

GoApply - Multidimensional governance of climate change adaptation in policy making and practice

WP3 Stakeholder involvement on local and regional level

Criteria and Factors for Successful Stakeholder Participation

Andrej Lange, Andreas Vetter, Sebastian Ebert German Environment Agency (Umweltbundesamt)

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1 Introduction

1.1 Background: the GoApply project

This report is a deliverable of the project **GoApply – Multidimensional governance of climate change adaptation in policy making and practice**¹ (11/2016 – 04/2019). The project is co-funded by the Interreg V B Alpine Space Programme 2014-2020, runs under programme priority 4 "Well-governed Alpine Space" and addresses the programme objective "Increase the application of multilevel and transnational governance in the Alpine Space".

GoApply responds to challenges, barriers and gaps related to governance that currently all Alpine countries are facing in their efforts to implement their national adaptation strategies in practice. The project aims to strengthen capacities for the governance and implementation of climate adaptation across multiple levels and sectors. In doing so, it pursues the following specific objectives in interlinked work packages:

- (1) Improving understanding of adaptation governance systems and promoting vertical coordination and cooperation for the implementation of adaptation policies across levels [WP1]
- (2) Supporting effective horizontal integration of climate change adaptation into relevant sector policies (mainstreaming) [WP2]
- (3) Strenghtening more active involvement of public and non-public stakeholders in regions and municipalities and stimulating adaptation coordination structures on sub-national levels [WP3]
- (4) Sustaining, deepening and leveraging transnational cooperation, knowledge transfer and learning in the context of the EU Strategy for the Alpine Region (EUSALP) and the Alpine Convention [WP4]

GoApply tackles these objectives in a transnational approach. The project builds on the network of the national public adaptation coordinators responsible for climate adaptation policy-making in the Alpine countries. These institutions are carrying out the project as project partners and in observer roles.

WP3 – "Stakeholder involvement on local and regional level" of the GoApply project is centered around four main lines of activities:

- Identifying, selecting and co-designing stakeholder interaction formats addressing the local and regional level
- Applying stakeholder interaction formats on the local and regional level
- Reflecting local stakeholder involvement for improvement of multilevel governance
- Transnational science practice lab on adaptation governance

The report at hand lays ground for identifying, selecting and co-designing stakeholder interaction formats addressing the local and regional level.

1.2 Goals of the report

This document provides a concept of success criteria for stakeholder interaction formats and their application in the context of climate change adaptation. Within the scope of WP3, the concept serves as a basis for evaluating practice examples for climate change adaptation in the GoApply project.

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¹ http://www.alpine-space.eu/projects/goapply/en/home





After providing some conceptual background on participation and its evaluation, the methodology for developing success criteria is described, the criteria and their operationalization presented, and additional information provided on how the concept is going to be applied within the work of GoApply. While the proposed concept applies to all forms of interaction formats and processes, our focus lies on participatory activities in a narrower sense, aiming at forms of actual two-way communication among and between format participants.

2 State of the art

Climate adaptation governance within our project is defined as "the structures, processes and interdependencies that determine how actors (from public administration, politics, science, business and civil society) make decisions, share power, exercise responsibility, and ensure accountability regarding adaptation to climate change" (see also WP1 methodology concept).

The definition of what constitutes "good governance" and —subsequently — how to set up criteria and measure good governance practice is subject to a larger discussion.

The White Paper on European Governance by the EC has identified five principles of good governance on all political levels:

- **Openness:** active communication about decision-making and processes of public institutions in an understandable way in order to improve confidence in complex institutions;
- **Participation:** application of an inclusive approach towards developing and implementing policies, ensuring wide participation, focusing on consensus and trust;
- Accountability: clarification of institutions' roles and responsibility in the political process;
- **Effectiveness:** effective and timely delivery of policies based on clear objectives, past experience and evaluation of future impact;
- **Coherence:** consistent approach towards policies and actions across different political levels in a complex system, mainstreaming and coordination with affected policy sectors, compliance with legislation. (EU COM 2001)

These aspects have to be realized under specific challenges for governance systems in climate adaptation – uncertainty and long-term effects, cross-sectoral issues which go beyond the capacity of classic political instruments (Fröhlich et al 2013) as well as a large number of affected stakeholder groups with diverging perspectives and interests.

In the context of the work of WP3, we focus on the latter issue: stakeholder interaction activities can serve as a forum for deliberation and decision-making processes and provide certain benefits for governance efforts, for vertical integration as well as for mainstreaming of adaptation into current sector policies.





Benefits of stakeholder interaction formats and processes

Development, implementation and improvement of governance structures and processes for enhanced climate change adaptation most often include the discussion about formats and procedures of information, participation and collaboration between various stakeholder groups relevant for adaptation (Fröhlich et al. 2014). While there is a wide variety of specific participatory instruments, there is a common set of expected benefits from any participatory activity, which can be summarized as:

- Improving knowledge about adaptation by fostering exchange and co-creation of knowledge, thereby gaining a better understanding of challenges and perceptions, (Hoffmann et al. 2007, Gardner et al 2009);
- **Improving the quality** of the decision-making and implementation processes by involving different views and creating solutions through "actionable knowledge", provided by a diverse group of stakeholders (Lang et al 2012, Hoffmann et al. 2007);
- **Improving legitimacy** of decisions through consensus-based decision-making on adaptation strategies and measures, increased fairness and increased acceptability (Forrester 1999, Webler & Renn 1995);
- **Improving effectiveness** of the adaptation process by fostering ownership and commitment among stakeholders as well as increasing their awareness, resources, and interrelations. (Newig 2005)

Most of the time, all of these potential benefits are part of the reasoning in favor of stakeholder participation (for a further discussion of normative vs pragmatic reasoning see e.g. Reed 2008). In order to establish and evaluate success factors, however, it is necessary to examine the aims and characteristics of specific interaction formats. One approach to characterizing interaction formats, which informed the subsequent creation of success factors, is the distinction by degree of participation.

Degrees of participation

Interaction formats and processes can be distinguished by the degree of participation they strive at or allow for. Most typologies of participation are based on Arnstein's seminal ladder of citizen participation (1969). With regard to climate change adaptation governance, UBA (2013) distinguishes between four types with increasing degree of participation and allocate specific interaction formats to each of these levels:



Degree of Participation	Characteristics	Aims	Examples for interaction formats
Stakeholder communication	Mostly one-way flow of information from initiator to stakeholder or vice versa	Access to stakeholder knowledge, awareness raising, dissemination of results	Websites, newsletters, presentations, surveys, etc.
Stakeholder consultation	Two-way flow of information, mainly aimed at gathering opinions and proposals without obligation to integrate stakeholders' views in decision-making	Increase acceptance and / or support for adaptation policies, gather insights on relevance and implementation options, recommendations for development of strategies / measures	Workshops, focus groups, Delphi events, open spaces, interviews, etc.
Stakeholder co- production	Stakeholders have crucial role on generating knowledge, often in a research-led participation process	Integration of different knowledge bases, coping with conflicts, uncertainties, and different risk perceptions; evidence-based policy development	Participatory scenario development, interactive vulnerability analysis, participatory modeling, etc.
Stakeholder co- decision / co- design	Stakeholders are involved in analysis, action-planning, decision-making or the preparation of political decisions Co-Design: stakeholder involvement in identifying and framing societal challenges, participatory development of research agendas, questions, funding schemes	Joint development of strategies, action plans, measures; increased societal relevance of scientific research; establishing common understanding of tolerable / acceptable risk levels (risk governance approach)	Workshops as integrated part of strategy development, stakeholders as members of decision-making boards, etc.

Table 1: Degrees of participation; based on Hoffmann et al. (2014), modified

Fulfilling each of these degrees of participation requires specific interaction formats. Naturally, the degree of participation at which specific formats are aimed affects the assessment of its success. The higher the degree of participation, the larger is the extent to which stakeholders are involved in the process; formats applied and evaluation of factors has to be tailored accordingly.

Evaluation of stakeholder participation





How can interaction formats be planned and implemented in order to increase the quality and effectiveness of the adaptation process? Any list of success factors has to be based on a thorough evaluation of interaction formats. Systematic evaluation approaches have long been called for (see e.g. Rowe/Frewer 2000).

However, the evaluation of quality and effectiveness of interaction formats faces particular challenges: The large spectrum of process objectives, specific formats and stakeholders involved impedes the development of a consistent system of success criteria. Goals, type of application and target groups addressed may differ, e.g. based on the policy cycle phase in which the format is implemented (Jann/Wegrich 2009, EU Commission 2013). Describing and assessing specific characteristics of a process is not sufficient for judging their impact on the quality of the process. To date, no successful cause-effect-relation between individual characteristics and overall outcome has been established, due to the large variety of formats and intercorrelations between different characteristics (Schmid et al. 2016). Moreover, contextual and environmental factors play an important role and are interrelated with format characteristics (Rowe / Frewer 2000). A number of factors are beyond the control of the format itself; issues such as the timing of a specific event, news of the day which affect stakeholders' perception and attitudes or simply the facilitator having a "bad day" can affect any carefully planned process (Reed et al. 2014; Grothmann 2017) Controlled experimental studies are rarely feasible, given the nature of the processes as well as ethical considerations, among other reasons.

Scientific literature has established general principles to stakeholder interaction formats which promote expected benefits of interaction formats (e.g. Rowe / Frewer 2000). Beyond that, scientific literature struggles to develop a comprehensive set of success criteria, which are applicable for all types of formats and expected results. In order to evaluate a specific format, success criteria are heavily dependent on what is considered effective or "desirable" as format outcome as well as underlying theoretical concepts and the specific assessment method applied (Schmid et al. 2016).

Studies on stakeholder interaction in climate change adaptation and, more generally, in sustainability science have elaborated on factors which promote success (e.g. Lange et al. 2016, Reed et al. 2014, Rowe/Frewer 2000) It should be noted, however, that most of these studies are based on individual case studies and project efforts with limited potential for generalization and transfer; only a small number of meta-studies exists to date. Systematic evaluation of participation processes in climate change adaptation, and beyond, is not undertaken regularly. There is not only a lack of insight on how participation can foster integration of scientific and practical or experiential knowledge (Scherhaufer / Grüneis 2015); evidence of impacts of stakeholder participation on adaptive capabilities or motivation to take action towards adaptation are generally lacking (Grothmann 2017). Therefore, we opted for a pragmatic approach towards generating a comprehensive list of success factors which is applicable for all degrees of participation.

It cannot be overstated: any set of success criteria and factors needs to be seen as criteria *promoting* success, not *guaranteeing* success; criteria are heavily context-dependent. A particular format conducted may be successful or not, given the variety of aims, formats, and influencing factors. Bearing this in mind, the subsequent sections provide methodological aspects of developing an evaluation concept, the list of success criteria and recommendations for their application.





3 Methodology

The set of success criteria and factors is based on a literature research among studies evaluating stakeholder interaction processes in sustainability science, with a focus on climate change adaptation. Emphasis was put on comprehensive accounts of evaluation concepts themselves.

Success factors and recommendations were extracted using elements from qualitative content analysis (Mayring 2000): Based on the source material (scientific publications) and pre-defined selection criteria (success factors for interaction formats), items were extracted and coded for further analysis; categories were built inductively and revised throughout the analytical process of the extracted items; categories were reduced and factors allocated in an iterative process; altogether, 4 iterations of the material led to the final list. Options for operationalization were added during the final iteration, based on literature and pre-existing work within the GoApply project. The original extraction yielded a "gross list" of 273 recommendations (including duplicate items); the final list contains 123 recommendations allocated to 21 factors.

Given the diversity of aims as well as possible types of formats, many of the factors have to be adapted to the specific process under scrutiny (Lexer et al. 2012). We distinguish between two sets: basic, underlying criteria which are generally recommended for all types of interaction format in order to improve the quality of the process. Secondly, a more specific set of success factors, which is grouped into three phases of the interaction process: conceptual phase, implementation phase, post-processing phase. Each factor is further elaborated upon by distinctive recommendations for success, which pay special regard to interaction formats in climate change adaptation. Factors which are relevant only for formats aspiring for higher degrees of participation are marked as "if applicable". Factors are also allocated to the specific basic criteria which they elaborate upon.

Furthermore, we offer recommendations for operationalization of the factors, i.e. specific question to be covered when analyzing interaction formats according to success factors. These questions have either a descriptive (i.e. information-gathering) or a normative (information-assessing) character. While the description can be covered by a thorough documentation of the format, assessment will usually be based on normative statements by experts.





4 Overview of success criteria, factors, and operationalization

Basic criteria for conducting interaction formats and processes are:

- 1. clarity of definitions: nature, goals and scope of the format should be clearly defined;
- **2. transparency:** clear and open communication about the process, role of participants and facilitators, modes of decision-making with stakeholder in all phases;
- **3. feasibility:** time and financial resources should be adequate to ensure successful completion of preparation, implementation and post-processing of the format; make sure that all relevant participants can engage in the process and provide opportunities for building of relationships, networks and trust;
- 4. efficiency: interaction formats can be time-consuming, labor-intensive and costly for stakeholders involved; the process should be conducted efficiently, balancing costs and desired outcome for all participating parties
- **5. flexibility** formats should be open to incorporate new aspects and inputs from stakeholders;
- **6. representativeness** formats should include all relevant representatives of stakeholders and make sure they can participate in the decision-making process; attention should be given to marginalized groups and their chances to participate;
- 7. appropriateness information, applied tools and instruments should be tailored to capacities and needs of involved target groups;
- **8. objectivity** participation should be conducted in an unbiased way; information should be presented based on objective, scientific research;
- **9. timely and frequent involvement** stakeholders should be involved in the format as early as possible and informed on a regular basis throughout the whole process;
- **10. respectfulness and trust:** participants and facilitators should engage on equal footing throughout the process, respect different points of view and engage in respectful dialogue; building trust and enhancing relationships should be facilitated throughout the process
- **11. impact:** The output of the procedure should have a genuine influence on policy; impacts should be evaluated and communicated.





4.1 Overview of success factors, recommendations and questions for further analysis

4.1.1 Conceptual phase

Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Clear goals of the process	 Formulate, visualize and locate problems and aims as specific as possible Ensure consistency of goals with mission statements, management plans etc. Ensure goals are consistent with existing laws and policies Check appropriateness of goals themselves If applicable: integrate exchange and co-creation of strategies, measures, decision-support focus on a limited number of specific topics - makes implementation and communication easier If applicable: focus on generation of "actionable knowledge" (knowledge which has practical relevance for stakeholders to resolve specific problems 	 What are the overarching objectives of the format? Which problems/ issues are addressed? Which phase of the adaptation policy cycle can the process be associated with? What are consistencies / inconsistencies between format goals and process/project in which they are embedded? What are consistencies / inconsistencies between format goals and legal/ political framework in which they are embedded? Are assumptions behind goals elaborated? Is the definition process of goals transparent? What role does participation play in achieving the goals? Which topics are addressed by the goals of the format? What is the actual benefit / impact of the goals for involved stakeholders? 	 clarity of definitions feasibility efficiency impact





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Consideration of existing structures / processes	 Research other adaptation strategy processes, publicly funded activities in climate change adaptation, research projects and look for synergies / lessons learned Attach process planning to existing networks Research and involve local/regional initiatives (with support and trust from population) which are active in climate change adaptation Evaluate political commitment to adaptation 	 List relevant activities and lessons learned which the format builds upon List relevant networks which the format builds upon List contacts of relevant actors which the format builds upon What kind of activities are undertaken to connect formats with activities/networks/actors in preparation of the format? Have adaptation strategies, action plans or specific measure been developed and / or implemented? What priorities have been set in adaptation? 	 clarity of definitions feasibility representativeness impact
Clear identification of target groups	 Identify relevant groups; conflict parties (if applicable); users and relevant stakeholders Identify and involve key actors Identify marginalized / vulnerable groups Consider ethical implications of engaging with different stakeholders If applicable: in case of administrations - identify and involve decision-makers as well as staffers responsible for implementation 	 Who is the initiator? Which groups are mentioned as relevant stakeholders and target groups? Who is defined as key actor and why? Are marginalized groups addressed? How and Why? Are there ethical implications in engaging specific stakeholder groups? 	 clarity of definitions transparency feasibility representativeness timely and frequent involvement





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Thorough stakeholder analysis	 Conduct a stakeholder analysis - emphasize position and decision-making power (legitimacy), knowledge and ability to disseminate findings (resources), interrelations and network embeddedness (connections) Assess stakeholders' knowledge and expertise on topic Assess stakeholders' knowledge and experience with participatory formats Understand what is likely to motivate stakeholders to get involved in the process Consider stakeholders who are typically marginalized/excluded Ethical reflection - consider norms and attitudes of stakeholders Identify personal/organizational agendas, need to actively manage difficult individuals; identify potentially conflicting stakeholders 	 Who is affected, who has a stake? Who has which role and responsibility? What are stakeholders' resources and powers of influence? How are stakeholders connected? Which knowledge of climate adaptation exists among stakeholders? Which knowledge of participation methods exists among stakeholders? 	 clarity of definitions transparency: feasibility: efficiency representativeness appropriateness impact





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Identification of possible barriers to participation	 Identify possible barriers such as education, language prepare mobilization and methodology accordingly. Consider group-specific barriers such as time constraints for certain groups (e.g. farmers, teachers,	 Are particular stakeholders precluded from participation? What is done to ensure participation? Are there conflicting parties among stakeholders? How can these conflicts be addressed? What kind of outreach instruments were employed (e.g. event location close to stakeholders, etc.? 	 transparency feasibility representativeness appropriateness objectivity timely and frequent involvement respectfulness and trust impact
Clear methodological concept	 Formulate concept (including type of format, frequency, length, instruments applied) as specific as possible Adapt the content to stakeholders' prior knowledge and experience Include target-group specific presentation of knowledge/information Ensure that plans involve flexibility to respond to changing stakeholder needs and priorities Include clear rules of conduct and rules for decision-making (e.g. consensus-based, majority voting, etc.) Prepare appropriate entry points for engaging stakeholders - e.g. regional occurring events, climate 	 What kind of format was chosen? Is the participation process a formal or informal event? What kind of tools and instruments are applied during the format? What are the rules of conduct / rules for decision-making throughout the format? 	 clarity of definitions feasibility efficiency flexibility representativeness appropriateness objectivity respectfulness and trust impact





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
	impacts, topics relating to individual or group experiences		
	- Clarify limitations of the concept		
	 If applicable: involve key stakeholders in concept development to promote appropriateness If applicable: combine different instruments, modes 		
	of presentation and discourse		
	 If applicable: emphasize small-scale interactions such as workshops, - effective for increasing knowledge, promoting deeper conversations, understanding and trust 		
	 If applicable: face-to-face communication tends to generate more impact than communication through (mass) media. One-way, written or verbal communications tend to enable learning and active engagement less well than dialogic and interactive forms of communication 		
	 If applicable: create opportunities for informal interaction and learning between stakeholders 		





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Consistency between goals, target groups, methods	 Is the methodology tailored to the goals? (Refer to degree of participation: communication, consultation, co-production, co-decision) Is methodology target-group specific (incl. modes of interaction, e.g. social media etc.) Are prepared information and knowledge tailored to requirements and level of knowledge of target groups? Are target groups addressed consistent with goals of the format? Consider trade-offs between highly formalized methods and the degree of flexibility and interaction necessary to assure an inclusive and responsive processes 	 What degree of participation is intended? Does it fit the aims of the process? Are methodology and aimed objectives consistent? Is the methodology target-group specific? Are prepared information and knowledge tailored to requirements and level of knowledge of target groups? Are target groups addressed consistent with goals of the format? 	 clarity of definitions transparency feasibility efficiency flexibility representativeness appropriateness objectivity
Consideration of format context	 Consider and be sensitive towards cultural, traditional, political, social, economic, environmental context - preparatory field work might be needed Identify and accept factors beyond control (e.g. changing "issues of the day") Consider the timing of the format (see also barriers) Use "windows of opportunity" – e.g. high public interest due to media coverage or occurrence of extreme events Prepare for "atmospheric factors" - e.g. adequate location, provision of food and beverages, etc. 	 What is the specific cultural, traditional, political, social, economic, environmental context of the format? Are these issues considered in the concept? Are there current topics (e.g. in media) which affect the format? Are these advantageous / disadvantageous? Have past or present weather or climate related issues / events been publicly discussed, broadcasted in the media, documented or otherwise approached? 	 feasibility efficiency representativeness appropriateness objectivity timely and frequent involvement respectfulness and trust
Define role of staff and	Use neutral / expert moderator and facilitators;Use skilled staff for preparation and implementation	How is the format moderated?Who organizes the single events of the formats?	representativenessappropriateness





Success factors Conceptual phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
facilitators	Work with knowledge brokersInvolve key stakeholders in your preparation process	What kind of information is presented by whom during the format?Are stakeholders involved in the preparation of the format? If so, how?	objectivityrespectfulness and trust
Sufficient resource allocation	 Budget planning, time and funding for preparation and follow-up Resources for food, drink, compensation of participants Consider time and resource constraints for involved stakeholders 	 Was the budget planning sufficient for successful format implementation? If not, why? 	feasibilityefficiencyappropriatenessrespectfulness and trust
Develop monitoring and evaluation concept	 Include appropriate indicators, measurements and evaluation criteria to observe, monitor and assessment of format If applicable: combine qualitative and quantitative measures 	 Has the process been monitored, documented, and/or evaluated? What were the objectives and instruments of the evaluation process? 	- (depending on type of evaluation)





4.1.2 Implementation phase

Success factors Implementation phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Invitation and monitoring of participation	 Prepare and disseminate timely invitations, including goals and type of the format, length, expected contributions, added value of participation If applicable: engage and use regional contacts trusted by target groups as "bridging actors" to promote participation If applicable: ensure continuity in participation throughout a process including multiple events which are interlinked 	 How are stakeholders addressed and invited to the format? Are intermediaries (e.g. regional climate adaptation administration, network or process facilitators) part of the invitation process? What was the number of participants? Were all invited groups represented? 	 transparency feasibility efficiency representativeness timely and frequent involvement respectfulness and trust
Establish general rules of conduct	 Conduct format in an open, accessible and transparent way Clearly communicate goals and interests of the format If applicable: create common agreement on goals / content of the format Apply expectation management - be open about what can be achieved – realistic goals, given resource and other constraints Avoid "pseudo-participation" - impact and limitations of format outcome should be clearly communicated Establish roles of participants and facilitators Ensure that moderator engages on equal footing with participants Ensure that participants engage on equal footing with each other 	 Is the participation process made transparent? Are goals and interests clearly communicated to participants Are goals and content of the format pre-set or developed and agreed upon by participants? Are limits of the format and its outcome clearly communicated? Are rules of conduct communicated? 	 clarity of definitions transparency flexibility representativeness appropriateness objectivity timely and frequent involvement respectfulness and trust





Success factors Implementation phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Appropriateness of applied methods	 Engage in two-way dialogue as equals with likely target groups Use professional facilitator for format Communicate and explain use of specific instruments Use visualizations to make the abstract more relatable to personal and local context Counter-act barriers to participation with appropriate instruments (non-verbal, visual tools) Working with abstract and complex issues: use concrete and relatable information, e.g. personal accounts of extreme weather events, locally occurring phenomena etc.; address personal perception of e.g. risks and vulnerabilities Be sensitive to uncertainties connected with climate change and impacts Use overlaps with other sectors when communicating climate change aspects If applicable: work with knowledge brokers (e.g. from science) If applicable: Combine different tools and moderation techniques 	 Which methods were applied during the format to meet the objective? What elements were particularly innovative? How was successful participation in specific methods ensured? 	 appropriateness objectivity timely and frequent involvement respectfulness and trust
Target group- specific knowledge	 Provide adequate, target group-specific information on climate change impacts and vulnerabilities Clarify relevant climate impacts and vulnerabilities for participants 	 What kind of information was presented to participants? How was the information presented? How was information presented tailored to 	transparencyfeasibilityefficiencyflexibility





Success factors Implementation phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
transfer, exchange and creation	 Ensure appropriate handling of uncertainty, esp. in science-practice communication about climate change impacts Make use of existing know-how / experiential knowledge of the participants If applicable: provide opportunities for knowledge exchange, deliberation and self-reflection between stakeholders If applicable: create discussion opportunities for smaller groups If applicable: Search for agreement on adequate results, promote consensus-based decision making 	 participants? Describe the process applied to promote knowledge exchange and development. What kind of innovative instruments were used? 	 representativeness appropriateness objectivity timely and frequent involvement respectfulness and trust
Engagement of stakeholders	 Point out added value for participants Give participants the feeling that they can achieve something If applicable: communicate climate change not only as challenge, but also as opportunity If applicable: emphasize influence on the policy/research process: Promote personal ownership and social responsibility Appeal to emotions to engage participants (without over-dramatization) - balance with objective presentation of facts Strive for diverse, inclusive participation during the format 	 What was done to motivate and engage participants? Were participants compensated/reimbursed for their participation? What challenges and conflicts were encountered during the format? How were arising conflicts handled during the format? 	 feasibility efficiency flexibility appropriateness timely and frequent involvement respectfulness and trust





Success factors Implementation phase	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
	 Identify and use synergy potentials between the stakeholders Promote relationships and collaboration Recognize differences in values and attitudes Compensate stakeholders for their effort, e.g. through money, support local projects, demonstrate benefits from participating Pay attention to atmospheric factors – location, food and beverages, opportunities for breaks, etc. If applicable: promote joint development of common visions - consensus on vision can be a basis for common solutions and acceptance of measures If applicable: co-create strategies on how to engage other stakeholders / citizens If applicable: in conflict situations: address affected groups directly If applicable: co-create strategies for conflict resolution 		
Adaptability and flexibility throughout the format	 Be open to integrate perspectives, questions, interests of participants If applicable: encourage knowledge exchange and cocreation of knowledge 	 Which additional topics / discussions came up? How were they integrated into the format? 	feasibilityefficiencyflexibilityappropriatenessrespectfulness and trust





4.1.3 Post-processing / Follow-up

Success factors Post-processing/ Follow-up	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Documentation and communication of results	 Document the process carefully and transparently Create feedback loops with stakeholders for documentation Relay information on next steps, responsibilities, use of results Keep participants informed throughout and after the process If applicable: promote joint interpretation / agreement on implications of work done 	 How was the format documented? How were participants involved in documentation of the format and its results? How was the documentation communicated? 	 transparency representativeness appropriateness objectivity timely and frequent involvement
Implementation of results and impact on process/project	 Produce tangible outcomes as soon as possible Create "quick wins" for stakeholders, especially if it's a multi-phase process Share good practice If applicable: publish the results Implement decisions which were agreed upon Consolidate cooperation with local initiatives Promote linkages to individuals and groups beyond primary participants Establish and communicate benefits for other sectors 	 What kind of immediate outcomes were produced and how were they communicated? How were decision reached in the format implemented? Did the format result in contacts / cooperation with stakeholders beyond the circle of participants? If so, who and what? 	 representativeness objectivity timely and frequent involvement impact
Evaluation - short- term/long term	- Conduct careful evaluation of the format and its outcomes - include short-term and long-term	- Has the participation process been monitored and evaluated? If so, how?	transparencyrepresentativeness





Success factors Post-processing/ Follow-up	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
aspects	perspective - Create learning effects from evaluation of context and consider unintended outcomes - Monitor and reflect format together with stakeholders – throughout and after the process; integrate differences in perceptions between participants, facilitators and knowledge brokers	 Did the format meet its objectives? Which solutions did the format generate? Did the format yield specific strategies / action plans / measures / tasks? Did participants create and / or gain an improved knowledge and understanding? Did the format have an impact on policy-making? Did the format e.g. lead to changes in existing institutions, governance arrangements, improvements in cooperation, networks, and work flow? Did the format lead to improved relations and trust? If applicable: Did the format lead to improved capacity for conflict resolution? Are outcomes consistent with existing laws and policies? Are there any unintended / unanticipated outcomes? Which additional themes, discussions, conflict, information came up during the process, and how those were handled? Which barriers/ drivers were noticed during the format? How did different participant groups perceive / assess the format? 	 objectivity timely and frequent involvement respectfulness and trust impact





Success factors Post-processing/ Follow-up	Recommendations	Operationalization for analyzing interaction formats	Relation to criteria
Legacy arrangement	 Keep in touch with stakeholders and facilitators Offer further support or consulting for the implementation of adaptation measures / strategies Consider approach to stabilize and develop created knowledge and relationships beyond the process / project If applicable: establish continuity - hand over responsibility to appropriate stakeholders 	 Describe the communication strategy with stakeholders after completion of the format What kind of support is offered for implementing created outcomes? Are the outcomes transferable to other processes? If so, are transfer efforts undertaken? How do facilitators of the format support continuity beyond the project / process? 	 transparency representativeness appropriateness objectivity timely and frequent involvement respectfulness and trust impact





5 Application in GoApply

The empirical assessment of interaction formats using the criteria and factors introduced above will apply a summative (ex-post) evaluation approach. The methodological focus is on qualitative instruments with the single steps outlined below.

1. Structured survey among facilitators / initiators of interaction formats (already in progress):

This survey provides an overview about interaction format in climate adaptation processes, delivered by the project partners from their respective countries. The analysis of the survey allows for a preliminary assessment of a number of factors. Moreover, it serves as a means of identifying specific formats (which are e.g. especially innovative) which will be subject to a more detailed analysis

- Method: Structured questionnaire
- Results: Overview over range of interaction formats, involved groups, innovative elements, challenges, further contacts and access to process documents

2. Identification of cases for in-depth study

Based on the survey material, we will choose suitable cases for further study, based on a number of criteria, e.g.

- Which cases promise innovative, stakeholder-focused/driven instruments for lessons learned? Which cases promise to yield transferable lessons learnt?
- Which cases included an evaluation procedure (and can possibly provide documentation thereof?)
- Which cases provide access to additional information project documents etc.?

Ideally, this choice will generate a list of two examples from each participating country in GoApply. The selection will be discussed among the project partners and national observers.

- Method: Selection based on expert assessment of criteria
- Result: Cases for in-depth study

3. Document analysis

Based on the available material (process documentation, results of the format, evaluation if available), a document analysis will be conducted. This analysis will not only provide an overview about details of the interaction format and allow for a preliminary identification of success factors, but also inform the preparation of the subsequent step. As mentioned above, not all factors are relevant for all formats and not all factors can be covered in a limited number of interviews. The document analysis, in combination with the survey results will serve as a basis to generate an interview guide specific to the case in question (e.g. based on degree of participation, position in the policy cycle etc.)

- Method: document analysis (qualitative)





- Results: More detailed overview over specific cases, preliminary assessment of success factors, construction of interview guide

4. Expert interviews

For the specific identification and assessment of success factors, a series of semi-structured expert interviews will be conducted. Interview partners are the initiators, facilitators and / or evaluators of the specific interaction format. The focus of the interviews will be:

- General experiences and lessons learned
- Strengths and weaknesses of the process and comparison against the list of success factors –
 which factors were aimed at, which were fulfilled?
- Results, outcome and follow-ups of the process

Given the resource constraints, we will be able to only conduct one or two interviews per case. Interviews will be conducted face-to-face or via phone.

- Method: semi-structured expert interviews, qualitative analysis
- Results: Insight into relevance of success factors for specific examples, expert-based assessment of format success or failures

5. Discussion and Synthesis

The results of all aforementioned steps will be presented to and discussed with the project partners who provide important insights on the context of the specific formats and outcome of the processes. A final synthesis will provide lessons learned as well as conclusions on the extent to which results from individual cases can be generalized and transferred to other contexts. The results will also provide a basis for the multi-lingual brochure of successful examples for empowering stakeholders and building adaptive capacities.





6 References

- Agger, Annika (2012): Towards tailor-made participation: how to involve different types of citizens in participatory governance. S. 29-45 In: Town Planning Review. Liverpool University Press. Liverpool.
- Arnstein, S (1969): A ladder of citizen participation. Journal of the American Institute of planners, 35(4), pp. 216-224
- Berkes, F. Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. J. Environ. Manage. 2009, 90, 1692–1702.
- Conley & Moote (2003): Evaluating Collaborative Natural Resource Management. Society and Natural Resources 16:371-386
- Drazkiewicz, Anna; Challies, Edward; Newig, Jens (2015): Public participation and local environmental planning. Testing factors influencing decision quality and implementation in four case studies from Germany. S. 211-222 In: Land Use Policy 46. Elsevier Ltd.
- EEA (2009): Regional climate change and adaptation. The Alps facing the challenge of changing water resources. No 8/2009. Kopenhagen.
- European Commission (2013): Commission Staff Working Document. Guidelines on developing adaptation strategies.
- European Commission (2001): European Governance: A White Paper. EU COM(2001) 428, Brussels
- Fazey et al. (2014): Evaluation knowledge exchange in interdisciplinary and multi-stakeholder research. Global Environmental Change, 25 (2014) 204-220
- Flick U.; Kardoff, E.v.; Steinke, I. (Ed.) (2008): Qualitative Sozialforschung. Ein Handbuch. Rowohlts Enzyklopädie, Hamburg.
- Forrester, J. (1999): The logistics of public participation in environmental assessments. International Journal of Environment and Pollution. 11 (3). S. 316-330.
- Fröhlich, Jannes; Knieling, Jörg; Kraft, Tobias (2014): Informelle Klimawandel-Governance. Instrumente der Information, Beteiligung und Kooperation zur Anpassung an den Klimawandel. HafenCity Universität Hamburg. In: neopoöis working papers: urban and regional studies, no 15. Hamburg.
- Gardner, J., Dowd, A. M., Mason, C., & Ashworth, P. 2009. A framework for stakeholder engagement on climate adaptation. CSIRO Climate Adaptation National Research Flagship
- Grothmann, T. (2017): Was motiviert zur Eigenvorsorge? Motivationseffekte von Beteiligungsprozessen in der Klimawandelanpassung. Unveröffentlicht
- Grothmann, T. (2016) Beteiligungsprozesse zur Klimaanpassung in Deutschland: Kritische Reflexion und Empfehlungen. unveröffentlicht
- Helming, Katharina; et al. (2016):. Forschen für nachhaltige Entwicklung. Kriterien für gesellschaftlich verantwortliche Forschungsprozesse. GAIA 25/3 (2016): 161–165
- Hoffmann, Esther Gebauer, Jana Fritz, Sabine (2014): Stakeholderdialoge zur Klimaanpassung 2011 2014. Bericht. Umweltbundesamt, Dessau





- Hoffmann, Esther; Siebenhüner, Bernd; Beschorner, Thomas & Arnold, Marlen (2007): Gesellschaftliches Lernen und Nachhaltigkeit. Zur Einführung. In: Hoffmann, Esther; Siebenhüner, Bernd; Beschorner, Thomas; Arnold, Marlen; Behrens, Torsten; Barth, Volker; Vogelpohl, Karin (Hrsg.): Gesellschaftliches Lernen und Nachhaltigkeit. Marburg. Metropolis. 11-32.
- IMRA (2011): Planning and implementing communication and public participation processes in flood risk management Procedural guidelines and toolbox of methods
- lÖW (2017) Erfolgsfaktoren für Beteiligungsprozesse. Arbeitspapier im Rahmen des Nationalen Dialoges 2017 am Umweltbundesamt. Unpublished.
- Jann, W.; Wegrich, J. (2009) Phasenmodelle und Politikprozesse: Der Policy Cycle. In: Lehrbuch der Politikfeldanalyse 2.0 / Klaus Schubert; Nils C. Bandelow. München: Oldenbourg, 2009. S. 75-113,
- Klima- und Energiefonds (ed.) (2017) Partizipation. Berichte zur Klimafolgenforschung. Austrian Climate Research Programme, "ACRP in essence", Vienna.
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P. & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: practice, principles, and challenges. Sustainability science, 7(1), 25-43.
- Lange, A., Siebert, R., Barkmann, T. (2016). Incrementality and Regional Bridging: Instruments for Promoting Stakeholder Participation in Land Use Management in Northern Germany Society and Natural Resources 29(7), pp. 868-879
- Lexer, Wolfgang; Scherhaufer, Patrick; Felderer, Astrid; Mitter, Hermine; Kirchner, Mathias; Schönhart, Martin; Schmid, Erwin; Lexer, Manfred J.; Kropp, Jürgen; Universität für Bodenkultur (BOKU) (Ed.) (2012): Partizipative Regionale Vulnerabilitäts- und Klimawandelfolgeuntersuchungen. Leitlinien, Schlussfolgerungen und Empfehlungen. Wien. URL: http://nbn-resolving.de/urn:nbn:de:0168-ssoar-348154 [zuletzt abgerufen 02.03.2017]
- Mahrenholz, Petra; Knieling, Jörg; Knierim, Andrea; Martinez, Grit; Molitor, Heike; Schlipf, Sonja (2017): Optionen zur Weiterentwicklung von Anpassungsstrategien. S. 335-344 In: Brasseur, G.; Jacob, D.; Schuck-Zöller, S. (2017): Klimawandel in Deutschland. Wiesbaden. Springer Spektrum.
- Mauser, Wolfram; Klepper, Gernot; Rice, Martin; Schmalzbauer, Bettina Susanne; Hackmann, Heide; Leemans, Rik; Moore, Howard (2013): Transdisciplinary global change research: the co-creation of knowledge for sustainability. Current Opinion in Environmental Sustainability 2013, 5:420–431
- Mayring, P. (2000) Qualitative Inhaltsanalyse Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, Vol 1, No 2 (2000) http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385
- Menzel, Susanne; Nordström, Eva-Maria; Buchecker, Matthias; Marques, Alexandra; Saarikoski, Heli; Kangas, Annika (2012): Decision support systems in forest management. Requirements from a participatory planning perspective. Wiesbaden. Springer Fachmedien.
- Newig, J. (2005): Erleichtert Öffentlichkeitsbeteiligung die Umsetzung (umwelt-)politischer Maßnahmen? Ein Modellansatz zur Erklärung der Implementationseffektivität. In: Feindt, P. u. Newig, J. (Hrsg.): Partizipation, Öffentlichkeitsbeteiligung, Nachhaltigkeit. Metropolis Verlag. Marburg: 89-116





- Prutsch, A., Felderer, A., Balas, M., König, M., Clar, C., Steurer, R. (2014): Methods and Tools for Adaptation to Climate Change. A Handbook for Provinces, Regions and Cities. Environment Agency Austria, Wien.
- Pütz, M.; Braunschweiger, D.; Probst, Th. (2017): Methodological framework WP1 Strengthening capacities for multilevel climate adaptation governance, GoApply project, internal document, unpublished.
- Reed, M. S.; Stringer, L. C.; Fazey, I.; Evely, A. C.; Kruijsen, J. H. J. (2014): Five principles for the practice of knowledge exchange in environmental management. J. Environ. Manage. 2014, 146, 337–345.
- Reed, M.S. (2008): Stakeholder participation for environmental management: A literature review. Biological Conservation 141 (2008) 2417 –2431
- Rowe, G.; Frewer, L.J. (2005) A Typology of Public Engagement Mechanisms Science, Technology, & Human Values, Vol. 30 No. 2, Spring 2005 251-290
- Rowe, G.; Frewer, L.J. (2000): Public Participation Methods: A Framework for Evaluation Science, Technology, & Human Values, Vol. 25 No. 1, Winter 2000 3-29
- Scherhaufer und Grüneis (2015): Herausforderungen und Grenzen partizipativer Projektarbeit. Zwei Beispiele aus der transdisziplinären Klimawandelanpassungsforschung und erste Lösungsansätze. Wien. Institut für Wald-, Umwelt- und Ressourcenpolitik, Universität für Bodenkultur.
- Schmid , Julia C., Knierim, Andrea; Knuth, Ulrike (2016): Policy-induced innovations networks on climate change adaptation An ex-post analysis of collaboration success and its influencing factors. Environmental Science & Policy 56 (2016) 67–79
- Webler, T. & Renn, O. (1995): A Brief Primer on Participation: Philosophy and Practice. In: Webler, T., Renn, O. & Wiedemann, P. (Hrsg., 1995): Fairness and Competence in Citizen Participation. Dodrecht. Kluwer. S. 17-33.
- UBA (2015) Entscheidungsprozesse zur Anpassung an den Klimawandel in Kommunen. CLIMATE CHANGE 04/2015.
- UBA (2013): Stakeholder Participation in Adaptation of Climate Change. Lessons and Experience from Germany. Climate Change 12/2013. Dessau-Roßlau.