



EviBAN

Evidence Based Assessment of NWRM
for sustainable water management

EviBAN Learning Alliance - Conceptual framework and KPIs

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Introduction

The concept of Learning Alliances (as well as other methods to promote social learning) is gaining popularity, as a way to try and overcome the twin challenges of solving increasingly complex problems and scaling-up innovations in urban water management (Verhagen et al. 2008). Under Task 1.3, SINTEF, with support from Aalto and BRGM, will facilitate a Learning Alliance, to involve multiple stakeholders and ensure co-development across the cases in EviBAN.

The Learning Alliance will draw on and provide inputs to the co-design in WP2 and 3 and provide annual recommendations for dissemination in WP4. The process will be built around a common virtual workspace, an annual stakeholder workshop locally for each case study, and annual workshops for the project partners and key stakeholders from all partner countries, in connection with the consortium meetings.

This document provides a description of how the concept Learning Alliance is understood in EviBAN. It outlines the intended process and defines a set of key performance indicators for

- monitoring progress
- identifying strengths and weaknesses of the chosen approach
- learning across cases, as regards co-development and stakeholder involvement
- if need be, make adjustments to the overarching approach (for example in number/format of workshops, level of electronic communication, etc.)

The Learning Alliance concept

A Learning Alliance is a series of interlinked stakeholder platforms from a given innovation system that seeks to realize widespread impact through the upscaling of an innovative approach. In EviBAN it is nature-based solutions, and more especially natural water retention measures (NWRMs) that we want to promote. The specific solutions in the pilot cases are diverse, but they still have common characteristics as *"multi-functional measures that aim to protect and manage water resources using natural means and processes, therefore building up Green Infrastructure, for example, by restoring ecosystems and changing land use"* (EC 2014). There are common challenges and opportunities in how to manage and promote the solutions, to be addressed through the EviBAN Toolbox, and there are different experiences, knowledge pools and network resources in the cases, that we want to bring together and learn from. According to the project description, we therefore aim to run the collaboration process and series of case-specific and joint workshops as a Learning Alliance.

The Learning Alliance approach is associated with so-called "Mode Two" knowledge production (Gibbons 1994). Mode Two knowledge production involves multidisciplinary teams that work together on specific problems in the real world, in contrast to mode one knowledge production which is motivated by science alone and less concerned with the application and impact of the results. Gibbons noted that this type of knowledge creation both promotes and depends on the interaction of multiple actors and knowledge sources. In

order to enable lasting uptake of technological, social and institutional innovations, it is necessary to respond to rapidly changing contexts and demands and therefore to engage actively with different stakeholders throughout the different stages of the process.

A Learning Alliance can be understood as a process undertaken jointly by research and development actors through which research outputs are shared, adapted, used, and innovated upon. This is done to strengthen local capacities, improve the research outputs, generate and document development outcomes, and identify future research needs and potential areas of collaboration. Applied in EviBAN, this means that while conducting the interaction and meetings in order to realize the planned activities and outputs – the technical content of the project – we also aim to build common ground between the different disciplines and practice fields involved, to achieve experience-sharing across the cases, and debate and evolve together tools and recommendations for how to address institutional constraints and enhance institutional learning on nature-based solutions (Verhagen and Butterworth, 2008).

The EviBAN Learning Alliance

Broadly speaking, Learning Alliances seek to:

- Feed research outputs into existing or proposed development activities
- Track use, adaptations, improvements, and adoption of methods and tools by users over time
- Identify and document development outcomes
- Foster long-term, collaborative inter-organizational relationships between practitioners and researchers

This implies that the EviBAN Learning Alliance will run through and have important functions at several levels, including 1) the pilot cases, where we want solutions to be demonstrated, accepted and later implemented, 2) the collaboration between research and development partners from Norway, Finland, France and South Africa, and 3) the dissemination activity and joint efforts to stimulate dialogue among a wider set of stakeholders.

Objectives

The main objective for the Learning Alliance is the same as for EviBAN as a whole:

To increase the knowledge on how NBS can be used for management of water resources to counter negative impacts of climate change, anthropogenic activities and societal change, and contribute to progress towards the global sustainability development goals (SDGs).

More specific aims for the process are to

- a) Provide a forum for promotion of the EviBAN solutions, both among local stakeholders and vis-à-vis a wider set of stakeholders in the partner countries and beyond
- b) Secure needed stakeholder input and feedback, for continued development of the solutions in focus in the four pilot cases.
- c) Facilitate interdisciplinary dialogue and co-development of the EviBAN Toolbox, as a holistic framework to assess sustainability and enable uptake of nature-based solutions in water management.
- d) Build relations between the project partners and key stakeholders, as a ground for further efforts to increase knowledge and facilitate uptake of the EviBAN solutions and Toolbox.

A Learning Alliance seeks to benefit all partners. Therefore, its development is a shared responsibility between the project participants.

Flexible, but connected

Principally, Learning Alliances consider research outputs as inputs to innovation processes that are place and time specific. Through the joint learning process, the tools under development will change as users adapt them to their needs and realities.

Identification of each group's questions and willingness to participate in diverse aspects of learning is key. As the piloted solutions and their local and national contexts differ greatly, flexible but connected methods are needed. In Agon-Coutainville, where MAR already has been implemented, the focus and approach will be different than in Hessequa, South Africa, where a novel MAR concept will be developed and tested from scratch. In the first case, experience-sharing and evaluation of the existing solution is a natural starting point, whereas the initial approach in South Africa will have to be more exploratory.

The workshops in homogeneous Norway, on green roofs and permeable pavements which do not involve any resource struggles or larger interventions in the natural environment, may be facilitated with other techniques than those on MAR in South Africa, which will involve stakeholders at multiple levels and local communities that are characterized by huge inequalities. Finnish culture is associated with a form of communication where less is spoken and more is implicit, whereas the Norwegian style can be rather blunt and direct, and the French form tends to be more formal and polite.

Thus, workshop formats and content may vary significantly, and what the best facilitation and exchange techniques will be may differ from case to case. Local facilitators will be in the best position to decide but are encouraged to select set-ups and methods that enhance open dialogue and broad involvement. A list of suitable techniques developed by Bijanju et al (2015), may well be consulted for inspiration. In all cases, however, we strive for social learning as a key to "mode two" knowledge creation.

Social learning

Social learning theory is associated with imitation and role models, but its core is really that we learn through behavior. Bandura, the originator of the theory, identified four requirements for learning, namely a) observation (environmental), b) retention (cognitive), c) reproduction (cognitive), and d) motivation (which may be both cognitive and social, gained from interaction with one's environment) (Bandura 1972).

As applied in organizational learning and innovation, the concept refers to processes that span wider than formal sharing of knowledge, to include the forms of learning that may occur through informal conversation, learning-by-doing, tacit knowledge acquisition over time, designed co-creating activities, etc. It is associated with active engagement, rather than passive reception of information, and with learning that subverts hierarchy, aiming to include multiple perspectives and provide knowledge that is relevant, as well as agile and adaptive.

Social Learning as such is a specific design approach, where formal and social elements are combined, and effort is made to create spaces for co-creation. Social Learning happens within communities, therefore relation-building as well as shared symbols (such as the EviBAN logo), stories, etc. are important. Creating space to listen may be more important than providing rules and structures, and time is also an important factor.

In EviBAN, all this must be balanced against the limited number of person-hours and geographical distance between the partners. Still, social learning will be adopted as an overriding perspective, and its key principles will inspire our joint activities. To be emphasized are:

- Active engagement
- Respect for and emphasis on including multiple perspectives
 - Disciplines
 - Practices
 - Culture
 - Gender
- Subverting hierarchy
- Combining formal and social elements

Process in EviBAN

As noted in the project description, the research partners relating to each respective case-study are obliged to arrange at least one local stakeholder workshop each project year, and participate in a yearly project meeting, in the form of a workshop where industry/user partners as well as other key stakeholders are invited.

Apart from this two-level workshop series, we have a common virtual workspace (SharePoint) and a dedicated project website. Social learning cannot be created through technology. However, it may be facilitated through reflective and practical use of technology, in this case in the form of Skype-meetings and virtual sharing and co-writing when it is not possible to meet physically.

In EviBAN, planned and informal interaction through Skype and the virtual workspace will provide the continuous platform for communication and co-learning. The workshops, where some or all participants meet physically, will be the elements or points in time which provide most direction and energy. The idea is that the experiences and results from each workshop will be shared through the virtual workspace and then feed into the next one, as depicted below (Figure 1):

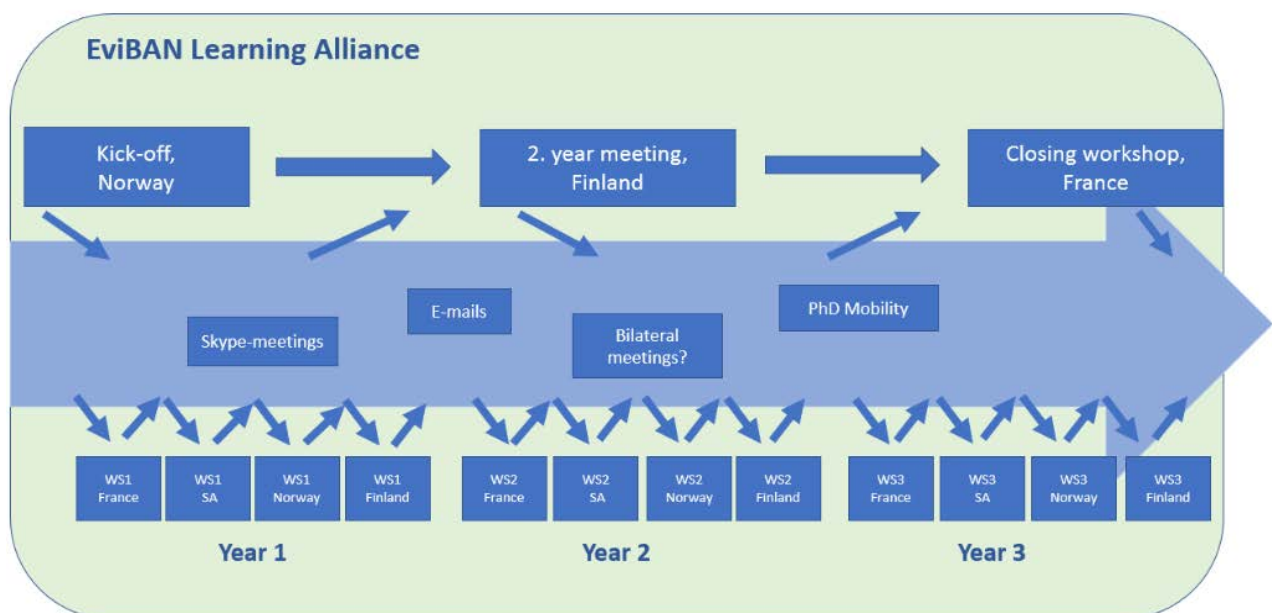


Figure1: EviBAN Learning Alliance – process.

As the process proceeds, external stakeholders will increasingly be involved.

The three workshops at project level are associated with specific topics/knowledge outputs, specified in the project description: i) Drivers and barriers to NWRM, ii) Toolbox development, needs and ambitions, iii) Potential of the EviBAN NWRM and NBS as measures for 'closing the water gap', as illustrated in Figure 2.

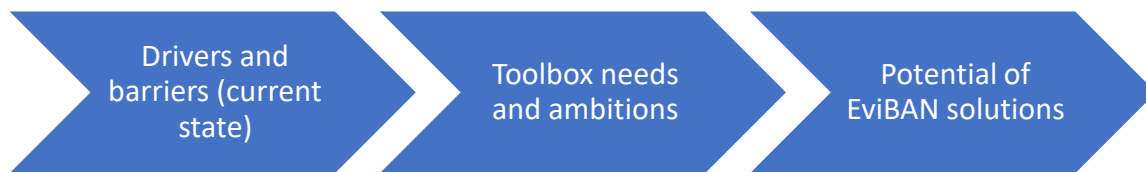


Figure 2: Topics and progress through project workshops.

The workshops at local /case level will follow a similar sequence, as illustrated in Figure 3. With some variation, the first workshop will bring together key stakeholders to discuss the NRW in question, as well as its potential impact on the sustainability development goals. A variable number of stakeholders will be involved (depending on the nature of the case).

The second local workshops, scheduled for the second project year, will discuss the performance of the solution/progress of the respective case-study, main drivers and barriers, and how the Toolbox may enhance assessment and innovation uptake. At least, the key stakeholders should be involved.

The local workshops in the third year will bring together a wider set of local stakeholders, to present to them the NRW solutions and results from application of the Toolbox, and discuss how the potential impact of the solutions may be enhanced and realized in the given governance context.

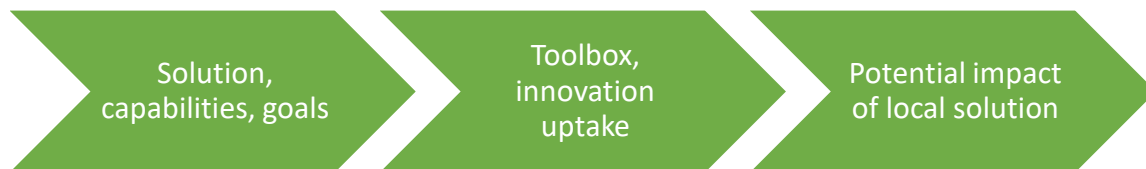


Figure 3: Topics for co-creation of knowledge in local workshops.

The virtual workspace will be used for document sharing and co-writing between project partners. The project website will provide a platform for dissemination and dialogue with external stakeholders.

PhD mobility is another element, to facilitate network building and learning for the PhD candidates and enable cross-fertilization between the pilots and respective model/tool development processes. At the outset, a stay in Norway is planned for the Finnish candidate, and the possibilities for the South African candidate to visit BRGM for a period will be explored.

Furthermore, the Learning Alliance will draw on networks and knowledge established via related projects, such as Aquanes in France, Klima 2050 in Norway, etc.

Link between learning alliance and dissemination activity?

Key Performance Indicators (KPIs)

- Workshop attendance (number, stakeholder categories, male/female)
- Response from workshop participants (input collected, workshop evaluation forms)
- Workshop reports, news items, social media
- Clicks, viewers of the website
- Co-creativity within the project (number of co-produced papers, presentations, etc.)
- Spin-offs/joint initiatives outside EviBAN

References

Bandura, A. 1972. "Modeling theory: Some traditions, trends, and disputes". In Parke, R.D. (ed.). *Recent trends in Social Learning Theory*. New York: Academic Press, Inc.

Bijanju, A., Bulancea, P., Matthes, J., Mudbhary-Sitaula, D., Mullerbeck, E., Storchi, P., et al. 2015. *Knowledge Exchange Toolbox - Group methods for sharing, discovery and co-creation*. New York: UNICEF.

EC 2014. *EU policy document on Natural Water Retention Measures*. By the drafting team of the WFD CIS Working Group Programme of Measures (WG PoM). Technical Report 2014-082. doi:10.2779/227173

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., Trow, M. 1994. *The new production of knowledge: the dynamics of science and research in contemporary societies*. London: Sage Publishing.

Lundy M., Gottret, M.V. 2006. *Learning Alliances: An approach for Building Multi-stakeholder Innovation Systems*. In: Smits, S.J., P.B. Moriarty and Sijbesma, C. (eds.) (2007) *Learning Alliances: Scaling up innovations in water, sanitation and hygiene sector*. Delft, the Netherlands, IRC International Water and Sanitation Centre (Technical Paper Series No 47).

Verhagen, J., Butterworth, J., and M. Morris 2008. *Learning alliances for integrated and sustainable innovations in urban water management*. *Waterlines* 27:2, April 2008. DOI: · 10.3362/1756-3488.2008.014