



UvA-DARE (Digital Academic Repository)

Cost and Value of Stakeholders Participation

A Systematic Literature Review

Anggraeni, M.; Gupta, J.; Verrest, H.J.L.M.

DOI

[10.1016/j.envsci.2019.07.012](https://doi.org/10.1016/j.envsci.2019.07.012)

Publication date

2019

Document Version

Final published version

Published in

Environmental Science & Policy

License

CC BY-NC-ND

[Link to publication](#)

Citation for published version (APA):

Anggraeni, M., Gupta, J., & Verrest, H. J. L. M. (2019). Cost and Value of Stakeholders Participation: A Systematic Literature Review. *Environmental Science & Policy*, 101, 364-373. <https://doi.org/10.1016/j.envsci.2019.07.012>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



ELSEVIER

Contents lists available at ScienceDirect

Environmental Science and Policy

journal homepage: www.elsevier.com/locate/envsci

Review

Cost and value of stakeholders participation: A systematic literature review

Mustika Anggraeni^{a,c,*}, Joyeeta Gupta^{a,b}, Hebe J.L.M. Verrest^a^a Department of Geography, Planning and International Development Studies, Faculty of Social and Behavioural Science, Amsterdam Institute of Social Science Research, University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, the Netherlands^b IHE Institute for Water Education, Westvest 7, 2611 AX Delft, the Netherlands^c Urban and Regional Planning, Engineering Faculty, Brawijaya University, MT. Haryono 167 65145 Malang, Indonesia

ARTICLE INFO

Keywords:

Stakeholder participation
Participation cost
Participation value
Inclusive development

ABSTRACT

Participation has been increasingly prioritized in environmental policy processes to achieve inclusiveness in development. The vast literature discusses the pros and cons of participation but does not provide much information on the actual costs and value of participation. Hence, this review paper addresses the question: what does the literature tell us about the costs and value of participation, the evolution of the concept, and how participation costs and value have been problematized in relation to actors, levels, methods, variables, relationships between costs and value, output/outcome, geographical aspects, and contexts? Out of a larger set, the systematic review analyzes nine articles based on how the cost and value of participation are being calculated. Overall there is a lack of literature on how participation costs and value are being problematized and calculated. What is more – to the extent that this is done, the range of methods is small, limited variables are used to operationalize intangible costs and value, the focus is mainly on the local level, and the geographical distribution of case studies is limited. The literature suggests that the costs and value of participation are inequitably shared between actors. This may influence the kind of decisions being produced in the stakeholder's participation process. This causality calls for more attention for costs and benefits of participation to realize effective participation and a more inclusive participation process in environmental policy.

1. Introduction

The literature and environmental policy arena, advocate stakeholder participation in policymaking (Glicken, 2001; Reed, 2008). As such, a comprehensive understanding of the costs and benefits of stakeholder participation is warranted. Arnstein's seminal (1969) paper on the 'Ladder of Citizen Participation' warned us that participation processes could range from being purely manipulative to completely handing over responsibility to stakeholders (Arnstein, 1969). We review the literature since the 1960s to assess the lessons learned from the literature with respect to the narrow question of budgeting for and valuing of participation and the relationship between costs and effectiveness. We hypothesize that the nature and effectiveness of participation also depend on how it has been budgeted for and on how costs are shared between policymakers and stakeholders.

2. Methods

We systematically reviewed the literature (Kitchenham, 2004;

Moher et al., 2009) in the SCOPUS database for 1970–2017 to understand (a) the evolution of participation costs and value, and (b) the lessons learned on costs and value. The first query searched for: (i) "stakeholder participation" OR "stakeholder engagement" OR "stakeholder involvement"; (ii) "stakeholder participation" OR "stakeholder engagement" OR "stakeholder involvement" AND cost OR price OR expense; (iii) "stakeholder participation" OR "stakeholder engagement" OR "stakeholder involvement" AND value OR benefit; and OR profit OR gain; (iv) "stakeholder participation" OR "stakeholder engagement" OR "stakeholder involvement" AND cost OR price OR expense OR "participation cost" OR "participation price" OR "participation expense" OR "participation benefit". It generated 6,134 articles on "stakeholder participation," 1,928 on "benefit" or "value" and "stakeholder participation," 660 on "cost" and "stakeholder participation," and 330 on the combined keywords.

The second query searched for "stakeholder participation" OR "stakeholder engagement" OR "stakeholder involvement," AND cost OR price OR expense AND value OR benefit OR profit OR gain OR "participation cost" OR "participation price" OR "participation expense" OR

* Corresponding author at: Department of Geography, Planning and International Development Studies, Faculty of Social and Behavioural Science, Amsterdam Institute of Social Science Research, University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, the Netherlands.

E-mail addresses: M.Anggraeni@uva.nl (M. Anggraeni), J.Gupta@uva.nl (J. Gupta), H.J.L.M.Verrest@uva.nl (H.J.L.M. Verrest).

<https://doi.org/10.1016/j.envsci.2019.07.012>

Received 4 October 2018; Received in revised form 8 March 2019; Accepted 16 July 2019

Available online 13 September 2019

1462-9011/ © 2019 Elsevier Ltd. All rights reserved.

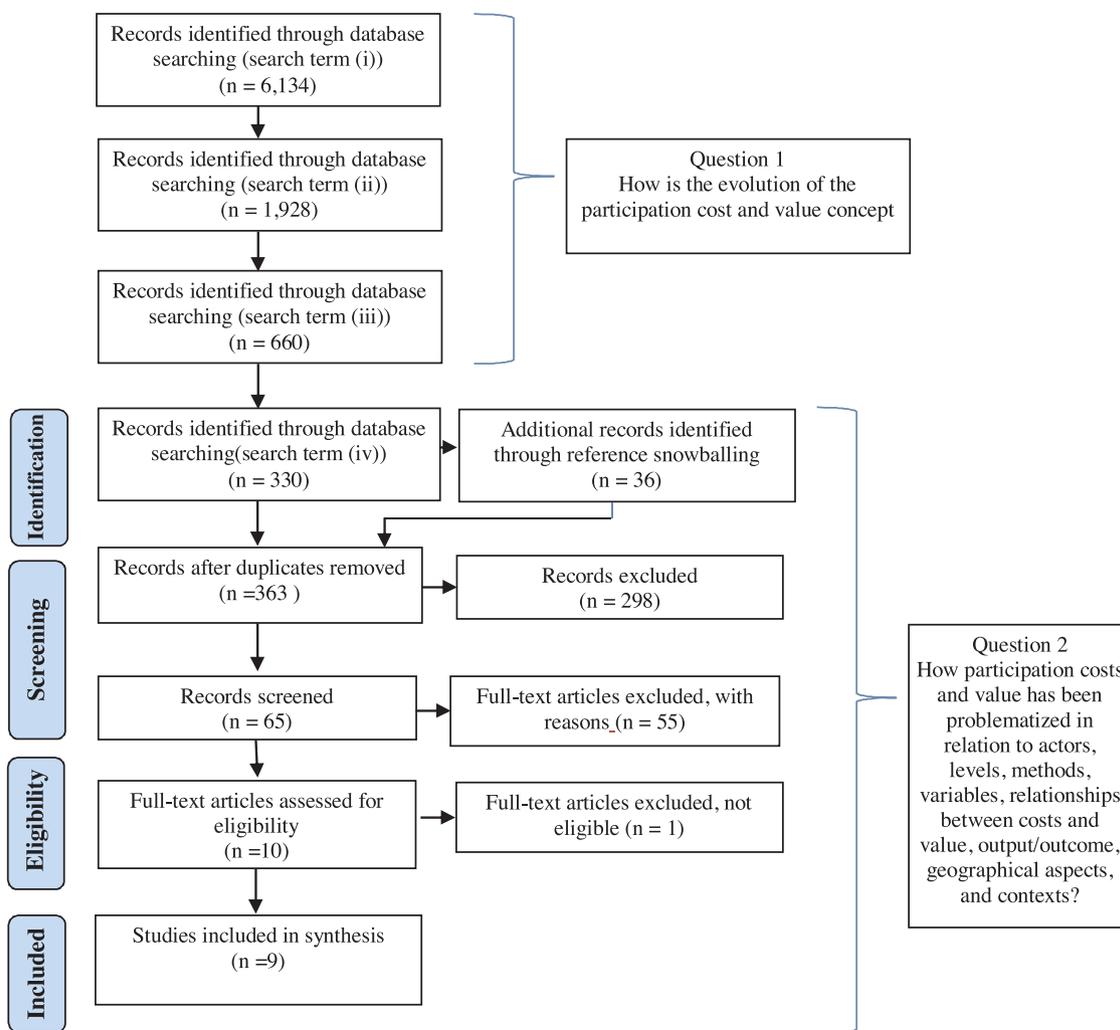


Fig. 1. Modified PRISMA flow diagram of the literature review process on participation cost and value.

“participation benefit.” We added other records ($n = 36$) which came from reference snowballing both from back-referencing and citation tracking (Petticrew and Roberts, 2008). We used the modified PRISMA search flow (see Fig. 1) to narrow down the search to nine key articles. We specifically looked for case studies that assesses the costs and the value of participation and those that covered the related participation process, methods, actors, related variables, the relationship between cost and value, output and outcome, geographical setting and context.

3. Evolution of participation costs and value in literature

The review confirms that stakeholder participation enhances (a) the legitimacy and accountability of policy (Cornwall, 2008); (b) equitable policy by engaging marginalized groups in the decision-making process (Martin and Sherington, 1997) and empowering them (Greenwood et al., 1993; Okali et al., 1994); (c) the transparency of decision-making (Richards et al., 2004; Tsaang et al., 2009); (d) social learning through valuing other stakeholder’s perspectives (Blackstock et al., 2007) and iterative reflection (Keen et al., 2005); (e) policy effectiveness (Ansari and Andersson, 2011); and (f) governance and democratization (Hurlbert and Gupta, 2015). However, it is expensive and time-consuming raising questions regarding how such participation should be costed and valued. This paper focuses on the costs of participation processes and how these are considered in relations to value. As such, we aim to reduce the tendencies of environmental and other policy makers to symbolically refer to stakeholder participation without

providing enough financial support to realise a meaningful engagement.

We note first that although there is a steep increase in articles on “stakeholder participation” followed by articles using “participation” in combination with “benefit” or “value”, very few discussed the combinations of “cost” and “participation”, and even fewer discussed “participation,” “cost,” and “value” (see Fig. 2). Policy makers refer extensively to the concept of participation, but the outcome is often not analysed, not always satisfactory (Barreteau et al., 2010), and the implementation process is unclear.

Our review of this literature is summed up in Table 1. In the 1970s, the shift from top-down to bottom-up policy-making called for stakeholder participation. Some authors were skeptical about participation; others assumed that it could be a cost-free or low-cost process (Aleshire, 1970), while some claimed that even if costly, participatory processes were the right thing to do (Rawls, 2005). Many emphasized the need to measure participation costs (Cooper, 1979; Cohen and Uphoff, 1977; Involve, 2005) and its role in programme budgeting (Cooper, 1979).

The papers of the 1980s discussed the scope of costs (individual-organizational costs) (Friedmann et al., 1988; Roberts-DeGennaro, 1986), the costs of the process (investment and operating costs) (Pieters and Verhallen, 1986), and the dimensions of costs (material, solidarity and behavioural costs) (Friedmann et al., 1988). The less extensive research focused on the material, purposive and solidarity benefits (Prestby et al., 1990), but there was recognition that participatory processes could shift the burden of costs from the state to voluntary

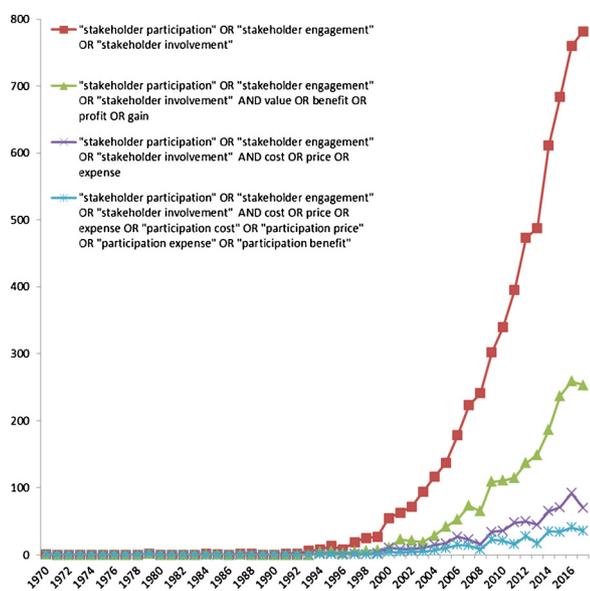


Fig. 2. Annual trends of participation, cost and value in literature.

efforts of local people (Hallett, 1987). The economic methods (benefit-cost model) used were not adequate to reveal the motives of the government in promoting participation which could be merely symbolic (Edelman, 1985). This emerged because in the benefit-cost model there is a logical assumption that the government will calculate the costs and benefits of decision-making carefully. However, this is not always the case.

In the 1990s, the papers focused on participation types that accommodate both participation costs and benefits (Chinman and Wandersman, 1999; Chinman et al., 1996; Doherty and Price, 1998; Prestby et al., 1990). However, measuring participation costs (and benefits) was problematic as voluntary participation was treated as (a) an endless resource (Taylor, 1995) and (b) participation was an unpredictable mechanism hard to manage and could generate unpredictable costs (Oakley, 1991). In the 2000s, papers viewed participation costs and value in different social and environmental policy areas (e.g. gender – B.F. Mills and Hazarika, 2003; pro-poor – Pinto,

2004; Public-Private Partnership/Financial Private Initiatives – Li et al., 2005; good urban governance – Stewart, 2006; payments for environmental services – Wünscher et al., 2008; and nonprofit voluntary accountability – Gugerty, 2009). Methods for the economic assessment of participatory processes were developed, and papers discussed costs in relation to variables such as satisfaction, commitment, and ownership (El Ansari and Phillips, 2004).

In the 2010s, the rise of online participation influenced the costs and value of participation. Methods to measure participation costs increasingly incorporated the intangible costs and benefits of participation. However, there remained a lack of empirical data on participation costs and benefits, and on how a decision-maker’s budget for participation might influence meaningful participation (Ansari and Andersson, 2011) as in the management of marine ecosystems (Lynham et al., 2017). Participation costs were considered in different contexts ranging from the poor household targeting project (Pinto, 2004) to public procurement strategies in Nigeria (Otairu et al., 2014). However, advanced indicators that capture the costs and benefits of public participation were still needed (Ansari and Andersson, 2011). The above evolution reveals that the scholarly literature scarcely covered the actual empirical costs and value of participation or how it is budgeted for in policies.

4. Participation costs and value measurement

4.1. Who pays, who gains and who is excluded?

Table 2 presents an overview of the key elements that emerge from the nine papers that discuss or calculate the cost and value of participation. In order to compare the participation costs and value of different projects, there needs to be an assessment of the project related characteristics. In this paper the focal characteristics are the social-spatial context, process and output of participation (Hassenforder et al., 2015) critical for successful environmental policymaking. These elements are discussed individually below.

We assess the papers in terms of decision-making processes to see from whose perspective the costs and value are being measured: (a) the government/organizer perspective; (b) the individual participant perspective; and (c) the hybrid perspective. The literature inadequately addresses the costs and benefits from the participant’s perspective and

Table 1
Evolution of participation cost and value.

Period	Evolution
The 1970s	<ul style="list-style-type: none"> ● Problematizing participation costs (Aleshire, 1970; Cooper, 1979); contestation of the concept (Rawls, 2005). ● Cost minimization (Aleshire, 1970). ● Early studies of participation cost emphasize solidarity, purposive and material benefits (Clarke et al., 1978). ● The need to lower/subsidize participation costs, because if the participants cannot afford participation costs, there will be more excluded participants (Cooper, 1979).
The 1980s	<ul style="list-style-type: none"> ● Relationship between participation costs and value and willingness to participate, higher participation benefit will increase the willingness to participate (Fox and Faver, 1984; Knoke, 1988; Rich, 1980; Roberts-DeGennaro, 1986; Pieters and Verhallen, 1986) or reduce their commitment level if the cost is high (Friedmann et al., 1988). ● The type of participation costs was elaborated (Friedmann et al., 1988; Roberts-DeGennaro, 1986; Pieters and Verhallen, 1986). ● Inequity in the distribution of participation costs was recognized (Hallett, 1987). ● Debate on the limits of economic methods (Edelman, 1985).
The 1990s	<ul style="list-style-type: none"> ● More studies on the types of benefits and costs of participation (Chinman et al., 1996; Chinman and Wandersman, 1999; Doherty and Price, 1998; Prestby et al., 1990). ● Participation in the 90s dominated the development discourse. However, the hierarchy is still existing in practice (Brett, 1996). ● The empirical evidence of participation cost calculation is still very limited (Jackson, 1999).
The 2000s	<ul style="list-style-type: none"> ● Development of methods for economic assessment of participatory processes and econometric modelling emerges (Burton et al., 2004; Masuda, 2007; Osborne et al., 2000). ● Participation costs linked to variables such as satisfaction, commitment, and ownership (El Ansari and Phillips, 2004).
The 2010s	<ul style="list-style-type: none"> ● Use of ICT in participation; potential cost-saving mechanism (Wang and Bryer, 2013; Zutshi et al., 2011). ● The variety of contexts within which participation costs increases, e.g. (Mills and Hazarika, 2003; Pinto, 2004; Stewart, 2006). ● Advanced indicators that capture the costs and benefits of public participation is needed (Ansari and Andersson, 2011). ● The impact of who (and how) can afford participation costs on the decision-making process is problematic. The result of decision-making satisfying only for the participant that can afford the participation cost (Lynham et al., 2017). ● Shift from benefit to value of participation (Wang and Bryer, 2013).

Table 2
Comparison of participation cost and value measurements from the perspective of the participant (P) or government (G).

Author	Actors		Level & context			Approach & Methods		Variable	Relation Cost & Value	Output/Outcome
	Pers-pective	Who pays	How much?	Level	Place	Context	Approach			
Lynham et al. (2017)	P	P	n/a	Local	California, USA	Marine ecosystem policymaking.	Cost effectiveness.	Theoretical review.	Intangible cost.	Connects cost & regime inertia.
Wang and Bryer (2013)	G	Both	Total < USD 75,000; data	Local	Florida, USA	Online citizen participation.	Cost minimization.	Quantitative methods.	Tangible cost.	More on cost, not linked with benefit of participation.
Brun and Jolley (2011)	G	n/a	n/a for sharing 25-33% est. addition to total budget	Local	North Carolina, USA	Local industrial clustering.	Cost saving.	n/a	Intangible cost and benefit.	Not clearly measured.
Ortiz et al. (2011)	Mix	Both (23% by farmers)	Av. USD 820.1 (2005) and USD 564.3 (2006) per group	Regional	Bolivia, Ethiopia, Peru, Uganda	Research on technology in potato farming.	Cost-effectiveness.	Perception through interviews, participatory workshop.	Intangible benefit and tangible cost.	Not clearly measured.
El Ansari and Phillips (2004)	P	n/a	Favourable cost-benefit ratio: benefits > 60% more than costs (total)	National	South Africa	Public health, educational institution & community.	Multi-criteria analysis.	Perception measurement (qualitative-quantitative scaling).	Intangible benefit and cost.	Measuring both cost (intangible) and benefit (intangible).
Doherty and Prime (1998)	P	P	13.7% of total	Local	South Africa	Public health rural health care service.	Cost saving.	Quantitative, household surveys.	In/tangible cost.	Focus on cost.
Chinman et al. (1996)	P	n/a	n/a (perceptual scoring)	Local	South Carolina, USA	Community drug abuse prevention.	Multi-criteria analysis.	Quantitative (ANOVA), questionnaire.	Intangible cost and benefit.	Not clearly measured.
Goetze and Godwin (1982)	G	G	n/a	Regional	Virginia, USA	Transboundary water governance.	Cost effectiveness.	Quantitative econometrics.	Intangible cost and benefit.	Cost and benefit are considered quantitatively.
Cooper (1979)	Mix	Both	n/a	Local	Los Angeles, USA	Public health, selection of local representative in council.	Cost saving.	Qualitative scaling on organization design & implementation.	Intangible cost.	Focus on cost.

thereby tends to exacerbate the potential inequity in the costs and benefits of participation (Involve, 2005). This review also reveals that the hybrid perspective that defines participation costs from the perspective of the government/organizer and participants is also hardly covered. The articles argue that participation costs need to be shared by participants and the government/organizer. Some suggest that the former should fund the direct costs and the latter the indirect costs (Ansari and Andersson, 2011; Doherty and Price, 1998). However, we believe that before discussing how such costs are to be shared, there is a need to calculate the actual direct and indirect costs from the perspective of both actors and agree who bears what costs and under what conditions. For example, if some participants are not able to afford the (in)direct costs, they may become marginalized in the decision-making process as has happened in a marine ecosystem case, thereby maintaining the status quo (Lynham et al., 2017).

4.2. Level, geography and context

Most articles cover local level participatory programmes; some discuss the national level, and one case study discusses a regional programme. The local level cases provide the most empirical operationalization of participation costs and value, and the regional level shows relationships between administrative levels (Goetze and Godwin, 1982). Different actors and levels of governance will require different participation processes with accompanying costs. At each level, each actor has a different perspective on participation costs (Goetze and Godwin, 1982) and these perspectives need exploration to assess how costs are generated, and who bears it at each level, especially as multilevel inclusive and sustainable development governance becomes increasingly important (Gupta et al., 2015). The costs of participation can be understood at various scales; the social, temporal and spatial scale (Hassenforder et al., 2015), and are also spread over multiple levels of scale(s). Our focus is on identifying the relevant levels of the spatial scale and governance, as well as the relation between these levels in terms of costs. More specifically, there is a need to understand how costs shape the relationship between multilevel processes and positive outcomes (Hassenforder et al., 2015). Secondly, it is important to understand how relations between costs and benefits are intersected by scale: at what level are costs being met and at what level are benefits being reaped? The value of participation is mostly covered in single scale research, and mostly at local level. The value of participation is influenced by the cost of participation discussed in an article, at the local level in relation to the willingness to participate (El Ansari and Phillips, 2004).

Furthermore, most of the research is situated in the United States ($n = 6$); the rest is in South America ($n = 3$), and Africa ($n = 2$). One research used four case studies: two in South America and two in Africa. The lack of cases in general, and in the Global South in particular, is problematic because the design of the stakeholder participation process should reflect the local conditions and constraints and not be imposed from outside (Anokye and Gupta, 2012), not least because we hypothesize that participation costs and value vary in the Global North and Global South.

At the global level, World Bank documents acknowledge the importance of participation costs (Rietbergen-McCracken and Narayan, 1998) and define them as the direct costs of participation; they also take into account the indirect benefits for participants (Bhatnagar et al., 1996). They measure the benefits in non-monetary terms (Rietbergen-McCracken and Narayan, 1998). Early World Bank projects calculated participation costs based on direct cost (The World Bank, 1994). Later they also provided incentives to the poor to participate (Bhatnagar et al., 1996). The measurement of participation costs and benefit is complex since the direct benefit, and the intangible cost, is hard for the participant to perceive (Bhatnagar et al., 1996). In its general development assistance evaluation, the OECD (2001) included participation in its programmes but did not discuss its cost and value; subsequently it

evaluated participation costs in aid (OECD DAC, 1997) and concluded that the assessment of participation cost and the benefit is scarce. However, participation is considered necessary regardless of the costs.

Stakeholder participation is applied to different policy arenas such as the public health context (Chinman et al., 1996; Cooper, 1979; Doherty and Price, 1998; El Ansari and Phillips, 2004), e-participation (Wang and Bryer, 2013; Wang et al., 2014), marine ecosystems (Lynham et al., 2017), agriculture (Ortiz et al., 2011), and water governance (Goetze and Godwin, 1982). In the public health context, participation is better developed because in health provision, participation requires substantial investment from public resources and there is a need for transparency and accountability (Ansari and Andersson, 2011). Interestingly, while participation is increasingly emphasized in environmental policy, only three of the nine articles on costs consider the environmental or natural context. Moreover, in these papers the measurement of costs and value was mostly focused on cost effectiveness, while in the health and urban context the approach has more variation.

4.3. Variables in participation costs and value

Most case studies examined the costs and benefits of participation while three case studies focused only on the costs (see Table 3). They recognized that participation has intangible benefits such as enhancing social and human capital (Ortiz et al., 2011) but includes costs such as time spent (Brun and Jolley, 2011; Chinman et al., 1996; Cooper, 1979; El Ansari and Phillips, 2004; Lynham et al., 2017), and issues related to trust (Lynham et al., 2017), and conflict (Chinman et al., 1996; Cooper, 1979). Intangible benefits are often simplified in the benefit-cost analysis and can be misleading. Most papers accounted for intangible costs and benefits in qualitative terms. The papers do, however, enable the identification of tangible and intangible variables of costs and benefits (see Table 3).

4.4. The relation between costs and value and output and outcome

If there is inadequate information on the costs and value of participation, this can lead to the poor design of participatory processes. Few papers focus on tangible costs. Some mixed tangible and intangible costs and values. Few papers reviewed examined both costs and value. While Lynham et al. (2017); Wang and Bryer (2013) and Cooper (1979) studied the costs of participation, none measured the value of participation. Two studied both costs and benefits, but not their relationship. Some estimate the costs and benefits of the participatory process (Brun and Jolley, 2011. Ortiz et al., 2011) and express costs and benefits as a Benefit-Cost Ratio arguing that the benefit-cost ratio must be 60% or more (minimum proportion of benefit 60% and the cost is 40%) before the participant will be inclined to participate (El Ansari and Phillips, 2004). However, most papers fail to assess participation costs and value (Ansari and Andersson, 2011). Some case studies investigate the relationship between participation costs and other variables. For example, Wang and Bryer (2013) study the relationship between costs and the level of e-participation (quality and quantity) and conclude that lower production costs of participation from the perspective of the participant increase the quantity of participation (number of posting in e-participation), however it is very little influenced the quality of participation. In some cases, the participation costs and benefits are identified. However, the relationship between cost and value are directly compared, for example, in the participatory industrial cluster identification case (Brun and Jolley, 2011) and the potato-related participatory research (Ortiz et al., 2011). What is evident is that papers (a) do not engage in empirically analyzing the tangible costs and benefits although they do attempt a qualitative analysis of intangible costs and values, and (b) possibly the lack of data combined with the notion that the intangible information is more important than the tangible data has reduced the focus on assessing the relationship between costs and

Table 3

Variables of costs and benefits of participation.

Source: Brun and Jolley, 2011; Chinman et al., 1996; Cooper, 1979; Doherty and Price, 1998; El Ansari and Phillips, 2004; Goetze and Godwin, 1982; Lynham et al., 2017; Ortiz et al., 2011; Wang and Bryer, 2013.

Cost	Benefit/value
Tangible <ul style="list-style-type: none"> • The expense of selecting stakeholders and their size. • Travel costs of participants and staff. • Information/communication development and delivery. • Arrangements for the formal processes such as accommodation, meetings, consumables (fuel, meals, office supply, training material). • Training programmes if applicable – training, monitoring, developing training material. • Other participants' expenses (e.g. child care). • Other cost items. 	<ul style="list-style-type: none"> • Payments to the agency to obtain its participation. • Access to appropriate technology. • Access to enhanced income. • Access to enhanced public services. • Access to improved ecosystem services.
Intangible <ul style="list-style-type: none"> • The opportunity cost of time; less time for other activities; adds unwanted job responsibilities. • Exclusion of intended stakeholders/beneficiaries. • Individuals' skills and time are not well used. • Conflicts of interests get exacerbated. • Problems may not be solved; unrealistic expectations (esp. unstructured problems). • Inadequate public recognition for the participatory programme. • The potential loss of political support and decision costs for the public officials. • Loss of autonomy and representation. 	Accountability, transparency: <ul style="list-style-type: none"> • Stakeholders are informed and can assist in decision-making; enhances democracy. • Stakeholders accept outcomes. Capacity building/learning <ul style="list-style-type: none"> • Increasing social and human capital (includes; networking, partnership skills, public speaking, programme planning, etc.). • Building the organization's capacity. Quality of services/projects <ul style="list-style-type: none"> • Improved analysis. • Improved policy implementation. • Stakeholder support policy. Social cohesion <ul style="list-style-type: none"> • Gaining recognition and respect from others. • Developing collaborative relationships with others. • Increasing cooperation between stakeholders. Personal satisfaction and recognition <ul style="list-style-type: none"> • Gaining personal recognition and respect. • Increasing satisfaction by being involved. • Fulfill a sense of responsibility to contribute to the community.

benefits. However, a lack of information about how to budget for participation remains a key challenge. This paper attempts to examine the costs of participation and how these shape social and environmental benefits. However, as becomes clear from Fig. 1, the discussions on the benefits or value of stakeholder participation are more extensive than those on the costs, and reference to the calculation of costs and values are far less frequent. Furthermore, out of five articles which address costs and benefits, only one measures how the benefits found are shaped by the costs (El Ansari and Phillips, 2004).

Most papers include evaluation in the process. However, although costs and value can be evaluated in the long-term, most papers evaluate only in the short term (Chinman et al., 1996; Cooper, 1979), measuring the output, but not the outcome, of participation. While some evaluate the share of costs, they do not always accommodate the perception of each actor. Some evaluate the satisfaction, commitment and sense of ownership as part of the value of participation (El Ansari and Phillips, 2004). Where papers evaluate effectiveness, they tend to focus only on cost-effectiveness and leave out the value or intangible costs. Some papers emphasize that the absence of a proper discussion or calculation of costs and benefits is an important risk factor for the success of participation (El Ansari and Phillips, 2004; Ortiz et al., 2011). One article mentions the project failed to achieve its set outcomes because of the high cost of participation, which could not be met by the participants (Cooper, 1979).

4.5. Approach and methods to calculate participation costs and value

Most frequently used methods to measure participation costs and value include scaling based on the perception of stakeholders, quantitative methods, interviews, and group meetings. The quantitative methods include econometric modeling and benefit-cost-ratio (BCR) analysis. These methods were applied in the early stages of participation costs and value research. However, dissatisfaction with the mainstreamed economic model in assessing participation costs and value

may have led to its disuse (Ansari and Andersson, 2011). Some argue in favour of simplified economic measurement to account for intangible benefits, long-term benefits, the sharing of costs and benefits, the difference in perception between the various participants and the expense involved in such assessments. Quantitative methods have been enriched with qualitative analysis such as the perceived benefits and costs, the willingness to pay for interviews and group meetings (Ortiz et al., 2011) – aiming to understand better intangible variables. The need for multiple methods to assess the costs and value of participation is continuously emphasized to enable an assessment of how this influences meaningful participation

5. Discussion

5.1. Evolution, external influence, and contestation

The challenges with top-down policymaking led to the birth of stakeholder participation in policymaking for inclusive and sustainable development. The idea was that consultation with stakeholders would enhance the quality of the decision taken both substantively (regarding appropriateness, cost-effectiveness) and procedurally (regarding legitimacy, transparency, equity, and accountability), thereby enhancing the likelihood that the social and ecological outcomes expected would be achieved. However, there are three key challenges:

First, the costs are difficult to estimate, being tangible and intangible, short-term and long-term, direct and indirect, and are perceived differently by different actors. This requires a quantitative and qualitative method. However, the difficulty in measuring qualitative indicators led to a focus on measuring the measurable (Ansari and Andersson, 2011), but did not yield many papers. The unwillingness of the government/organizers to pay for the intangible costs (Doherty and Price, 1998) has led to general stagnation in the research. Second, the benefits are difficult to estimate, often being more intangible than tangible (possibly even more intrinsic and therefore not subject to

Table 4

Typology of the cost of participation.

Source: Brun and Jolley, 2011; Chinman et al., 1996; Cooper, 1979; Doherty and Price, 1998; El Ansari and Phillips, 2004; Goetze and Godwin, 1982; Lynham et al., 2017; Ortiz et al., 2011; Wang and Bryer, 2013.

	Cost borne by the government/funder	Cost borne by the stakeholders
Tangible cost	<ul style="list-style-type: none"> ● Institutional cost. ● Stakeholder selection. ● Direct cost. ● Training cost. ● Communication cost. ● Salaries. ● Transportation cost. 	<ul style="list-style-type: none"> ● Transportation cost. ● Loss of income from participation.
Intangible cost	<ul style="list-style-type: none"> ● Organization recognition. ● Loss of authority. ● Uncertainty. ● The potential loss of political support. 	<ul style="list-style-type: none"> ● The opportunity cost of time. ● Conflict. ● Distress. ● Geographical distances. ● Capacity. ● Representation. ● Loss when the decision-making process is not clear.

valuation), more long-term than short-term, more indirect than direct, and could distort the measured benefits, and often tend to be more value oriented, such as promoting democracy and equity. Third, this makes the assessment of the links between the costs and benefits extremely complicated.

As a consequence, although the initial literature focused on cost-minimization (Aleshire, 1970), it appears as if the literature has shied away from dealing with these complexities even though it continues to emphasize the need for such participation and to recommend participatory processes. This may be because participation is seen as the right thing to do, irrespective of the costs (Rawls, 2005).

However, this lack of information makes a mockery of stakeholder participation in social and environmental policymaking processes. Because without such information, it is very difficult for policymakers to make any judgment regarding how much they should invest in the policy process. Moreover, the lack of resources to fund participation leads to a transfer of costs to the participant based on the idea that such participation can be costed by the participant. However, (a) the willingness to participate depends on the net benefits of participation, and some argue that such benefits are more valuable if they are more diverse (Homans, 1974). If the participant cannot judge whether his or her participation is likely to lead to a benefit, the participant may opt out. (b) The high cost of participation will lower the willingness to participate, (Fox and Faver, 1984; Knoke, 1988; Norton et al., 1993; Rich, 1980) and level of commitment (Friedmann, 1989). (c) This will mainly be in cases of collective or public goods such as environmental protection where participants may wish to “free ride” (Goetze and Godwin, 1982) or (d) where the poorer and more marginalized communities with much to gain cannot invest in such participation (Cooper, 1979; Lynham et al., 2017) and therefore self-exclude themselves (Altaf, 2019). Such self-selection bias can affect the entire participatory process. (e) Moreover, with the rise of the neoliberal discourse, participation can also be seen as minimizing state responsibility and using participants as unpaid labour (Garande and Dagg, 2005; Hallett, 1987). Moreover, truly empowering participants may challenge the dominant agenda of the policymaker, and participatory processes have not been properly financed and analyzed possibly because they could potentially challenge the existing power distribution. This has meant that participatory approaches have often failed to achieve meaningful social and environmental change because they have failed to confront issues of power and politics, and there was insufficient evidence of empowering outcomes (Hickey and Mohan, 2004). Overall, participatory processes might dominate the environment and development discourse, but the

role of hierarchic approaches to organizing participation remains the dominant practice (Brett, 1996). As a consequence, there is a surge of papers discussing the normative aspects of participation in a rich variety of case studies but these do not deal with the nitty-gritty issues of how to budget for good quality participation. This leads to a pacification strategy.

However, while we recognize the dangers of reducing participation to an issue of costs, not confronting such an analysis will exacerbate the risk of failure of participatory processes. In relation to risk, a lower participation budget could lead to higher risk of failure of participation depending on the level of intervention. However, the risk of failure can be even higher if the cost of participation was not discussed prior to the project as it creates more room for uncertainty. The arguments in favour of measuring the costs and value of participation and related budgeting include: (a) participation uses public resources that need to be spent well and in an accountable manner; (b) the need for information on how to cost and value participation in order to design appropriate decision-making processes and understanding of the different ways in which participation can be encouraged, including through the use of Information and Communication Technology; (c) the need to understand that different problems may require different kinds of participation with differing costs and value, and conversely that different levels and types of expenditure will lead to different types of outcomes; and (d) new and innovative methods are needed to measure participation (Ansari and Andersson, 2011; Hurlbert and Gupta, 2015).

5.2. Who bears the costs?

The typology of the costs of participation based on case studies (See Table 4) shows that most intangible costs are borne by the participants, often exacerbating existing inequities, especially in relation to common pool resources problem (Goetze and Godwin, 1982).

Most of the articles focus on the aggregate costs and benefits and recommend that if the BCR (Benefit Cost Ratio) is positive, the project should be implemented (El Ansari and Phillips, 2004). They do not explain the difference between tangible and intangible costs and who bears them or the distributional impact, thereby empowering the more powerful at the expense of the less powerful (Jenkins, 1999).

A next dimension that can be distilled from the articles are the actors considered when participation costs are defined and their relation with how the sharing of the costs and value of participation is considered (See Table 4). The first category that comes up from the articles are when the costs of participation is calculated based on the government's or funder's definition of cost. Then these costs are borne by themselves, and the example of the costs are loss of authority, uncertainty, and potential losses of political support (Goetze and Godwin, 1982). The second category is when the cost of participation is defined from the participant's point of view, and the participants have to bear the cost to participate. For example, in the case study on marine ecosystem decision-making and rural health care service, most of the indirect costs are paid by the participants. The third type that can be determined from the articles is cost sharing (hybrid) between the government and the participant, mostly when elements of costs are defined from both perspectives, for example in the case study on potato farming technology (Ortiz et al., 2011) and the selection of local representatives in a health advisory council (Cooper, 1979). The Regional Intergovernmental Institution (RII) case shows that when costs were defined only by the government or funder specifically, unequal sharing among participants in the form of free riding may occur (Goetze and Godwin, 1982). The free-riding practices, especially for collective goods, occur because it's difficult to differentiate between stakeholders based on their contribution to the costs. As such, actors that do not or very little contribute to meeting the costs, are still able to reap the benefits (Goetze and Godwin, 1982).

On the other hand, when the participation cost is seen from the participant's perspective (Table 5), the unequal sharing among

Table 5
Typology of participation and value based on the relationship between sharing and perspective.

Sharing	Perspective		
	Governments/funders perspective to calculate the cost	Mix governments/participants perspective	Participants perspective to calculate the cost
Governments/funders pay for participation cost	☑	–	–
Participants pay for participation cost	–	–	☑ ☑
Cost Sharing	☑	☑ ☑	–
Unequal sharing among participants/ free rider	☑	–	☑
n/a	☑ ☑		☑

participants also becomes clear as in the marine ecosystem case. When the participation cost is extremely high and charged to participants, only those who can afford to can participate, and this can lead to maintaining the status quo or benefitting the rich (Lynham et al., 2017). Some cases (e.g. the industrial clustering & community coalition against alcohol, tobacco) consider the calculation from the government’s perspective but do not analyse further whether the costs were equitably shared between the participants.

From the above discussion, we can infer that (a) when participation is perceived as an interaction between the government/organizer and participant, participation costs are more likely to be shared; (b) most of the few articles on this issue focus on the costs and values for the government and participant, but exclude the perspective of investors, mass media and academia.

5.3. Typology of economic assessment approach on participation cost

The typology of microeconomic assessment methods of measuring participation costs and benefits are categorized into monetary or non-monetary measurements (Table 6). Although Cost-Benefit Analysis (CBA) is prevalent in economic theory, it is not often used in the papers as intangible variables are hard to convert into monetary values (Ansari and Andersson, 2011). Cost-effectiveness approaches calculate the direct monetary cost and non-monetary benefit and have been more often used (Ansari and Andersson, 2011), and in this literature review they have mostly been used in environmental studies. The cost consequences analysis also calculates the monetary cost and non-monetary benefit; it differs from cost-effectiveness because the costs and benefits are reported separately. This is used by The World Bank to study the participation costs and value in their projects (Rietbergen-McCracken and Narayan, 1998). Cost minimization and cost-saving approaches mainly focus on the costs of participation to the organizer and do not incorporate the value of participation. This approach is used, for example, in the study of industrial cluster planning which employed the estimation of cost with participation or without participation (Brun and

Table 6
Typology of economic assessment approach on participation cost.
Source: Compiled based on the work on Ansari and Andersson (2011), and Involve (2005)

	Cost		Benefit	
	Monetary	Non-monetary	Monetary	Non-monetary
Cost-benefit analysis	☑		☑	
Cost-effectiveness	☑			☑
Cost consequences analysis	☑			☑
Cost minimization	☑			
Cost saving analysis	☑	☑		
Cost-utility analysis				☑
Multi-criteria analysis		☑		☑

Jolley, 2011). Multi-criteria analysis is emerging as an approach that can cover the gap in the neoclassical economic approach that cannot measure the non-monetary cost and benefit of participation. However, even such approaches are relatively limited in the literature in demonstrating the links between costs and value.

5.4. Participation cost and value in Global South and Global North

Public consultation for decision-making is institutionalized in the Global North and promoted in the Global South. There are hundreds of papers focusing on stakeholder participation in the South and the need for more context relevant strategies (e.g. Reed, 2008). However, this evolution remains more rhetorical, descriptive and ethnographic and does not extract the data regarding participation costs and value in the Global South.

The challenges of decision-making processes in the Global South include informality, complexity, and legal pluralism inherited from colonial and post-colonial governance practices; poverty and inequality in the context of intertwining environmental, social-economic and financial crises (Gupta et al., 2015); and the emergence of information technology in policy development and implementation processes (Schlagwein et al., 2017). The ability and speed of a stakeholder to understand, react and take advantage of changing situations and deal with uncertainty is different. The costs and benefits of participation may not follow conventional definitions, such as transportation costs or opportunity costs for attending a stakeholder’s meeting. The political context is very different. The distribution of power between the various social actors is also different. Extrapolating from the research in the North to the South will need to be ground-truthed with empirical data from the South.

While the issue of costs is critical, as demonstrated in this paper, costs and values may differ in different kinds of projects. For instance, there are projects that have capacity building or stakeholder learning as their main objectives, and these will have different types of cost and value generated. Furthermore, acknowledging that it is obscure to quantify the long-term intangible benefits for stakeholder learning projects (Smajgl and Ward, 2015) does not take away the importance of knowledge on how participation costs are being grappled with by decision makers and scholars, especially in the different contexts of the Global South and North.

6. Conclusion

This article has reviewed the scholarly literature on participation costs and value. We draw three key conclusions. First, the literature continues to emphasize the importance of stakeholder participation, although it also emphasizes that it can be misused and misapplied (Arnstein, 1969; Hurlbert and Gupta, 2015). Second, given that participation costs money and time (tangible and intangible costs), it is remarkable how very few papers have covered this issue. This is partly because there is an assumption of the limitless voluntary contribution of the public in participation and the difficulty of predicting participatory

processes. It is also because of the inherent difficulties in making such calculations. Further, possibly there is a political unwillingness to support more genuine analysis of the empirical evidence about the costs and benefits of participation as genuine participatory processes may lead to a challenge to the existing distribution of power. Third, the link with value reveals that only 5.4% of the four decades of literature have dealt with this, and even less so in an environmental decision-making context. This may be because it is hard to measure intangible benefits and over a longer period, or because there is no interest in funding such research. We conclude that the literature does not point out precisely how tangible and intangible costs should be perceived (from whose perspective), calculated and budgeted for social and environmental policy processes to ensure meaningful participation especially by those who are the most marginalized. Additionally, the literature does not adequately address the risk of failure of the participation process in relation to the cost and value. If the intent of participation is to give voice to the voiceless, lack of budgeting to enable the marginalized to participate may serve to do the opposite of what was intended – skew the policy in favour of the more powerful participants! Budgeting processes may also end up shaping who is included and who is excluded, who self-includes and who self-excludes and therefore the process may only serve to reproduce existing power differences.

Acknowledgments

The first author would like to acknowledge financial support from the Ministry of Finance, Indonesia Endowment Fund for Education (LPDP) and Indonesian Ministry of Research, Technology and Higher Education (RISTEKDIKTI). This paper has been written within the context of the ongoing research work on participatory processes at the Governance and Inclusive Development group of the Amsterdam Institute for Social Science Research of the University of Amsterdam.

References

- Aleshire, R.A., 1970. Costs, benefits and approaches. *Urban Aff. Q.* 369–393.
- Altaf, A., 2019. *The Many Hidden Faces of Extreme Poverty: Inclusion and Exclusion of Extreme Poor People in Development Interventions in Bangladesh, Benin and Ethiopia*. University of Amsterdam.
- Anokye, N.A., Gupta, J., 2012. Reconciling IWRM and water delivery in Ghana—the potential and the challenges. *Phys. Chem. Earth* 47–48, 33–45. <https://doi.org/10.1016/j.pce.2011.06.010>.
- Ansari, W.E., Andersson, E., 2011. Beyond value? Measuring the costs and benefits of public participation. *J. Integr. Care* 19. <https://doi.org/10.1108/14769011111191467>.
- Arnstein, S.R., 1969. A Ladder of citizen participation. *J. Am. Inst. Plann.* 35, 216–224. <https://doi.org/10.1080/01944366908977225>.
- Barreteau, O., Bots, P., Daniell, K., 2010. A framework for clarifying participation in participatory research to prevent its rejection for the wrong reasons. *Ecol. Soc. Resil. Alliance* 15.
- Bhatnagar, B., Kearns, J., Sequeira, D., 1996. *The World Bank Participation Sourcebook*. <https://doi.org/10.1596/0-8213-3558-8>.
- Blackstock, K.L., Kelly, G.J., Horsey, B.L., 2007. Developing and applying a framework to evaluate participatory research for sustainability. *Ecol. Econ.* 60, 726–742. <https://doi.org/10.1016/j.ecolecon.2006.05.014>.
- Brett, E.A., 1996. The participatory principle in development projects: the costs and benefits of cooperation. *Public Adm. Dev.* 16, 5–19. [https://doi.org/10.1002/\(SICI\)1099-162X\(199602\)16:1<5::AID-PAD854>3.0.CO;2-6](https://doi.org/10.1002/(SICI)1099-162X(199602)16:1<5::AID-PAD854>3.0.CO;2-6).
- Brun, L.C., Jolley, G.J., 2011. Increasing stakeholder participation in industry cluster identification. *Econ. Dev. Q.* 25, 211–220. <https://doi.org/10.1177/0891242411409208>.
- Burton, P., Goodland, R., Croft, J., Abbott, J., Hastings, A., Macdonald, G., Slater, T., 2004. *What Works in Community Involvement in Area Based Initiatives? A Systematic Review of the Literature*. London.
- Chinman, M.J., Anderson, C.M., Imm, P.S., Wandersman, A., Goodman, R.M., 1996. The perceptions of costs and benefits of high active versus low active groups in community coalitions at different stages in coalition development. *J. Commun. Psychol.* 24, 263–274. [https://doi.org/10.1002/\(SICI\)1520-6629\(199607\)24:3<263::AID-JCOP6>3.3.CO;2-N](https://doi.org/10.1002/(SICI)1520-6629(199607)24:3<263::AID-JCOP6>3.3.CO;2-N).
- Chinman, M.J., Wandersman, a., 1999. The benefits and costs of volunteering in community organizations: review and practical implications. *Nonprofit Volunt. Sect. Q.* 28, 46–64. <https://doi.org/10.1177/0899764099281004>.
- Clarke, H.D., Price, R.G., Stewart, M.C., Krause, R., 1978. Motivation patterns and differential participation in a Canadian party: the Ontario liberals. *Am. J. Pol. Sci.* 22, 130–151.
- Cohen, J.M., Uphoff, N.T., 1977. *Rural Development Participation: Concepts and Measures for Project Design, Implementation and Evaluation*. Cornell University Center for International Studies Rural Development Committee Monograph Series. Rural Development Committee, Center for International Studies, Cornell University.
- Cooper, T.L.L., 1979. The hidden price tag: participation costs and health planning. *Am. J. Public Health* 69, 368–374.
- Cornwall, A., 2008. Unpacking “Participation”: models, meanings and practices. *Commun. Dev. J.* 43, 269–283.
- Doherty, J., Price, M., 1998. The cost implication of participatory research. Experience of a health services review in a rural region in South Africa. *S. Afr. Med. J.* 88, 390–393.
- Edelman, M.J., 1985. *The Symbolic Uses of Politics*. Illini Book: Polit. Science. University of Illinois Press.
- El Ansari, W., Phillips, C.J., 2004. The costs and benefits to participants in community partnerships: a paradox? *Health Promot. Pract.* 5, 35–48. <https://doi.org/10.1177/1524839903258066>.
- Fox, M.F., Faver, C.A., 1984. Independence and cooperation in research: the motivations and costs of collaboration. *J. Higher Educ.* 55, 347. <https://doi.org/10.2307/1981888>.
- Friedmann, J., 1989. Planning in the public domain: discourse and praxis. *J. Plan. Educ. Res.* 8, 128–130. <https://doi.org/10.1177/0739456X8900800214>.
- Friedmann, R.R., Florin, P., Wandersman, A., Meier, R., 1988. Local action on behalf of local collectives in the U.S. and Israel: how different are leaders from members in voluntary associations? *J. Volunt. Action Res.* 17, 36–54. <https://doi.org/10.1177/0899764088017003-404>.
- Garante, T., Dagg, S., 2005. Public participation and effective water governance at the local level: a case study from a small under-developed area in Chile. *Environ. Dev. Sustain.* 7, 417–431. <https://doi.org/10.1007/s10668-004-3323-9>.
- Glicken, J., 2001. Getting stakeholder participation “right”: a discussion of participatory processes and possible pitfalls. *Environ. Sci. Policy* 3, 305–310. [https://doi.org/10.1016/S1462-9011\(00\)00105-2](https://doi.org/10.1016/S1462-9011(00)00105-2).
- Goetze, D., Godwin, R.K., 1982. Regional intergovernmental institutions: participation benefits and costs. *Environ. Manage.* 6, 527–533. <https://doi.org/10.1007/BF01868381>.
- Greenwood, D.J., Whyte, W.F., Harkavy, I., 1993. Participatory action research as a process and as a goal. *Hum. Relat.* 46, 175–192.
- Gugerty, M.K., 2009. Signaling virtue: voluntary accountability programs among non-profit organizations. *Policy Sci.* 42. <https://doi.org/10.1007/s11077-009-9085-3>.
- Gupta, J., Verrest, H., Jaffe, R., 2015. Theorizing governance. In: Gupta, J., Pfeffer, K., Verrest, H., Ros-Tonen, M. (Eds.), *Geographies of Urban Governance: Advanced Theories, Methods and Practices*. Springer International Publishing, Switzerland, pp. 27–43. https://doi.org/10.1007/978-3-319-21272-2_2.
- Hallett, C., 1987. *Critical Issues in Participation*. Association of Community Workers, Sheffield.
- Hassenforder, E., Smajgl, A., Ward, J., 2015. Towards understanding participatory processes: framework, application and results. *J. Environ. Manage.* 157, 84–95. <https://doi.org/10.1016/j.jenvman.2015.04.012>.
- Hickey, S., Mohan, G., 2004. *Participation: From Tyranny to Transformation?* 1st ed. Zed Books, London.
- Homans, G.C., 1974. *Social Behavior; Its Elementary Forms*. Harcourt, Brace, Jovanovich.
- Hurlbert, M., Gupta, J., 2015. The split ladder of participation: a diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environ. Sci. Policy* 50, 100–113. <https://doi.org/10.1016/j.envsci.2015.01.011>.
- Involve, 2005. *The True Costs of Public Participation* 206. <https://doi.org/10.1057/9780230206915>.
- Jackson, E.T., 1999. The strategic choices of stakeholders: examining the front-end costs and downstream benefits of participatory evaluation. *World Bank Conference on Evaluation and Poverty Reduction* 1–16.
- Jenkins, G.P., 1999. Evaluation of stakeholder impacts in cost-benefit analysis. *Impact Assess. Proj. Apprais.* 17, 87–96. <https://doi.org/10.3152/147154699781767927>.
- Keen, M., Brown, V.A., Dyball, R., 2005. Social learning: a new approach to environmental management. In: Keen, M., Brown, V.A., Dyball, R. (Eds.), *Social Learning in Environmental Management: Towards A Sustainable Future*. Earthscan Publications, London, pp. 3–21.
- Kitchenham, B., 2004. *Procedures for Performing Systematic Reviews*, vol. 33. Keele Univ., Keele, UK, pp. 28 10.1.1.122.3308.
- Knoke, D., 1988. Incentives in collective action organizations. *Am. Sociol. Rev.* 53, 311–329.
- Li, B., Akintoye, A., Edwards, P.J., Hardcastle, C., 2005. Perceptions of positive and negative factors influencing the attractiveness of PPP/PFI procurement for construction projects in the UK. *Eng. Constr. Archit. Manag.* 12, 125–148. <https://doi.org/10.1108/09699980510584485>.
- Lynham, J., Halpern, B.S.S., Blenckner, T., Essington, T., Estes, J., Hunsicker, M., Kappel, C., Salomon, A.K.K., Scarborough, C., Selkoe, K.A.A., Stier, A., 2017. Costly stakeholder participation creates inertia in marine ecosystems. *Mar. Policy* 76, 122–129. <https://doi.org/10.1016/j.marpol.2016.11.011>.
- Martin, A., Sherington, J., 1997. Participatory research methods: implementation, effectiveness and institutional context. *Agric. Syst.* 195–216.
- Masuda, N., 2007. Participation costs dismiss the advantage of heterogeneous networks in evolution of cooperation. *Proc. R. Soc. B Biol. Sci.* 274. <https://doi.org/10.1098/rspb.2007.0294>.
- Mills, B.F., Hazarika, G., 2003. Do single mothers face greater constraints to workforce participation in non-metropolitan areas? *Am. J. Agric. Econ.* 84, 143–161. <https://doi.org/10.1111/1467-8276.00109>.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., Altman, D., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J.A., Clark, J., Clarke, M., Cook, D., D’Amico, R., Deeks, J.J., Devereaux, P.J., Dickersin, K., Egger, M., Ernst, E., Gotzsche, P.C.,

- Grimshaw, J., Guyatt, G., Higgins, J., Ioannidis, J.P.A., Kleijnen, J., Lang, T., Magrini, N., McNamee, D., Moja, L., Mulrow, C., Napoli, M., Oxman, A., Pham, B., Rennie, D., Sampson, M., Schulz, K.F., Shekelle, P.G., Tovey, D., Tugwell, P., 2009. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med.* 6. <https://doi.org/10.1371/journal.pmed.1000097>.
- Norton, S., Wandersman, A., Goldman, C.R., 1993. Perceived costs and benefits of membership in a self-help group: comparisons of members and nonmembers of the alliance for the mentally ill. *Commun. Ment. Health J.* 29, 143–160. <https://doi.org/10.1007/BF00756340>.
- Oakley, P., 1991. *Projects with People: The Practice of Participation in Rural Development*. International Labour Office.
- OECD, 2001. *Engaging Citizens in Policy Making: Information, Consultation and Public Participation*.
- OECD DAC, 1997. *Evaluation of Programs Promoting Participatory Development and Good Governance*. Development.
- Okali, C., Sumberg, J., Farrington, J., 1994. *Farmer Participatory Research*. Intermediate Technology Publications, London.
- Ortiz, O., Orrego, R., Pradel, W., Gildemacher, P., Castillo, R., Otiniano, R., Gabriel, J., Vallejo, J., Torres, O., Woldegiorgis, G., Damene, B., Kakuhenzire, R., Kasahija, I., Kahi, I., 2011. Incentives and disincentives for stakeholder involvement in participatory research (PR): lessons from potato-related PR from Bolivia, Ethiopia, Peru and Uganda. *Int. J. Agric. Sustain.* 9, 522–536. <https://doi.org/10.1080/14735903.2011.605640>.
- Osborne, M.J., Rosenthal, J.S., Turner, M.A., 2000. Meetings with costly participation: comment. *Am. Econ. Rev.* 90, 927–943.
- Otairu, A., Umar, A.A., Zawawi, N.A.W.A., Sodangi, M., Hammad, D.B., 2014. Slow adoption of PPPs in developing countries: survey of Nigerian construction professionals. *Procedia Eng.* 77 (2014), 188–195. <https://doi.org/10.1016/j.proeng.2014.07.014>.
- Petticrew, M., Roberts, H., 2008. *Systematic Reviews in the Social Sciences: A Practical Guide*. Wiley.
- Pieters, R.G., Verhallen, T.M., 1986. Participation in source separation projects: design characteristic and perceived costs and benefits. *Resour. Conserv.* 12, 95–111.
- Pinto, S.M., 2004. Assistance to poor households when income is not observed: targeted in-kind and in-cash transfers. *J. Urban Econ.* 56, 536–553. <https://doi.org/10.1016/j.jue.2004.07.001>.
- Prestby, J.E., Wandersman, A., Florin, P., Rich, R., Chavis, D., 1990. Benefits, costs. Incentive management and participation in voluntary organizations: a means to understanding and promoting empowerment. *Am. J. Commun. Psychol.* 18, 117–149.
- Rawls, J., 2005. *A Theory of Justice*, Oxford Paperbacks 301 301. Harvard University Press.
- Reed, M.S., 2008. Stakeholder participation for environmental management: a literature review. *Biol. Conserv.* 141, 2417–2431. <https://doi.org/10.1016/j.biocon.2008.07.014>.
- Rich, R.C., 1980. *The Dynamics of leadership in neighborhood organizations*. *Soc. Sci. Q.* 60, 570–587.
- Richards, C., Blackstock, K.L., Carter, C.E., 2004. *Practical Approaches to Participation* SERG Policy Brief No. 1. Aberdeen. .
- Rietbergen-McCracken, J., Narayan, D., 1998. *Participation and Social Assessment: Tools and Techniques*. World Bank, Washington.
- Roberts-DeGennaro, M., 1986. Factors contributing to coalition maintenance. *J. Sociol. Soc. Welf.* 13, 248–264. <https://doi.org/10.3868/s050-004-015-0003-8>.
- Schlagwein, D., Conboy, K., Feller, J., Leimeister, J.M., Morgan, L., 2017. “Openness” with and without Information Technology: a framework and a brief history. *J. Inf. Technol.* 32, 297–305. <https://doi.org/10.1057/s41265-017-0049-3>.
- Smajgl, A., Ward, J., 2015. Evaluating participatory research : framework, methods and implementation results. *J. Environ. Manage.* 157, 311–319. <https://doi.org/10.1016/j.jenvman.2015.04.014>.
- Stewart, K., 2006. Designing good urban governance indicators: the importance of citizen participation and its evaluation in Greater Vancouver. *Cities* 23. <https://doi.org/10.1016/j.cities.2006.03.003>.
- Taylor, M., 1995. *Unleashing the Potential: Bringing Residents to the Centre of Regeneration*. York. .
- The World Bank, 1994. *The World Bank and Participation*.
- Tsaang, S., Burnett, M., Hills, P., Welford, R., 2009. Trust, public participation and environmental governance in Hong Kong. *Environ. Policy Gov.* 19, 99–114.
- Wang, X.H., Hawkins, C., Berman, E., 2014. Financing sustainability and stakeholders engagement: evidence from U.S. cities. *Urban Aff. Rev.* 50, 806–834. <https://doi.org/10.1177/107808744522388>.
- Wang, X.H., Bryer, T.A., 2013. Assessing the costs of public participation: a case study of two online participation mechanisms. *Am. Rev. Public Adm.* 43, 179–199. <https://doi.org/10.1177/0275074012438727>.
- Wünscher, T., Engel, S., Wunder, S., 2008. Spatial targeting of payments for environmental services: a tool for boosting conservation benefits. *Ecol. Econ.* 65. <https://doi.org/10.1016/j.ecolecon.2007.11.014>.
- Zutshi, A., Parris, M.A., Creed, A., 2011. Write it or click on it? Paper vs. online questionnaires for organisational research. *Int. J. Bus. Innov. Res.* 5. <https://doi.org/10.1504/IJBIR.2011.043204>.