

# The coordinates of scaling: Facilitating inclusive innovation

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## Abstract

The desire to ensure that the benefits of successful small-scale social innovation are more widely available has led to a plethora of frameworks that seek to scale such innovations. We review 20 extant frameworks for scaling and distinguished four directions: up (producing changes in laws, policies, institutions or norms), down (resource allocation to support implementation), in (ensuring organizations have the capacity to deliver the type and number of good practices required) and out (geographically replicating or broadening the range or scope of good practices). In addition to these directions of scaling a generic pathway, or process, to achieve scaling is also discernible across many of the frameworks reviewed. This involves five phases: identifying, planning, implementing, learning and adapting. We stress the need for a more dynamic and systemic approach to scaling, as well as one which anticipates, addresses and assesses the extent to which scaling is inclusive of marginalized groups.

## KEYWORDS

inclusion, inclusive innovation, scaling, scaling frameworks, vulnerable populations

## 1 | INTRODUCTION

There is a growing interest in scaling social innovations<sup>1</sup> in development to increase their social impact. In recent years, there has been a flourishing of ‘scaling science’ to improve social impact and benefit society (Gargani & Mclean, 2017). Moreover, while scaling up<sup>2</sup> is frequently mentioned as desirable, there are only a few frameworks that address how to influence scaling so

that socially excluded populations also benefit. The existing scaling frameworks in the literature rarely incorporate specific strategies that require planning and implementing scaling that considers the needs of the most marginalized groups.

The purpose of this paper is to conceptualize a scaling framework that parsimoniously incorporates the essential components of the plethora of extant approaches to scaling and to strengthen a concern to ‘leave no one behind’. We emphasize that scaling socially inclusive innovations usually occurs within the context of complex adaptive systems (CASs) and that within this context there additionally needs to be a stronger and clearer focus on the inclusion of marginalized groups; and we suggest how this can be achieved. Furthermore, although existing frameworks prescribe a series of steps to achieve scaling, they rarely consider the complexity, or the

<sup>1</sup>We consider socially inclusive innovations to be ‘the development and implementation of new ideas which aspire to create opportunities that enhance social and economic wellbeing for disenfranchised members of society’ (George et al., 2012, p. 663), promoted through organizations whose primary purposes are social (Mulgan, 2006, p. 146).

<sup>2</sup>The use of use scaling up and scaling is used interchangeably in the literature.

unpredictability, of the broader system they aim to change (Paina & Peters, 2012).

A CAS approach addresses the interaction amongst different agents that are in and out of the system to be scaled (Hall & Clark, 2010). A CAS approach is potentially useful to understanding scaling in complex environments and to understand scaling failure (McVeigh et al., 2016; Paina & Peters, 2012). Furthermore, intervening organizations often overlook the interaction between the systems that they want to change, and the root causes of exclusion, or discrimination, in the scaling process. With the emphasis on ‘leaving no one behind’ in the Sustainable Development Goals (SDGs, 2015), this should be addressed and recognized as a priority. Given that the goal of scaling effective interventions is to promote social impact, it is important to have a scaling framework that analyses exclusion and discrimination, from a systems perspective.

The paper is divided into two sections. The first section describes existing scaling frameworks: how scaling is conceived and recommendations for its achievement. Using a constant comparison methodology, we identify five common phases of scaling and four distinct directions of scaling, representing a parsimonious synthesis of the range of terminology currently in use. The second section suggests an inclusive scaling framework that addresses inclusion and suggests a range of participatory mechanisms to centre inclusion as a scaling objective. By stressing inclusion as an implicit aim of scaling, we seek to refocus thinking about scaling into what social impact would mean for marginalized communities—for reaching towards the marginalized and promoting social benefit for all.

## 2 | METHODOLOGY

In order to understand how scaling happens and is promoted for socially inclusive innovations in development, we conducted a systematic search and review (Grant & Booth, 2009, p. 102). The scope of this review was to explore scaling frameworks that addressed socially inclusive innovations targeting vulnerable populations. We narrowed the review to the following inclusion criteria: (a) scaling up of innovations in development contexts (primarily low- and middle-income countries) and (b) for identifiable discrete innovations as interventions, good practices, or pilot projects of development actors, such as community-based organizations, non-governmental organizations (NGO), international NGOs (INGOs) and the public sector, with the intent to improve the living conditions, which included health, education, employment, housing, land tenure and agriculture, and technology.

The literature covered from 1995 to 2019 and considered the first studies on scaling frameworks in development (Uvin, 1995). The types of documents reviewed were as follows: (1) scientific academic research on scaling frameworks for innovations and (2) grey literature of reports and manuals on scaling frameworks from local, national and international organizations working on development, for example, US Agency for International Development (USAID), World Health Organization (WHO) and World Bank (WB). We excluded scaling up in nondevelopment contexts, businesses and scaling business-like models.

The data were collected, first, by conducting a literature search in Academic Search Complete, Web of Science and Google Scholar that included the key words ‘social innovation’ ‘development’ ‘scaling up approaches’ OR ‘scaling up frameworks’ OR ‘scaling up methodologies’, which resulted in 13 entries in Google Scholar, two in Academia Search Complete and four in Web of Science; when changing the term to ‘innovation’, the results were 189, 36 and 30, respectively. We extended the search to ‘innovation’ because using the term on ‘socially inclusive innovations’, the search yielded in no results. We eliminated the duplicates, reviewed the abstracts and selected those articles that mentioned a scaling framework with a number of steps to scale.

We also added ExpandNet,<sup>3</sup> a known source for scaling that has a scaling-up bibliography organized in 10 themes, with 369 titles focusing on scaling and 92 focusing on scaling up frameworks, with another 36 titles on development. We eliminated the duplicates with the articles selected on the first step, resulting in 52 new documents.

Other important sources to identify scaling up frameworks were Fixsen et al. (2009), who identified eight key frameworks that are incorporated in our literature review; Massoud et al. (2010), Subramanian et al. (2011), Bradley et al. (2011), Hardee et al. (2012), Milat et al. (2015), Adamou et al. (2013), Barker et al. (2016) and Sohal (2018) were all reviewed to identify approaches to scaling.

The frameworks were selected by reviewing the articles applying the following criteria: (a) covers a description of a number of steps to achieve scaling and/or (b) describes scaling directions and/or (c) defines scaling. Finally, we filtered those results that had used the same scaling framework. The frameworks were classified by policy area of focus and, if applicable, by organization sponsoring the framework. We used a constant

<sup>3</sup>ExpandNet is a global network of practitioners, scholars and academics to advance the science of scaling up. Available at: <https://expandnet.net>. Last accessed May 2020.

comparison analysis (CCA) to explore the differences and similarities of the 20 frameworks, and as a result of that analysis, we came up with five stages for scaling and four directions addressed in the next section.

The purpose of the CCA is to create new theory and/or to analyse documents (Leech & Onwuegbuzie, 2008; Onwuegbuzie et al., 2012). The CCA method has three stages of analysis: (a) open coding (identify thematic codes relating to particular ideas/activities/actions); (b) axial coding (identify codes into similar categories) and (c) selective coding to, in our case, create a new framework, but with the continuous process of monitoring new data (document analysis) to compare with the collected data (already analysed documents) (Onwuegbuzie et al., 2012, p. 13). The process of data collection reaches a point of theoretical saturation when no new categories are found in the subsequent analysis; in this case, no other different distinct stages were found in the scaling frameworks analysed (Onwuegbuzie et al., 2012).

## 2.1 | Findings—20 scaling frameworks

In order to understand how and when scaling might happen, we felt it was important to explore and analyse the different extant frameworks. In general, scaling frameworks define a direction of scaling and include a set of steps to follow; some also show the types of strategies employed to scale practices, programmes and policies.

The CCA open coding indicated different levels of completeness of the 20 frameworks reviewed; for example, if they have an explicit definition of scaling, refer to specific units of scaling or include steps to scale. A second stage of coding considered if a framework identified process issues to scaling. The third stage developed coding for five common phases, using a common language and is described in Sections 2.1.1 and 2.1.2. Table 1 summarizes the 20 approaches to scaling identified through the literature search. The scaling frameworks in Table 1 do not address differences between types of organizations and their paths to scale. For example, differences between scaling for a national programme that is implemented by the government and for a local project implemented by a community-based organization are not addressed. Indeed, the literature of scaling describes the approaches of scaling for non-profits, international NGOs, governments, social enterprises, community-based organizations and private sector, as essentially being the same. The Nesta UK framework defines the scaling target as the social innovations, defining these broadly as ‘new products, services and models that both meet social needs and create new social relationships or

collaborations – they’re “social” both in ends and means’ and ‘can be generated from within any sector – public, private or social – or from citizens and social movements. They may generate financial value, but don’t have to’ (Gabriel, 2014, p. 7).

The frameworks aim to scale pilots, projects, programmes or policies, often advocating for a variety of practices—not well defined—that leave their implementation to their use in the field. An exception to this is that the Self-Evaluation for Effective decision-making Systems for communities to adapt learning and expand (SEED) addresses only community-based projects as the ‘size’ of the unit to be scaled to larger programme adoption (Taylor & Taylor, 2003). More consideration is therefore needed to understand the practicalities of scaling for one type of organizational entity versus another type, as well as a set of interventions that are contextually relevant. The focus in these frameworks is generally on the reasoning to scale and not on the scalable unit for the frameworks, whether that is a pilot, a programme or a policy to scale. However, the Scaling up Management (SUM) framework is one approach that does differentiate scaling process by the scalable unit: pilot, demonstration, capacity building and campaigns; for example, in a pilot project, scaling up comes after the innovation phase (Kohl and Cooley, n.d., p. 4). The Nesta UK approach explains scaling of social innovations in a spiralling process to achieve systemic change, in six stages: (1) prompts, inspirations and diagnoses; (2) proposals and ideas; (3) prototyping and pilots; (4) sustaining; (5) scaling and diffusion; and (6) systemic change (Murray et al., 2010, p. 12-13).

In the 20 frameworks, scaling is a process that usually goes from small to big; some frameworks like ‘Making it Big’ are more explicit in this regard than others, such as the learning process approach (LPA). ExpandNet is one of the approaches that describes in more detail in nine steps and considers scaling as ‘expanding, replicating, adapting and sustaining successful policies, programs or projects in geographic space and over time to reach a greater number of rural poor’ (ExpandNet, 2010, p. 17). Other definitions of scaling include the improvement collaborative approach definition that focuses on the growth of the intervention from improvements that serve a small group to ‘a significantly larger population, such as an entire region or country’ (USAID, 2008, p. 20). The International Fund for Agricultural Development (IFAD) approach addresses scaling as quality of impact and sustainability (Hartmann & Linn, 2008, p. 8). This framework includes drivers and spaces; the drivers are the enablers to scale up (e.g. strong leadership), and the spaces are opportunities or potential obstacles to scale up (e.g. policy space). In the frameworks reviewed, scaling

**TABLE 1** Scaling frameworks (inclusion criteria and constant comparison analysis applied)

Name of framework	Organization/reference	Defines scaling	Phases to scale	Scaling directions	Policy field
(1) International Fund for Agricultural Development (IFAD) IFAD Approach	The World Bank/Hartmann and Linn (2008); Linn et al. (2010)	Explicit	Identifying Learning Adapting	Expansion Replication Spontaneous diffusion	Rural poverty and agriculture
(2) GHIL-AIDED (Assess, Innovate, Develop, Engage, Devolve)	Yale Global Health Leader Institute/Bradley et al., (2011, 2012)	Explicit	Identifying Planning Implementing Adapting	No	Health: family planning, breastfeeding programmes, community health workers
(3) The State Implementation and Scaling up of Evidence-based Practices (SISEP)	State Implementation and Scaling up of Evidence-based Practices Center/Fixsen et al. (2009); Fixsen (2009); Fixsen et al. (2013)	Implicit	Identifying Planning Implementing	No	Education, human services, child development
(4) Scaling up Management (SUM) framework <sup>a</sup>	Management Systems International (MSI) (Cooley & Kohl, 2006; Kohl & Cooley, n.d.), Cooley and Linn (2014)	Implicit	Identifying Planning	Expansion Replication Collaboration	General
(5) Guide for Fostering Change to Scale Up Effective Health Services <sup>b</sup>	The Implementing Best Practices Consortium (IBP) (2007)	Implicit	Identifying Planning Implementing Learning Adapting	Quantitative Functional Political	Health-service delivery—reproductive health
(6) The improvement collaborative approach <sup>c</sup>	Health Care Improvement Project/USAID (2008) <sup>d</sup>	Explicit	Learning	No	Health Care
(7) A Learning Process Approach <sup>e</sup>	Korten (1980)	Implicit	Planning Learning	No	Rural development, the background of participatory research practices
(8) SEED-Scale (Self-Evaluation for effective decision making—Systems for communities to adapt learning and expand)	Taylor and Taylor (2003)	Implicit	Learning Adapting	Blueprint Explosion Additive Biological	General
(9) ExpandNet Framework <sup>f</sup>	The World Health Organization, Simmons and Shiffman (2007), ExpandNet (2007, 2010), ExpandNet WHO—The World Health Organization (2009)	Explicit	Identifying Planning Implementing	Horizontal Vertical Spontaneous Diffusion Diversification	Health

TABLE 1 (Continued)

Name of framework	Organization/reference	Defines scaling	Phases to scale	Scaling directions	Policy field
(10) The framework for going to full scale	Barker et al. (2016)	Implicit	Identifying Implementing	No	Health
(11) Scaling up population health intervention guide	Milat et al. (2014, 2016)	Explicit	Identifying Planning Implementing Learning Adapting	No	Health
(12) The Multiplicative Scale-up Method <sup>g</sup>	Massoud (2004)	Explicit	Planning	No	Health—HIV/AIDS treatment and care
(13) Making it Big—Strategies for scaling social innovations	Gabriel (2014); Murray, Caulier-Grice and Mulgan (2010) Nesta UK	Implicit	Planning Implementing Learning	Scaling routes: Influence and advice, build a delivery network, form a strategic partnership, grow and organization to deliver (2014)	General-social entrepreneurship
(14) PATH's framework for product introduction. <sup>h</sup>	PATH <sup>i</sup> Programme for Appropriate Technology in Health	Implicit	Identifying Implementing	No	Health technologies
(15) Five Configurations for Scaling Up Social Innovation	Westley et al. (2014)	Explicit	Learning Adapting	<i>Volcano</i> —learning and experimentation <i>Bearstalk</i> , is initiated by a visionary <i>Umbrella</i> through funding, <i>LEGO</i> , the change starts in the community, <i>Polishing gemstones</i> , refining product	Non-profit Social Entrepreneurship
(16) The Scalability Framework	Weber et al. (2012).	Implicit	Adapting	No	Social Entrepreneurship
(17) The Scale up exclusive breastfeeding framework	Bhandari et al. (2008) <sup>j</sup>	Implicit	Identifying Planning Implementing Learning Adapting	No	Health-breastfeeding programmes
(18) Scaling Up Local and Community-Driven Development (LCDD)	Binswanger and Swaminathan (2003), Binswanger-Mkhize et al. (2009), Binswanger and Nguyen (2004)	Explicit	Identifying Planning Implementing	No	Community-Driven Development

(Continues)

TABLE 1 (Continued)

Name of framework	Organization/reference	Defines scaling	Phases to scale	Scaling directions	Policy field
(19) The Scaling Scan	Public Private Partnerships (PPP) Jacobs, Ubels and Woltering (2018)	Explicit	Identifying Planning	Horizontal Vertical	Generic
(20) A phase Approach	Baker (2010)	Implicit	Identifying Planning Implementation	No	Health

Source: Adapted from Hancock (in The World Bank, 2003), Fixsen (2009), Massoud et al. (2010), Bradley et al. (2011), Subramanian et al. (2011), Hardee et al. (2012), Milat et al. (2015), and Barker et al. (2016).

<sup>a</sup>Also, in Hardee et al. (2012), Fixsen (2009), Subramanian et al. (2011), Adamou et al. (2013), Milat et al. (2015), and Barker et al. (2016).

<sup>b</sup>In Hardee et al. (2012), Adamou et al. (2013), and Barker et al. (2016).

<sup>c</sup>In Hardee et al. (2012) and Adamou et al. (2013).

<sup>d</sup>USAID Health Care Improvement Project (2008). The Improvement Collaborative: An Approach to Rapidly Improve Health Care and Scale Up Quality Services. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC); 2008.

<sup>e</sup>In Subramanian et al. (2011).

<sup>f</sup>Also in Hardee et al. (2012), Fixsen (2009), Subramanian et al. (2011), Adamou et al. (2013), Milat et al. (2015), and Barker et al. (2016).

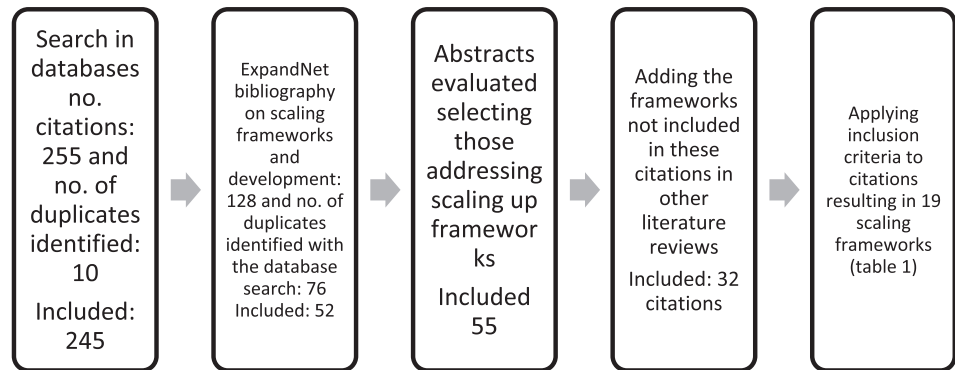
<sup>g</sup>Barker et al. (2016).

<sup>h</sup>Smith et al. (2015).

<sup>i</sup>Path is an organization working on global health issues since 1977. PATH's framework for product introduction. [http://www.path.org/publications/files/TS\\_product\\_intro\\_framework.pdf](http://www.path.org/publications/files/TS_product_intro_framework.pdf). Published 2007.

<sup>j</sup>In Milat et al. (2015).

**FIGURE 1** Flow diagram indicating the search process



in itself, is either a goal or a step to achieve sustainability. The ‘five configurations for scaling’ approach considers scaling ‘to make a durable and profound change’ (Westley et al., 2014, p. 3).

The 20 frameworks address scaling as a phase but, differing in the number of phases as well as the components they drop in for each phase. Barker et al. (2016) identified two models of global health scaling frameworks: (1) nonsequential and (2) sequential approaches. The latter follow a particular ordering of phases to achieve scale. The ‘framework for going to full scale’ explains linearity from developing the scalable unit to testing it and then to fully scaling it up (Barker et al., 2016, p. 7). The ‘scaling up population health intervention guide’ underlines the steps in an order with their objectives, strategies and challenges, as well as different tools required for each phase. The ‘State Implementation and Scaling up of Evidence-based Practices’ (SISEP) describes an implementation process to scale from the exploration and adoption to innovation and sustainability. The SUM framework approach emphasis is on the scaling plan to identify the need to scale and to establish the preconditions to implement the scale as well as the Implementing Best Practices Consortium (IBP) approach that begins defining the need for change. A few frameworks incorporate a final stage to evaluate the scaling process such as the IBP and the LPA. Moreover, the LPA considers participation and knowledge transfer as a precondition to scale up. The LPA stages aim to progressively achieve the organization’s maturity by achieving expansion as the ultimate goal in a way that the organization is able to address new problems and create new solutions to replicate (see Figure 1). The SISEP, like the LPA, highlights practice improvement and evaluation as key, and the innovation comes at the end of the process. The SISEP emphasizes the need to develop capacity in terms of professional development and practice improvement. The SISEP includes identifying different stages in the process to implement the project and the importance of evaluation. The transition to scale is depicted in most of the

approaches in a sequential order; however, for some like the GHLI-AIDED (Assess, Innovate, Develop, Engage, Devolve), the stages are not followed one after the other, but these can be reiterative over the process.

Some of the scaling frameworks have a higher level of complexity than others by delimiting the scaling directions, whereas others promote an understanding that scaling takes place intertwined in complex systems. The GHLI-AIDED, ExpandNet, the Five Configurations for Scaling up Social Innovation and the SEED emphasize unpredictability and complexity; that scaling does not happen in a vacuum. Complexity is understood as a system where the intervention adds or contributes to part of a change, the GHLI-AIDED specifically addresses CAS; unpredictability is part of the scaling process. The IBP and the GHDLI address scaling complexity as part of a larger systemic view of change. The Five Configurations for Scaling Up Social Innovation is a CAS model to scale; the scaling departure point is the analysis of complex systems (Moore & Westley, 2011; Westley & Antadze, 2010) or cross-scale interactions or ‘panarchy’.<sup>4</sup> The principal characteristic of the model is the unpredictability of the factors associated in scaling social innovations. This approach is useful in understanding the fluidity of change in an organization that is aiming to scale up. Another framework that addresses context as a key factor is ‘Guide for Fostering Change to Scale Up Effective Health Services’, which addresses scaling strategies ‘that best suits the environment’ (2007, p. 26). The environment is also a factor in the ExpandNet framework defining it as the ‘conditions and institutions that are external to the user organization but fundamentally affect the prospects for scaling up’ (ExpandNet, 2010, p. 16).

Most of the frameworks have focused on scaling health systems such as the GHLI-AIDED that seeks to disseminate innovations and understand how scale up works in low-income countries. The same is true of the

<sup>4</sup>Refers to multiple scales of space, time and social organization (Gunderson & Holling, 2002).

'improvement collaborative approach', which can also be used in other policy areas (Milat et al., 2014, p. 4). Frameworks like the SUM promote a generic set of questions to develop any scaling strategy: the what (model), the how (methods), the who (organizational roles) and where to scale up (dimensions) (Kohl and Cooley, n.d., 2003, p. 2). It is also clear that scaling is *interdisciplinary* and cuts across different fields such as health, education and agriculture (ExpandNet, 2010; Fixsen, 2009). Furthermore, scaling frameworks involve *multidimensional* processes (Hartmann & Linn, 2008) that require some common elements, such as favourable policies, collaboration and developing organizational capacities, amongst others.

### 2.1.1 | Five common phases across scaling frameworks

Across the frameworks we reviewed, there is no consistent understanding of the elements of a comprehensive framework to support organizations to scale. Some frameworks are better developed than others, to include different scaling dimensions and a detailed phase process of how to scale. However, there are stages to scale that overlap in these frameworks, and we use the constant comparison method described above; we identified five emergent common phases that are now described below: identification, planning, implementation, learning and adapting (IPILA) (see Figure 2). In Melanesian mythology, Nuga is the father of the Kiwaians of New Guinea. He was carved from wood by Ipila. To avoid being lonely, Nuga asked Ipila—to 'scale up'—to carve three more like himself.

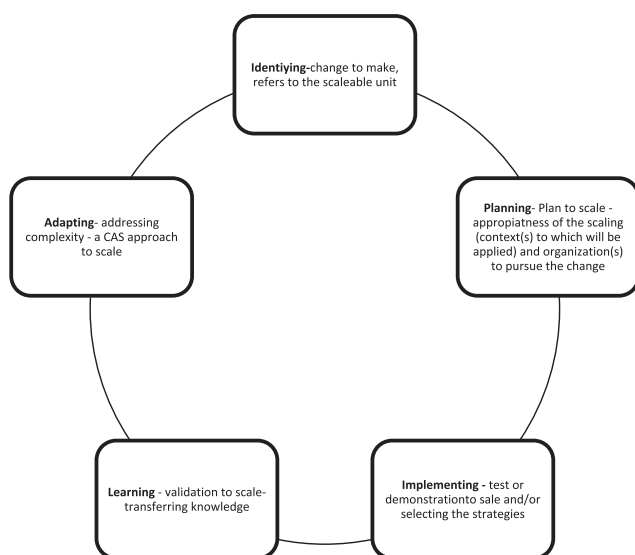


FIGURE 2 Common stages in the scaling frameworks

1. **Identifying:** Identifying the scalable unit is the starting point for scaling. A definition of this varies according to the different frameworks. 'Identifying' include sub-codes that emphasize context assessment and suitability of the innovation. As an example of the first, the GHLI-AIDED emphasizes the environment and the conditions rather than the innovation itself (Bradley et al., 2011, p. 18). The SISEP framework (Fixsen et al., 2013, p. 2) calls this phase an exploration and defines it as 'identifying the need for change, learning about possible interventions that may be solutions, creating readiness for change, learning about what it takes to implement the innovation effectively, developing stakeholders and champions, deciding to proceed (or not)'. In Table 1, a number of frameworks include this phase to varying extents (see Frameworks). A practice classification hierarchy (Hancock, 2003; Jonasova & Cooke, 2012) may be used to classify practices by the level of the evidence provided and to estimate their general applicability. The classification starts from a basic level of an identifiable discrete community practice, which is considered the 'innovation', with the highest level of unit to scale being a 'policy principle'. In general, the scaling frameworks refer to scaling of 'good practices' or 'promising practices' that are small-scale projects with some evidence that they can be replicated.<sup>5</sup>
2. **Planning:** Most scaling frameworks (see Table 1: e.g. 2, 3, 4, 5, 7, 9, 11, 13, 17, 18, 19 and 20) include a scaling planning process. This is the stage where the organization analyses what is feasible and has collected enough evidence to replicate the practice. The tools to plan the process differ, but most of them detail the steps to follow and the strategies to employ to scale the practice. The scaling up population health intervention guide in Milat et al. (2014, p. 13) addresses a basic question to plan scaling: 'Has a plan that creates a vision of what scaling up will look like and a compelling case for action been developed?' The SUM scaling planning is a four-task process that includes the creation of a vision in the first place (Cooley & Linn, 2014, p. 7, figure 5).
3. **Implementing:** A stage that covers a variety of strategies that are context driven. This phase will cover resource mobilization, stakeholder engagement and training to improve capacity to perform well and deliver (see Table 1: e.g. 2, 3, 5, 9, 10, 11, 13, 14, 17, 18 and 20). For example, the Guide for Fostering Change to Scale Up Effective Health Services includes a preimplementation phase that is supporting demonstration to then proceed to scale and selecting the

<sup>5</sup>Jonasova and Cooke (2012, p. 6).



appropriate scaling strategy (quantitative, functional or political scale-up; IBP, 2007, p. 26). The improvement collaborative approach includes an implementation package that needs to be based on what already works, and its components will be defined by what already exists (USAID, 2008, p. 7).

4. Learning: The learning process provides the validation to scale and requires knowledge transfer inside the organization and amongst others. For instance, the improvement collaborative approach highlights shared learning as one of the steps, and Korten's learning approach is about organizational learning and using it to acquire knowledge. The learning approach includes learning to be (1) effective, (2) efficient and (3) expand (Korten, 1980). The SEED approach includes three learning dimensions at the community level from the paternalistic approach to one that empowers communities (Taylor & Taylor, 2003; see Table 1, e.g. 1, 5, 6, 7, 8, 11, 13, 15 and 17).
5. Adapting: The process of scaling may be unpredictable and complex; some but not all the scaling frameworks take account of this. The adaptive models emphasize that scaling is not a linear process. The GHAI-AIDED is a nonsequential model that emphasizes the interconnection and non-linearity of their components. This approach addresses scaling up as multifactorial, hard to predict and in which sometimes it is difficult to directly identify cause-effect relationships. This CAS ethos is also a feature of the IFAD approach, as it defines the scaling process as adaptive; likewise, the SEED approach uses an adaptive learning model as a continuous exchange amongst the community and other stakeholders involve (see Table 1, e.g. 2, 8, 11, 15, 16 and 17).

We recommend the attempts at scaling address, in a deliberative manner, each of these five phases, but we do not prescribe the exact methodology for doing this. Specific methods can be gleaned from existing approaches but should in the first place be contextually relevant and emergent, ideally through participatory approaches. As well as identifying five thematic phases in the scaling processes we reviewed, we were also able to discern four emergent directions of scaling from the frameworks in Table 1, column 5.

### 2.1.2 | Finding a common language for the Scaling Directions

The frameworks we reviewed offer a plethora of terminologies that were sometimes overlapping and sometimes contradictory. We now briefly consider some of these.

Uvin (1995) defined 'scaling down' as 'processes whereby international organisations (IOs) change their structures and modes of functioning to allow for meaningful interaction and cooperation with grassroots organisations and NGOs' (p. 495). Scaling down refers to processes that aim to increase impact without becoming larger and focusing on fewer strategies (Uvin et al., 2000, p. 1416). Hancock (2003, pp. 5–6) distinguished 'scaling down' as shifting responsibilities to a lower level by deconcentrating and devolving, 'scaling out' as replicating between countries and 'scaling up' as advocating to influence policy (Korten, 1980). Moore et al. (2015) distinguished between 'scaling up' and 'scaling out' and introduced 'scaling deep' as a direction that implies a change in the culture, values and beliefs (Moore et al., 2015, p. 75). Hartmann and Linn (2008, p. 14) explained three directions to scale: the first is expansion and entails scaling a pilot project that, in some cases, the current organization might not be able to carry forwards and needs to pass it on to another organization with different capabilities. The second direction is replication and occurs through a franchise model between different types of organizations, for example, from NGOs to government. The third direction is spontaneous diffusion and is spreading the practices through replication where the spillover has formal or informal channels. Hartmann and Linn's formulation thus interweave process and direction.

Another example, ExpandNet, focuses on the effectiveness of interventions, growth, expansion and replication, mostly of health interventions. The first two directions to scale occur 'when authorities at high levels of government were persuaded that an approach adopted at a lower level of government was worthy of replication (horizontally) *at the same level* or (vertically, upward) *at higher levels*, when donors drew the same conclusion, or both' (Manor, 2007, p. 18, emphasis added). A third 'direction' is similar to the 'spontaneous diffusion' dimension explained by Hartmann and Linn (2008) and is also called 'spontaneous'. The functional direction is similar to the dimension defined by Uvin et al. (2000) and is when the organization increases the number of activities. There are other directions comprised in the table that emphasize the types of strategies used, for instance, a direct approach that is to increase impact by scaling operational expansion, scaling through advocacy or multiplicative activities (Edwards & Hulme, 1992a, 1992b).

As we have illustrated, the scaling literature is, well, scaling! However, it is developing with overlapping and sometimes inconsistent concepts such as directions, processes and dimensions. Given the importance of the idea of scaling to overall social gain, it is necessary to develop a parsimonious nomenclature, capable of incorporating

existing ideas but also one that provides a framework for further research and practice, especially, one that promotes social inclusion. Table 2 suggests a reclassification of scaling directions that folds multiple scaling types into easily understandable terminology with face validity; these have been derived from those found in the frameworks reviewed in Table 1. Our conceptualization does not necessarily seek to replace existing particular models or approaches but rather to allow a more effective synthesis of research and practice across commonly understood directions of scaling. We also differentiate ‘scaling’ from ‘scaling up’, which is often used interchangeably and confusingly. Scaling up in our classification seeks changes at the structural level in policies and laws. Scaling out requires the organization to replicate their model geographically. These two are the directions that are currently named in the literature. Scaling in and scaling down are two directions that are often confusingly subsumed in scaling literature but actually require different strategies and have different goals. In the first, the focus of change is within the organization, while in the second—scaling down—the focus is more on the community and context of change.

Table 2 summarizes the coordinates—*up*, *down*, *in* and *out*—of scaling directions. In reality, scaling will often involve moving in several directions at once; recognizing that CASs move with change, with components moving at different rates and possibly in different directions; and that linear attempts to scale in a single direction may be unrealistic and ineffective. However, each systematic approach to any of these directions of scaling should require passing through the particular phases already described above. However, once again, these should be seen as organic and dynamic, not as categorical, fixed or restrictive. In Table 2, we indicate the four directions and associated descriptions, strategies, goals and examples.

## 2.2 | Socially inclusive scaling

The scaling frameworks reviewed in Table 1 do not explicitly address exclusion and discrimination, nor is the CAS perspective often explicit in this regard either. ExpandNet includes the principle of respect for human rights, equity and a gender perspective (ExpandNet, 2010, p. 8); but as to how to include specific strategies to make that happen is not clear in the framework. In this section, we suggest to how to make explicit a scaling approach that incorporates vulnerable populations into the process of scaling, thinking of scaling not as a way to increase numbers of people but to include people who have been excluded. Scaling failure often arises through not

reaching vulnerable populations, such as persons with disabilities (Amin et al., 2011) because the models used failed to recognize the complexity of the broader system in which they operate and how this may marginalize some groups.

Scaling frameworks should introduce non-discrimination as a key feature and address inclusion as a process and goal (Huss & MacLachlan, 2016). Making scaling inclusive is challenging and demands different types of strategies to achieve inclusion in order to tackle different needs amongst vulnerable groups (MacLachlan et al., 2019). Carter et al. (2018, p. 3) highlighted a number of challenges that are specific for inclusive scaling practices: (1) understanding the wider contextual ideologies and *vested power* of individuals and groups, (2) reaching the *most marginalized*, (3) dealing with *longer times* frames, (4) coping with *reversals and backlash* when working on political and culturally sensitive issues, (5) turning theoretical models and emergency evidence into *clear operational guidance and effective practice* and (6) *learning how to measure* the impact, cost-effectiveness and sustainability of interventions (Carter et al., 2018, p. 27, our italics in the above).

Scaling frameworks focus on the product and evidence of previous intervention successes, rather than on the processes and outcomes for vulnerable groups, whose ‘outcomes’ are often poor compared with the mainstream. This, of course, is the very reason for the emphasis in the SDGs on ‘leaving no-one behind’. Sometimes, the task practice of scaling can become the centre of the scaling strategy, diverting attention from who gets to—and those who do not get to—participate in it. Carter et al. (2018, p. 8) also argued for the scaling processes to be explicitly inclusive, using interventions that target the most marginalized and incorporating inclusive goals that work to change social norms. For scaling inclusive interventions, the speed of the scaling and the cost are important. Equity in scaling may well mean that interventions targeting the most marginalized communities will be more expensive and take longer (Carter et al., 2018).

For each of the five-scaling process and four scaling directions we have identified, Carter et al.’s above challenges for inclusiveness should be considered. We do not recommend specific questions to probe for inclusiveness in a particular way but rather an ethos of assessing the extent of inclusiveness, appropriate to the local setting and conditions that constitute the specific context. It may be in some contexts that certain aspects of inclusion are more necessary to address than others. Examples of how the five scaling phases can be made more inclusive are provided in Table 3. Table 3 applies a number of the dimensions developed by Huss and MacLachlan (2016), as part of a United Nations multiagency project, to

TABLE 2 Scaling directions with associated descriptions, strategies, goals and examples

Scaling directions	Description	Strategies	Goal	Examples
Scaling up/structural	<i>Influencing</i> social structures, such as laws, policies, institutions and norms, to allow good practices to be adopted more extensively.	Advocacy, networking, partnerships, negotiation,	Achieve changes in laws, policies, institutions or norms.	The institutionalization of changes, for example, new laws, regulatory bodies or working norms relating to health, education or employment.
Scaling out/replication	<i>Repeating</i> the organization model or approach, across organizations working at similar levels within the systems.	Diffusion, communicating, learning and adapting	Broaden the range or scope of good practices geographically.	Replicating organizational models operating in different geographic locations. Rather like a franchise model in the commercial sector.
Scaling in/organizational	<i>Adjusting</i> the structure, functions or skills within an organization; to allow it to take on the particular work required to implement the good practices it is trying to promote; recognizing that change 'outside' often requires change 'inside' the organization too.	Capacity building	Ensure the organization is capable of delivering the scale of good practices required.	Adapting within the organization, such as introducing new skill sets, or greater skill range; increasing professionalization amongst staff through new training, supports or additional personnel.
Scaling down/allocation	<i>Ensuring that</i> changes in laws, policies or norms, have the necessary means to implement the envisaged good practices 'on the ground'.	Devolve and empower	Effective resourcing to achieve implementation	Sponsoring ground-level implementation ideas at the community level, including allowing for adaptations to local contexts and conditions.

TABLE 3 Thinking through socially inclusive scaling actions

Key action	Definition	Description	Examples of Questions	Sources of Evidence
Identifying inclusive innovations (adapted from Theme 9 of Huss & MacLachlan, 2016)	This phase requires recognizing an <i>inclusive innovation</i> , defined as 'the development and implementation of new ideas which aspire to create opportunities that enhance social and economic wellbeing for disenfranchised members of society' (George et al., 2012, p. 663).	Some element of evaluation is required to identify the inclusive practice for the targeted groups	What new socially inclusive ideas are being considered to scale?	Targeted-groups, consultation forums; key informants, representative organizations, evaluations of the process, establishing, if possible, a base line before the intervention starts.
		Appropriate selection criteria are put in place to identify the socially inclusive innovation	From whom is the innovation coming?	
		Organizational strategies have been developed and implemented to document inclusive practices.	Has the community participated in the development of the innovation?	
		Organizations have a diffusion strategy to share and promote the inclusive practice amongst different stakeholders	What are/were the inputs of the community to this innovation?	
			How has/could the innovation been/be implemented and adopted by the community?	
			How is the innovation improving inclusion of the most marginalized?	
Planning inclusive practices (adapted from Themes 1, 2, 3, 4 and 5 from Huss & MacLachlan, 2016)	This phase involves planning to improve inclusion by designing the appropriate tools to embrace the ideas, perceptions and thoughts of the targeted groups represented. The scaling plan needs to be built and shared with the communities.	Establishing a priori participatory mechanisms including within the targeted populations	How is the organization planning to scale?	Needs assessments with the participation of the targeted groups, community steering committees included in the decision-making processes of the project before it starts, working groups to address specific challenges around inclusion.
		Incorporating the results of the participatory processes in the planning processes	What process was followed, if any, and with which stakeholders, to scale?	

TABLE 3 (Continued)

Key action	Definition	Description	Examples of Questions	Sources of Evidence
Implementing inclusive actions (adapted from Themes 1 and 5 from Huss & MacLachlan, 2016)	This phase requires that the interventions have designed into them feedback mechanisms that are sensitive to and capable of reinforcing community participation	Eliminating intermediaries and making sure to reach out to the communities that are to be included.  Requires a communication strategy about the implementation that reaches the target populations.	How is the organization ensuring that the most marginalized groups are included? What strategies are employed?  How will the project activities be executed—are actors in the community taking a relevant role?	Targeted group leaders are informed/involved/in charge of community participation regarding the implementation and planning of their partners
		The actions and communications require mechanisms to address specific needs and considers intersections amongst, for instance, age, disability, gender, ethnicity, nationality	How are implementers aware of, or trained in, addressing exclusion and promoting inclusion?	Follow up meetings are regular and set according to the demand of the targeted population.
Learning inclusive lessons (adapted from Themes 1, 7 and 8 from Huss & MacLachlan, 2016).	The learning phase is a space to reflect without stopping implementation, and should overlap with it.	Organizational strategy to review the intervention activities as part of the process of intervention.  Participatory mechanisms to address possible risks as well as opportunities that include the various ways to address these  Organizations have tools and procedures to collect feedback critical of their own approach, allowing for nonconformity with intentions and guaranteeing impartiality and safety to those providing such feedback or reflection.	Are targeted groups represented in the implementation?  How is the organization's learning process inclusive of the disenfranchised groups they work with?  Does the organization have participatory learning tools that give equal opportunity for all to participate?  How does the organization protect people who may have views that are critical of its own actions?	Outcomes—that have been agreed by the target groups—are being explicitly assess according to methods sensitive to the nature of exclusion/inclusion.  Focus groups and participatory assemblies to review the different stages of the intervention.  Surveys that include open-ended questions at the end to provide critical feedback.  Provision of anonymous feedback mechanisms, as an option—e.g. ideas post boxes.

(Continues)

TABLE 3 (Continued)

Key action	Definition	Description	Examples of Questions	Sources of Evidence
Adapting to more inclusive practices (adapted form Themes 1 and 2, from Huss & MacLachlan, 2016).	Following the first cycle, this phase may overlap with several of the previous phases, especially implementation, and should be with the targeted population's participation.	An organization works with their targeted populations on their plan with potential partnerships to facilitate quick changes.	How is the organization adapting to unanticipated challenges concerning inclusion?	Risk assessment and possible solutions emerge from previous consultation with the targeted populations.
		A reviewed working plan whose modalities can change according to what is needed and is engaged with by the targeted populations	How is the organization addressing unpredictability without compromising the inclusion of vulnerable populations?	A specific group is charged with the responsibility to explore how things are now being done differently form before—how the work has evolved to be more inclusive.

promote more inclusive policy development and evaluation. The dimensions were derived empirically from an extensive review of the relevant research and also informed by United Nations declarations and conventions.

What the key issues are for inclusion in any scaling project should of course be determined in a participatory and inclusive manner, as part of the first phase of scaling—the identification process, so that the identification phase becomes not just about *what* to scale but also about *how* to do it in an inclusive way. It is important to try and assess and have some type of measure of the degree to which inclusion is achieved. This allows us to identify which aspects of inclusion—or groups of people—have been easier to address than others and may allow projects to benchmark against future performance. It also allows projects to identify how well things work in the different contexts. Table 3 indicates how such an assessment method can be used to measure inclusion. As illustrated in the table, this approach can be used to assess the extent of socially inclusive scaling for each of the five phases and therefore for each of the four directions relevant to a particular attempt to scale. Figure 3 presents our composite, three-pronged approach to scaling, incorporating (a) the five phases of scaling, (b) the four directions of scaling and (c) the multiple points across the phases and all directions, where inclusive actions should be taken to ensure that socially just scaling occurs and that marginalized groups are not left behind.

The application of socially inclusive scaling that we have adopted supports a right's-based approach. Although we have focussed on the approach of Huss and MacLachlan (2016), other approaches may also guide the identification of crucial themes for inclusion. For example, Forgas (2011) highlighted the importance of

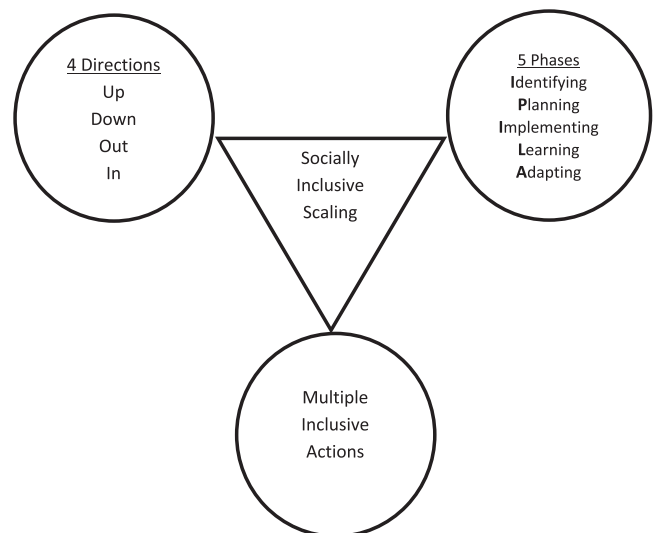


FIGURE 3 A three-pronged approach for a socially inclusive framework

practices that are participatory, accountable, accessible, equal and nondiscriminatory results-based, and appropriately resourced, which recognize the interaction between gender and disability, involve partnerships and are replicable and appropriate to recognize the context-specific requirements, if the practice is to be transferable to other contexts (Forgacs, 2011, p. 8). Han and Shah (2020) recently developed 'Ecosystem of Scaling Social Impact' framework, which considers financing, organizations, technology and data, strategies, institutional infrastructure and government policy and, although complimentary to our own, should also take account of just how greater social inclusion can be built in to the process of scaling. Indeed, regardless of the overall approach adopted, it is essential to include targeted groups, from planning to implementation and evaluation. In our view, a common mistake for the scaling frameworks reviewed previously is to see the intervention as an independent unit, disconnected from, rather than embedded in, the broader system that it must influence.

### 3 | CONCLUSIONS

There is great interest and value in understanding how successful scaling can be achieved. Scaling frameworks provide different perspectives on how scaling should happen; however, they generally do not promote inclusiveness as a core element in their approach. We argue that unless inclusion is integral in the process of scaling, then the harder-to-reach will be excluded, further contributing to their marginalization. No attempt at scaling social interventions can be considered legitimate, if it fails to reach those who may benefit most. Our review of 20 different approaches to scaling found commonalities, and we have integrated these into five phases and four directions of scaling: *in*, *out*, *up* and *down*. We welcome comment and empirical data exploring both the theoretical and practical value of the three-pronged approach (phases-directions-inclusion) outlined here.

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### REFERENCES

- Adamou, B., Curran, J., Wilson, L., Dagadu, N. A., Jennings, V., Lundgren, R., & Hardee, K. (2013). Guide for Monitoring Scale-up of Health Practices and Interventions. USAID and MEASURE Evaluation PRH. Retrieved from <https://www.measureevaluation.org/resources/publications/ms13-64> [18 September 2019]
- Amin, M., MacLachlan, M., Mannan, H., el Tayeb, S., el Khatim, A., Swartz, L., ... Schneider, M. (2011). EquiFrame: A framework for analysis of the inclusion of human rights and vulnerable groups in health policies. *Health and Human Rights*, 13(2), 1–20.
- Baker, E. L. (2010). Taking Programs to Scale. *Journal of Public Health Management and Practice*, 16(3), 264–269. <https://doi.org/10.1097/phh.0b013e3181e03160>
- Barker, P. M., Reid, A., & Schall, M. W. (2016). A framework for scaling up health interventions: Lessons from large-scale improvement initiatives in Africa. *Implementation Science: IS*, 11, 12. <https://doi.org/10.1186/s13012-016-0374-x>
- Bhandari, N., Kabir, A. K. M. I., & Salam, M. A. (2008). Mainstreaming nutrition into maternal and child health programmes: Scaling up of exclusive breastfeeding. Retrieved from <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1740-8709.2007.00126.x> [18 September 2019]
- Binswanger, H. P., & Nguyen, T. (2004). Scaling up community-driven development for dummies, 1–44. Retrieved from <http://siteresources.worldbank.org/INTCDD/550121-1138894027792/20806801/Scaling0Up0CDD0for0Dummies.pdf> [18 September 2019]
- Binswanger, H. P., & Swaminathan, A. (2003). *Scaling up community-driven development: Theoretical underpinnings and program design implications (English)*. Policy, research working paper series; no. WPS 3039. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/621171468751148231/Scaling-up-community-driven-development-theoretical-underpinnings-and-program-design-implications> [18 September 2019]
- Binswanger-Mkhize, H. P., de Regt, J. P., & Spector, S. (2009). *Scaling up local & community driven development (LCDD). A real world guide to its theory and practice*, 169. Retrieved from <https://openknowledge.worldbank.org/handle/10986/28252> [18 September 2019]
- Bradley, E. H., Curry, L., Pérez-Escamilla, R., Berg, D., Bledsoe, S., & Ciccone, D. (2011). Dissemination, diffusion and scale up of family health innovations in low-income countries. Retrieved from <https://docs.gatesfoundation.org/documents/yale-global-health-report.PDF> [18 September 2019]
- Bradley, E. H., Curry, L. A., Taylor, L. A., Pallas, S. W., Talbert-Slagle, K., Yuan, C., & Pérez-Escamilla, R. (2012). A model for scale up of family health innovations in low-income and middle-income settings: A mixed methods study. *BMJ Open*, 2(4), e000987. <https://doi.org/10.1136/bmjopen-2012-000987>
- Carter, B., Joshi, A., & Remme, M. (2018). *Scaling up inclusive approaches for marginalised and vulnerable people. K4D Emerging Issues Report*. Brighton, UK: Institute of Development Studies. Retrieved from [https://assets.publishing.service.gov.uk/media/5b69bf34ed915d2bbc0bb896/Scaling\\_up\\_inclusive\\_approaches\\_for\\_marginalised\\_and\\_vulnerable\\_people.pdf](https://assets.publishing.service.gov.uk/media/5b69bf34ed915d2bbc0bb896/Scaling_up_inclusive_approaches_for_marginalised_and_vulnerable_people.pdf) [18 September 2019]

- Cooley, L., & Kohl, R. (2006). Scaling Up—From vision to large-scale change. *Management Systems International*, (March), 1–64. Retrieved from <http://cosgroveandassociates.com/wp-content/uploads/2013/04/scalingup-framework.pdf> [18 September 2019]
- Cooley, L., & Linn, J. F. (2014). Taking innovations to scale: Methods, applications and lessons, (September). Retrieved from [https://www.usaid.gov/sites/default/files/documents/1865/v5web\\_R4D\\_MSI-BrookingsSynthPaper0914-3.pdf](https://www.usaid.gov/sites/default/files/documents/1865/v5web_R4D_MSI-BrookingsSynthPaper0914-3.pdf) [18 September 2019]
- Edwards, M., & Hulme, D. (1992a). Scaling up NGO impact on development: Learning from experience. *Development in Practice*, 2(2), 77–91. Retrieved from <http://www.jstor.org/stable/4028767>. <https://doi.org/10.1080/096145249100076691>
- Edwards, M., & Hulme, D. (1992b). In M. Edwards & D. Hulme (Eds.), *Scaling up the development impact of NGOs: Concepts and experiences in making a difference: NGOs and development in a changing world* (pp. 13–27). New York: Taylor and Francis.
- ExpandNet, WHO—The World Health Organization. (2010). Nine steps for developing a scaling up strategy. Retrieved from [http://www.who.int/immunization/hpv/deliver/nine\\_steps\\_for\\_developing\\_a\\_scalingup\\_strategy\\_who\\_2010.pdf](http://www.who.int/immunization/hpv/deliver/nine_steps_for_developing_a_scalingup_strategy_who_2010.pdf) [18 September 2019]
- ExpandNet WHO—The World Health Organization. (2007). 20 questions for developing a scaling up case study. Retrieved from <http://www.expandnet.net/PDFs/MSI-ExpandNet-IBP%20Case%20Study%2020%20case%20study%20questions.pdf> [18 September 2019]
- ExpandNet WHO—The World Health Organization. (2009). *Practical guidance for scaling up health service innovations*. World Health Organization: Geneva, 1–64. Retrieved from [https://apps.who.int/iris/bitstream/handle/10665/44180/9789241598521\\_eng.pdf;jsessionid=2C47770025A893239965684259D42BB2?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44180/9789241598521_eng.pdf;jsessionid=2C47770025A893239965684259D42BB2?sequence=1) [18 September 2019]
- Fixsen, A. M. (2009). Defining scaling up across disciplines: An annotated bibliography. *Complexity*, (December), 1–34. Retrieved from <https://pdfs.semanticscholar.org/57fc/57337970444b7bfc536adee7d0791a36471b.pdf> [18 September 2019]
- Fixsen, D., Blase, K., Horner, R., Sims, B., & Sugai, G. (2013, September). *Readiness for change. scaling up brief #3*. Chapel Hill: The University of North Carolina, FPG, SISEP. Retrieved from <https://fpg.unc.edu/sites/fpg.unc.edu/files/resources/reports-and-policy-briefs/SISEP-Brief3-ReadinessForChange-09-2013.pdf> [18 September 2019]
- Fixsen, D. L., Blase, K. A., Horner, R., & Sugai, G. (2009, February). *Scaling-up evidence-based practices in education. Scaling-up brief #1*. Chapel Hill: The University of North Carolina, FPG, SISEP. Retrieved from <https://files.eric.ed.gov/fulltext/ED507440.pdf> [18 September 2019]
- Forgasc. (2011). *Best practices for including persons with disabilities in all aspects of development efforts*. Department of Economic and Social Affairs (DESA) United Nations. 1–117. Retrieved from [http://www.un.org/disabilities/documents/best\\_practices\\_publication\\_2011.pdf](http://www.un.org/disabilities/documents/best_practices_publication_2011.pdf) [18 September 2019]
- Gabriel, M. (2014). Making it Big: Strategies for scaling social innovations. National Endowment for Science, Technology and the Arts (NESTA), (July), 1–61. Retrieved from <https://www.nesta.org.uk/report/making-it-big-strategies-for-scaling-social-innovations/> [18 September 2019]
- Gargani, J., & Mclean, R. (2017). Scaling science. *Stanford Social Innovation Review*, 15(4), 34–39. Retrieved from <https://idl-bnc-idrc.dspacedirect.org/handle/10625/56727?show=full> [18 September 2019]
- George, G., McGahan, A. M., & Prabhu, J. (2012). Innovation for inclusive growth: Towards a theoretical framework and a research agenda. *Journal of Management Studies*, 49(4), 661–683. <https://doi.org/10.1111/j.1467-6486.2012.01048.x>
- Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26(2), 91–108. <https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Gunderson, L. H., & Holling, C. S. (2002). *Panarchy: Understanding transformations in human and natural systems*. Washington, DC: Island Press.
- Hall, A., & Clark, N. (2010). What do complex adaptive systems look like and what are the implications for innovation policy? *Journal of International Development*, 22(3), 308–324. <https://doi.org/10.1002/jid.1690>
- Han, J., & Shah, S. (2020). The ecosystem of scaling social impact: A new theoretical framework and two case studies. *Journal of Social Entrepreneurship*, 11(2), 215–239. <https://doi.org/10.1080/19420676.2019.1624273>
- Hancock. (2003). Scaling up the impact of good practices in rural development: A working paper to support implementation of the World Bank's Rural Development Strategy (Report Number: 26031), The World Bank. Retrieved from [http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2004/01/30/000160016\\_20040130163125/Rendered/PDF/260310White0co1e1up1final1formatted.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2004/01/30/000160016_20040130163125/Rendered/PDF/260310White0co1e1up1final1formatted.pdf) [18 September 2019]
- Hardee, K., Ashford, L., Rottach, E., Jolivet, R., & Kiesel, R. (2012). *The policy dimensions of scaling up health initiatives*. Washington, DC: Futures Group, Health Policy Project. Retrieved from [http://www.healthpolicyproject.com/pubs/83\\_ScaleupPolicyJuly.pdf](http://www.healthpolicyproject.com/pubs/83_ScaleupPolicyJuly.pdf) [18 September 2019]
- Hartmann, A., & Linn, J. F. (2008). Scaling up: A framework and lessons for development effectiveness from literature and practice. *Wolfensohn Center for Development Working Paper*, (5). Retrieved from [http://repository.experience-capitalization.net/bitstream/handle/123456789/87/10\\_scaling\\_up\\_aid\\_linn.pdf?sequence=1&isAllowed=y](http://repository.experience-capitalization.net/bitstream/handle/123456789/87/10_scaling_up_aid_linn.pdf?sequence=1&isAllowed=y) [18 September 2019]
- Huss, T., & MacLachlan, M. (2016). *Equity and Inclusion in Policy Processes (EquIPP): A framework to support equity & inclusion in the process of policy development, implementation and evaluation*. Dublin: Global Health Press. Retrieved from <https://www.tcd.ie/medicine/global-health/assets/doc/The%20EquIPP%20manual%2013th%20April%202016.pdf> [18 September 2019]
- Implementing Best Practices Consortium (IBP). (2007). A guide for fostering change to scale up effective health services implementing best practices consortium. Management sciences for health. Retrieved from <http://www.who.int/management/AGuideFosteringChangeScalingUpHealthServices.pdf> [18 September 2019]
- Jacobs, F., Ubels, J., & Woltering, L. (2018). Scan- A practical tool to determine the strengths and weaknesses of your scaling



- ambition. *PPPlab and CIMMYT*, <https://ppplab.org/wp/wp-content/uploads/2018/11/PPPLab-Scaling-Final-19022019.pdf>
- Jonasova, M., & Cooke, S. (2012). *Thinking systematically about scaling up: Developing guidance for scaling up World Bank-supported agriculture and rural development operations (English)*. Agriculture and rural development discussion paper; no. 53. Washington, DC: World Bank. Retrieved from <http://documents.worldbank.org/curated/en/820861468335037807/Thinking-systematically-about-scaling-up-developing-guidance-for-scaling-up-World-Bank-supported-agriculture-and-rural-development-operations> [18 September 2019]
- Kohl, R., & Cooley, L. (n.d.). Scaling Up – A Conceptual and Operational Framework: A Preliminary Report to the MacArthur Foundation's Program on Population and Reproductive Health. *Management Systems International*.
- Korten, D. C. (1980). Community organization and rural development: A learning process approach. *Public Administration Review*, 40(5), 480–511.
- Leech, N. L., & Onwuegbuzie, A. J. (2008). Qualitative data analysis: A compendium of techniques and a framework for selection for school psychology research and beyond. *School Psychology Quarterly*, 23(4), 587–604. <http://dx.doi.org/10.1037/1045-3830.23.4.587>
- Linn, J. F., Hartmann, A., Kharas, H., Kohl, R., & Massler, B. (2010). Scaling up the fight against rural poverty: An institutional review of IFAD's approach, (August). Retrieved from <https://www.brookings.edu/research/scaling-up-the-fight-against-rural-poverty-an-institutional-review-of-ifads-approach/> [18 September 2019]
- MacLachlan, M., McVeigh, J., Huss, T., & Mannan, H. (2019). Macropsychology: Challenging and changing social structures and systems to promote social inclusion. In K. O. O'Doherty & D. Hodgetts (Eds.), *The SAGE handbook of applied social psychology* (pp. 166–183). Darrin Thousand Oaks, CA: SAGE Publications Limited.
- Manor, J. (Ed.) (2007). *Aid that works, successful development in fragile States*. Washington, DC: World Bank. Retrieved from <http://documents.worldbank.org/curated/en/969871468336614487/pdf/379590REVISED01OFFICIAL0USE0ONLY1.pdf> [18 September 2019]
- Massoud, M. R., Donohue, K. L., & McCannon C. J. (2010). Options for large-scale spread of simple, high-impact interventions. USAID Health Care Improvement Project/URC Retrieved from <https://www.usaidassist.org/resources/options-large-scale-spread-simple-high-impact-interventions> [18 September 2019]
- Massoud, R. (2004). An approach to rapid scale-up, using HIV/AIDS treatment and care as an example. World Health Organization. Retrieved from [http://www.who.int/hiv/pub/prev\\_care/en/rapidscale\\_up.pdf](http://www.who.int/hiv/pub/prev_care/en/rapidscale_up.pdf) [18 September 2019]
- McVeigh, J., MacLachlan, M., Gilmore, B., McClean, C., Eide, A. H., Mannan, H., & Normand, C. (2016). Promoting good policy for leadership and governance of health related rehabilitation: A realist synthesis. *Globalization and Health*, 12(1), 49. <https://doi.org/10.1186/s12992-016-0182-8>
- Milat, A. J., Bauman, A., & Redman, S. (2015). Narrative review of models and success factors for scaling up public health interventions. *Implementation Science*, 10(1), 113. <https://doi.org/10.1186/s13012-015-0301-6>
- Milat, A. J., Newson, R., & King, L. (2014). *Increasing the scale of population health interventions: A guide*. Centre for Epidemiology and Evidence. Evidence and evaluation guidance series, population and public health division. Sydney: NSW Ministry of Health.
- Milat, A. J., Newson, R., King, L., Rissel, C., Wolfenden, L., Bauman, A., ... Giffin, M. (2016). A guide to scaling up population health interventions. *Public Health Research & Practice*, 26(1), e2611604. <https://doi.org/10.17061/phrp2611604>
- Moore, M., & Westley, F. (2011). Surmountable chasms: Networks and social innovation for resilient systems. *Ecology and Society*, 16(1), 5. [online] URL: <http://www.ecologyandsociety.org/vol16/iss1/art5/>
- Moore, M.-L., Riddell, D., & Vocisano, D. (2015). Scaling out, scaling up, scaling deep strategies of non-profits in advancing systemic social innovation\*. *Journal of Corporate Citizenship*, 58, 67–84.
- Mulgan, G. (2006). The process of social innovation, innovations: Technology, governance. *Globalizations*, 1(2), 145–162. <https://EconPapers.repec.org/RePEc:tpr:inntgg:v:1:y:2006:i:2:p:145-162>
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. London: National Endowment for Science, Technology and the Art. Retrieved from <https://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovation.pdf> [18 September 2019]
- Onwuegbuzie, A. J., Leech, N. L., & Collins, K. M. T. (2012). Qualitative analysis techniques for the review of the literature. *Qualitative Report*, 17(28), 1–28.
- Paina, L., & Peters, D. H. (2012). Understanding pathways for scaling up health services through the lens of complex adaptive systems. *Health Policy and Planning*, 27(5), 365–373. <https://doi.org/10.1093/heapol/czr054>
- PATH-Program for Appropriate Technology in Health. (2007). PATH's framework for product introduction. Retrieved from [http://www.path.org/publications/files/TS\\_product\\_intro\\_framework.pdf](http://www.path.org/publications/files/TS_product_intro_framework.pdf) [18 September 2019]
- Schleien, S. J., & Miller, K. D. (2010). Diffusion of innovation: A roadmap for inclusive community recreation services. *Research & Practice for Persons with Severe Disabilities*, 35(3), 93–101. Retrieved from [https://www.researchgate.net/profile/Kimberly\\_Miller10/publication/233617433\\_Diffusion\\_of\\_Innovation\\_A\\_Roadmap\\_for\\_Inclusive\\_Community\\_Recreation\\_Services/links/0046351b5e3c87a005000000.pdf](https://www.researchgate.net/profile/Kimberly_Miller10/publication/233617433_Diffusion_of_Innovation_A_Roadmap_for_Inclusive_Community_Recreation_Services/links/0046351b5e3c87a005000000.pdf) [18 September 2019]
- SDGs. (2015). UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (SDGs), 21 October 2015, A/RES/70/1. Retrieved from <https://www.refworld.org/docid/57b6e3e44.html> [18 September 2019]
- Simmons, R., & Shiffman, J. (2007). Scaling up health service innovations: A framework for action. In R. Simmons, P. Fajans, & L. Ghiron (Eds.), *Scaling up health service delivery: From pilot innovations to policies and programmes* (pp. 1–30). Geneva: World Health Organization. <https://doi.org/10.1016/j.puhe.2009.05.012>
- Smith, J. M., de Graft-Johnson, J., Zyaee, P., & Ricca, J. (2015). Scaling up high-impact interventions: How is it done? *International Journal of Gynecology & Obstetrics*, 130(2), S4–S10. <https://doi.org/10.1016/J.IJGO.2015.03.010>

- Sohal, R. (2018). Scaling up health services delivery for bottom of the pyramid populations in lower-and-middle-income countries. Institute of Health Policy Management and Evaluation University of Toronto. Retrieved from [https://tspace.library.utoronto.ca/bitstream/1807/89844/3/Sohal\\_Ramanjeet\\_201806\\_PhD\\_thesis.pdf](https://tspace.library.utoronto.ca/bitstream/1807/89844/3/Sohal_Ramanjeet_201806_PhD_thesis.pdf) [18 September 2019]
- Subramanian, S., Naimoli, J., Matsubayashi, T., & Peters, D. H. (2011). Do we have the right models for scaling up health services to achieve the Millennium Development Goals? *BMC Health Services Research*, *11*(1), 336. <https://doi.org/10.1186/1472-6963-11-336>
- Taylor, D. C., & Taylor, C. E. (2003). *Just and lasting change: When communities own their futures*. Baltimore: Johns Hopkins University Press. Available from: ProQuest Ebook Central. [18 September 2019]
- The World Bank (2003). Report Number: 26031. Scaling-Up the Impact of Good Practices in Rural Development: A working paper to support implementation of the World Bank's Rural Development Strategy. *The World Bank. Agriculture & Rural Development Department*, [http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2004/01/30/000160016\\_20040130163125/Rendered/PDF/260310White0co1e1up1final1formatted.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2004/01/30/000160016_20040130163125/Rendered/PDF/260310White0co1e1up1final1formatted.pdf)
- USAID Health Care Improvement Project. (2008). *The improvement collaborative: An approach to rapidly improve health care and scale up quality services*. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC. (URC). Retrieved from [https://www.usaidassist.org/sites/assist/files/the\\_improvement\\_collaborative.june08.pdf](https://www.usaidassist.org/sites/assist/files/the_improvement_collaborative.june08.pdf) [18 September 2019]
- Uvin, P. (1995). Fighting hunger at the grassroots: Paths to scaling up. *World Development*, *23*(6), 927–939. [https://doi.org/10.1016/0305-750X\(95\)00028-B](https://doi.org/10.1016/0305-750X(95)00028-B)
- Uvin, P., Jain, P. S., & Brown, L. D. (2000). Think large and act small: Toward a new paradigm for NGO scaling up. *World Development*, *28*(8), 1409–1419. [https://doi.org/10.1016/S0305-750X\(00\)00037-1](https://doi.org/10.1016/S0305-750X(00)00037-1)
- Weber, C., Kröger, A., & Lambrich, K. (2012). Scaling social enterprises—A theoretically grounded framework. *Frontiers of Entrepreneurship Research*, *32*(19), 1–15. <https://doi.org/10.1108/JSBED-03-2017-0104>
- Westley, F., & Antadze, N. (2010). Making a difference: Strategies for scaling social innovation for greater impact. *The Innovation Journal: The Public Sector Innovation Journal*, *15*(2), Article-2. Retrieved from <https://pdfs.semanticscholar.org/8ae1/8a04b3f596783ecadf368adb41143cf40942.pdf> [18 September 2019]
- Westley, F., Antadze, N., Riddell, D. J., Robinson, K., & Geobey, S. (2014). Five configurations for scaling up social innovation: Case examples of nonprofit organizations from Canada. *Journal of Applied Behavior Science*, *50*(3), 234–260. <https://doi.org/10.1177/0021886314532945>

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