

# Contribution to the Development of the SEE River Toolkit

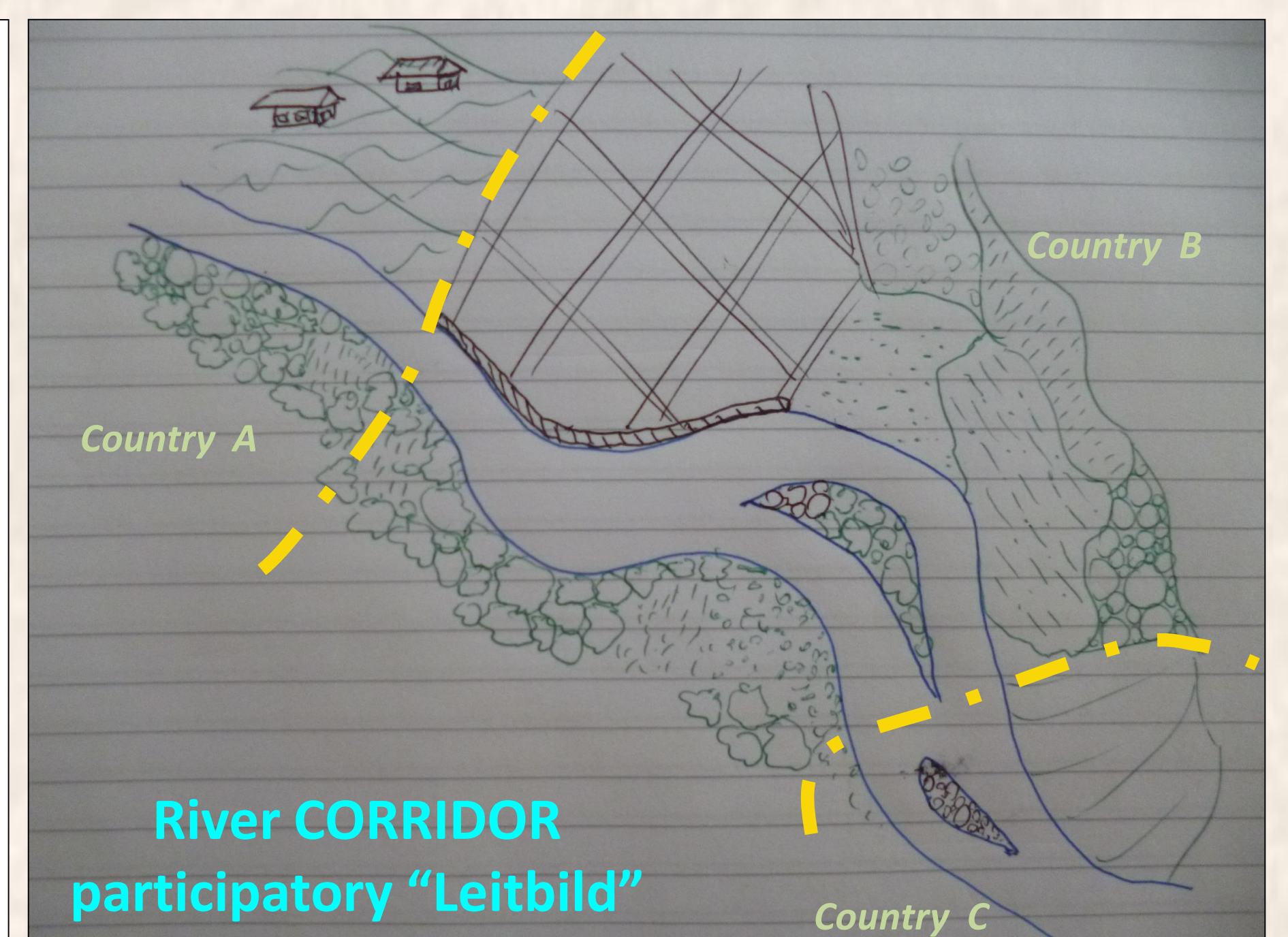
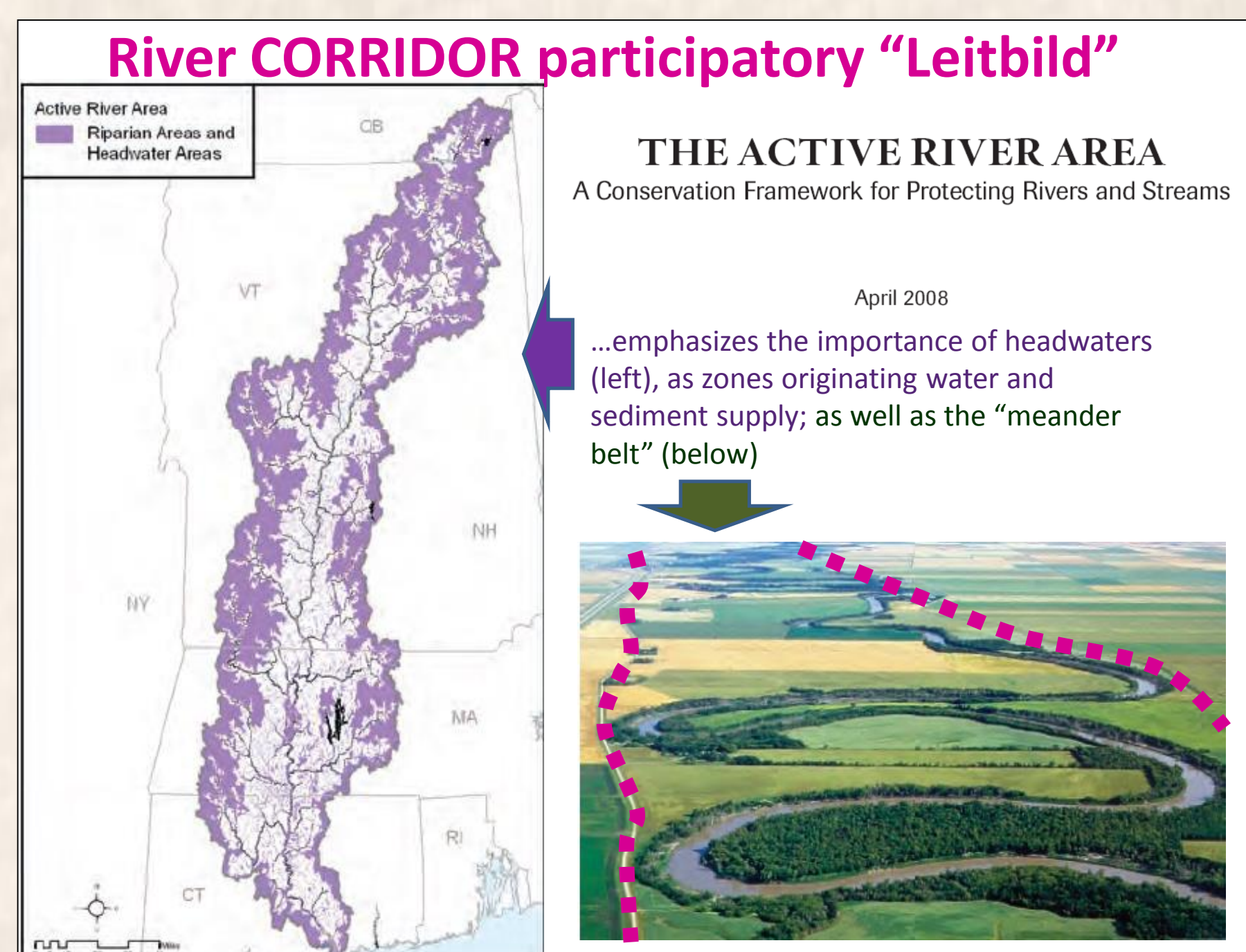
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SEE RIVER PROJECT

HAND IN HAND  
FOR RIVERS

## Rationale

One pillar of the SEE River Project is the deployment of a Toolkit to support river corridor management. In a first exploratory project phase conceptual schemes were generated as a contribution to the Development of the SEE River Toolkit and an overview is presented here. The Toolkit has to foster the creation of a river corridor → this is to be defined in a participatory and progressive way. The verbally formulated Leitbild and the coherently structured value system gives rise to a visualization of the river corridor (e.g. through mapping, rendering, physical model, or system modeling) and a set of objectives. Alternatives represent different synthesis amongst: i) what society desires, ii) what complies with the natural evolution patterns (i.e. river styles), and iii) what is allowed by the existing legal framework.



## Measuring Objectives

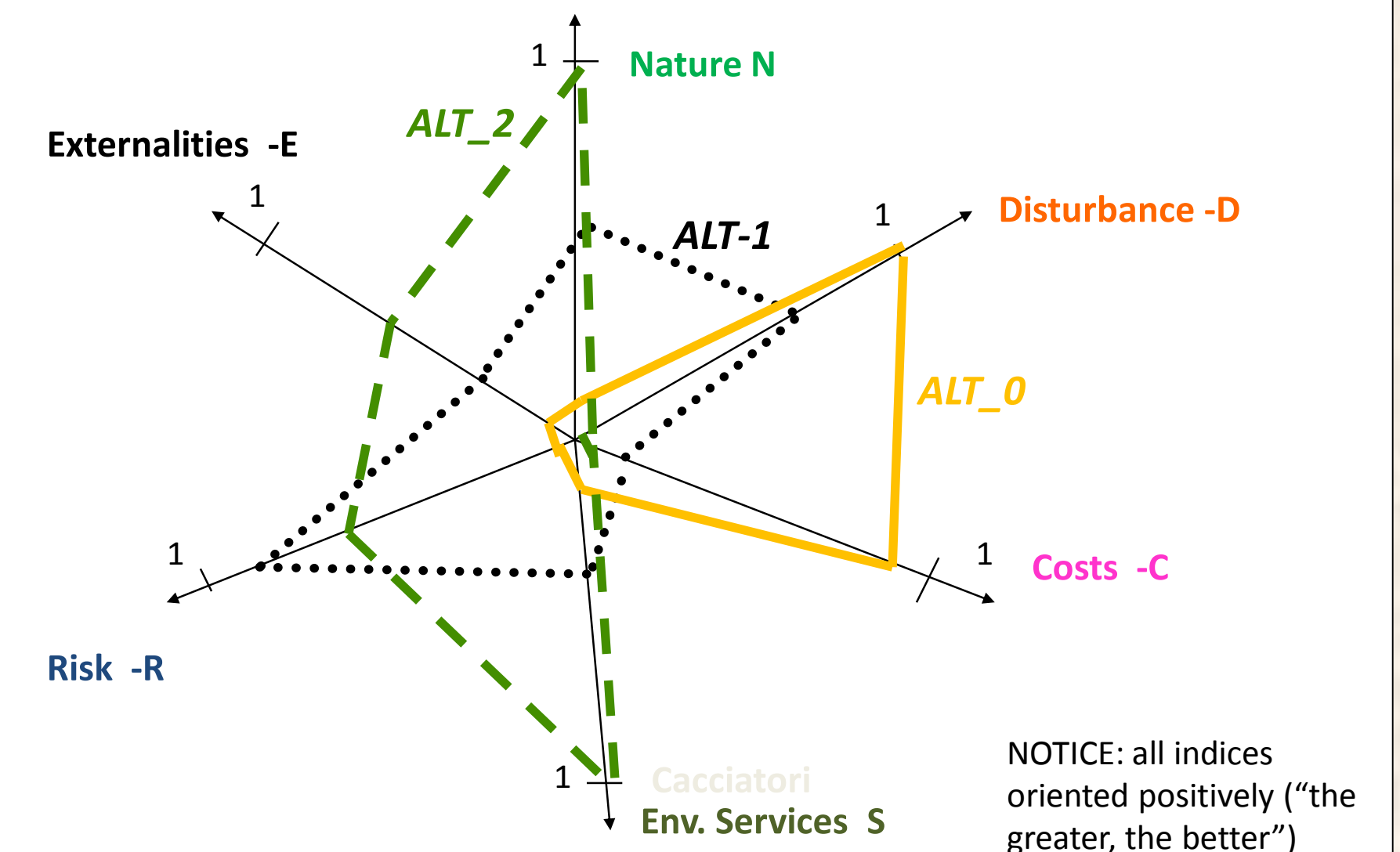
enables us to i) assess the performance of our river corridor, monitor its evolution and evaluate the impact of projects; ii) choose amongst alternatives of river corridor that typically emerge as a response to diverging needs and conflicting objectives of stakeholders. Measuring is not easy, but not impossible; we propose to start a process that sooner or later will enable all partner countries to measure the same objectives in a comparable fashion.

### Corridor's KEY Objectives

**R** : hydro-morphological Risk reduction (or safety enhancement)  
**N** : Nature conservation and enhancement (river ecological status, ecological network, terrestrial ecosystems, landscape)  
**C** : reduction of overall investment and management Costs  
**S** : maintenance and enhancement of environmental Services : e.g. water supply; hydropower production; fishery; navigation; land availability for residential and productive activities; recreation (fishing, canoeing/rafting, bathing)-amenity; cultural identity support; waste water disposal; ground water recharge; abatement of pointwise and diffused pollutants; CO2 capture, ...)  
**E** : export (from sub-basin or country) as few negative Externalities as possible: i) flood peak; ii) solid transport; iii) pollutants load; iv) longitudinal continuity; v) biodiversity support; ...

### MultiCriteria performance of R. Corridor ALternatives

(one of many possible presentations: "radar" format)



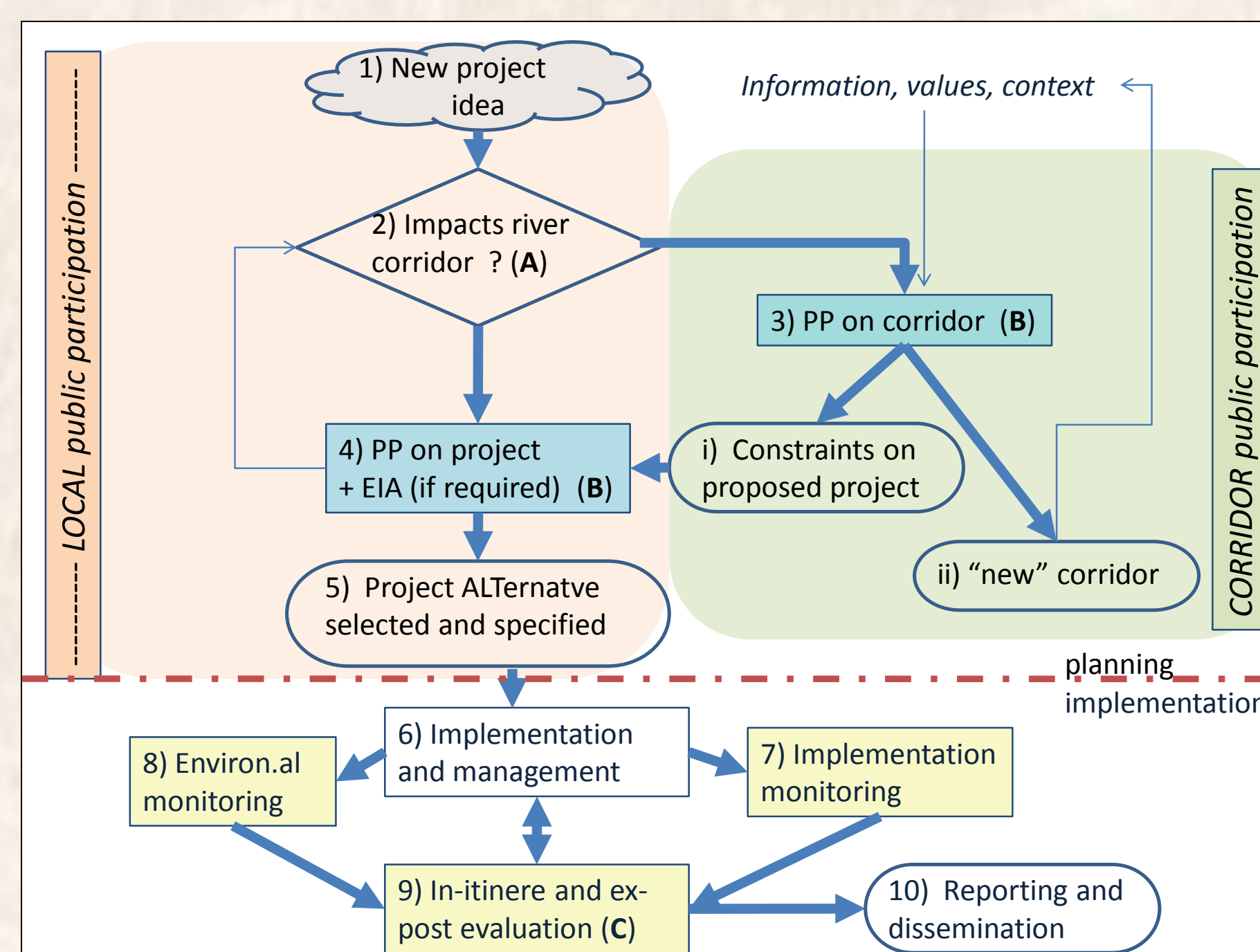
## Managing the Process

• The core of our contribution to the SEE-River Toolkit is a scheme supporting the piece-by-piece creation of a river corridor. This tool is intended to be used by all actors, being continuously updated  
• A generic "project" considered in what follows may:

- explicitly address one or more of the key objectives (at the local or corridor scale)
- address any other need (e.g. transportation or hydropower generation), which may somehow impact on one or more of such objectives.

• Block B) is a decision process based on Public Participation (PP) which may occur at both scales (local project or whole corridor setting). We also addressed the following relevant issues for integrated river corridor management:

- Criteria to define river corridors
- Issues to get to measurable objectives (based on Value Function approach), including examples
- Integrated Evaluation merging EIA/SEA, Cost-benefit and Multicriteria analysis in a negotiation framework for conflict management (based on Nardini A. and S. Pavan (2012). River restoration: not only for the sake of nature, but also for saving money while addressing flood risk. *Journal of Flood Risk Management*, 5 (2012), 11-133. Blackwell Publishing (UK)).



### Block B) Participatory decision making Process (PDMP)

