigation, increased quality of life, resource recovery, and employment opportunity. The top word from the poll for "finding the balance between the three pillars of sustainable remediation" was "**TRUST**". And finally **88% agreed NGOs can play an important role in building trust among stakeholders.**

4. Conclusions

This event was a real success and gave us the Keys for successful sustainable remediation projects :

- ✓ Stay **Simple** and practical, while seeking innovation;
- ✓ Build **Trust**, consensus and credibility being transparent, independent and technically expert;
- ✓ Think **Future** and **Broader**, looking forward and beyond the boundaries of the investigated site;
- ✓ **Transform** the way we work with new approaches and solutions such as **Circular Economy** and **NGOs**.

The NGO Proposition was then developed by Ekos/Nicole Latin America, defined as a non-governmental, non-profit organization to solve complex or sensitive environmental projects. The NGO, via a small and focused Steering Committee as the Governing body, would have the role of being a neutral entity with high technical capacity and credibility for the strategic planning and control of the project, supporting stakeholders in building consent for solutions encompassing all involved, in order to build solutions based on mutual trust, credibility and respect.



The NGO Proposition – How it will function

The main mission of the NGO will be to dialogue with stakeholders, negotiating solutions on behalf of problem owners, transferring as much as possible liabilities to the NGO; raising and managing funds financed by multiple sources; developing road maps; controlling independently the environmental performance of the project; networking with other organizations; fostering innovation and promoting young professionals in the beginning of their careers.

The NGO could accumulate financial resources in a Remediation Fund, submitted to the control of a focused Steering Committee and directed to orphan sites, where no financial resources are available, or complex, multi-user sites, where the responsibility of polluters is not entirely established and/or accepted by the main stakeholders and nothing is happening, like so many cases around the world.

Event report with more details can be found at <http://seminario.ekosbrasil.org/resumo/>