How a Strategic Scoping Canvas Can Facilitate Collaboration between Partners in Sustainability Transitions

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Abstract: The loosely applied concepts of transformations and transitions often result in unarticulated different visions and expectations among stakeholders regarding the orientation and ambition of a particular initiative related to system transitions/transformations. In this paper, a strategic scoping canvas and an associated facilitation process are presented as a way of enhancing shared understanding among stakeholders. Illustrations are provided of initial application in three cases related to food system transitions in Peru, Ethiopia, and Bangladesh, exploring the connectivity with approaches commonly used in the context of system transformations, including the Multi-Level Perspective on sustainability transitions, the Leverage Points approach, Capability Approach, and the theory of Large System Change. We conclude that the canvas and associated facilitation approach has proved useful in different contexts, offering opportunities for complementing existing methodologies, and potentially enhancing their efficacy in facilitated multi-stakeholder processes.

Keywords: multi-stakeholder processes; sustainability transformations; sense-making; strategy; theory of change

1. Introduction

Transformation has become a word which sometimes seems to have lost its edge. Originally, it relates to the word metamorphosis. However, there is a tendency to call anything changing (significantly) a transformation. Similarly, the word transition is often used as no more than an alternative for the word change [1]. Our purpose here is not to discuss semantics or even "appropriate" ways of using such concepts. We focus on effects it has for partnership collaboration. The loosely applied concepts of transformations and transitions often result in unarticulated different visions and expectations among stakeholders regarding the orientation and ambition of a particular initiative related to system transitions/transformations. Sooner or later, such differences become apparent, but sooner would be preferable and this paper offers a perspective on facilitating multi-stakeholder partnerships to articulate, discuss, and agree on strategic orientations at an early stage of collaboration. This also relates to normative perspectives on envisaged transition processes which tend not to be articulated in commonly used transition approaches [2,3].

Emergent partnerships of stakeholders considering joint investment in programmes to address a complex problem typically start with an initial phase of situational analysis and clarification of the mandate and scope of the envisaged change trajectory [4]. The preparatory stage ideally includes stakeholder and issue analysis, institutional analysis, power analysis and understanding political priorities. This is then translated into a policy or programme plan. Often, a Theory of Change (ToC) [5] features prominently in this stage, articulating a summary strategic outlook which clarifies a vision,

strategic pathways of change with relevant preconditions, clarity on anticipated roles of partners and types of interventions involved. In such processes, however, some stakeholders easily feel lost in the face of the large amount of (conceptual) information involved and end up losing the overview of the core nature and orientation of the initiative. This may result in a lack of shared understanding regarding the fundamental ambition and orientation of the initiative, which eventually undermines partnership efforts. Partners are often too easily assumed to be on the same page. This is the situation to which this paper responds.

The approach presented here involves using (1) a simple diagram in (2) a facilitated interactive process. It was found to be highly effective in facilitating interactive multi-stakeholder reflection [4] on the (desired) strategic focus of change initiatives related to system transitions, e.g., see reference [6] for an overview of related research. The diagram and associated facilitation process was found to help partners involved in transition processes to clarify the intended focus of their initiative. We briefly explore the connectivity with relevant approaches in sustainability transition/transformations literature, notably the Multi-Level Perspective on sustainability transitions (MLP) [7], the leverage points for systems change [8], the theory of large system change [9], and the Cynefin framework [10] on complexity thinking.

Section 2 presents the diagram (from here, we will refer to it as the strategic scoping canvas, or simply canvas—see Box 1) with a variety of options for assigning different specifications to it. Since much more can be achieved by using the canvas as part of a facilitated sense-making process, Section 3 elaborates on this, briefly illustrating application in three cases in Bangladesh, Ethiopia, and Peru. Section 4 illustrates wider connection and application opportunities, and Section 5 discusses lessons learnt from the initial application of the canvas, summarizing findings from this paper in a number of conclusions.

Box 1. Strategic scoping canvas.

> We use the word canvas to characterise the diagram as something flexible to be used for exploring particular visions, ambitions, strategic focus, etc., and not in any way to impose a particular preferred orientation upon the users. In this way, we consider it to be similar to methods used in Soft Systems Methodologies [11].

2. The Strategic Scoping Canvas

The idea behind the strategic scoping canvas emerged during the development of a draft strategic knowledge and innovation agenda on food security for the Dutch Ministry of Foreign Affairs (MoFA) [12]. An approach was required for interpreting the current and envisaged future research agenda in a strategic way to be able to see what type of research was currently funded and what the focus of research would need to be in the future. For this, we needed broad categories, which would provide an image of the extent to which a systems approach could be applied, as well as what level of change it would imply. Figure 1 summarizes the canvas that was later elaborated along a number of different lines related to research focus, food system interventions, innovation programmes, etc. Clearly, this is not about developing an in-depth understanding but rather about facilitating discussion at the level of strategic orientations, ambitions, and visions. The canvas is not prescriptive in terms of how and in what context it may be used, though it works best in more complex change processes such as system transitions. Whether a particular location on the canvas is considered appropriate cannot be defined in general but rather depends on what is considered to match with strategic aspirations in each particular case.
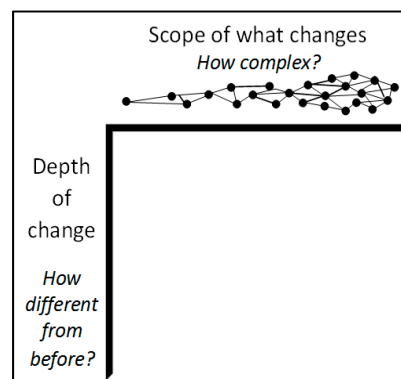
Figure 1. The essential structure of the strategic scoping canvas.

The two axes can be specified along many different lines, as indicated in Figure 2. First, an axis may be specified in terms of the type of questions to be considered, which may also help shape strategic learning agendas. This includes options such as, e.g., (a) identifying visions for change (possible futures) on the canvas, sharpening views on existing visions, and then discussing what is needed with respect to a shared vision; (b) identifying views on an already existing strategic (intervention) focus on the canvas; and (c) identifying research focus/agendas in the diagram, using this to consider investments or policy priorities. This may then be further specified regarding, e.g., a short-term, medium-term, or long-term focus. Second, it may be specified in relation to the scope for change. This includes options such as, e.g., food system dimensions (e.g., ranging from a focus on production to a comprehensive food system perspective), or geographic focus (e.g., ranging from local to global). Third, the depth of change may be characterized in relation to sustainability concerns. This may involve distinguishing between one-dimensional sustainability (e.g., a focus on only the economic), multi-dimensional sustainability, and an integral vision on sustainability, or ranging from a disciplinary to a transdisciplinary orientation. Facilitating reflection on a number of such specifications allows for comparing, for example, future aspirations vs. current realities, or short-term focus vs. long-term focus, as well as comparing different stakeholders' perspectives regarding the appropriate orientation/ambition of the initiative.
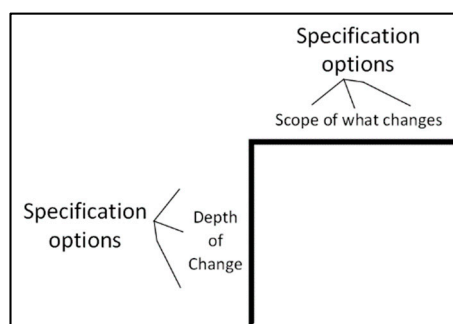

Figure 2. Specification options within the canvas.

Figure 3 portrays how the canvas can be assigned specific categories to connect to the particular context and interest of stakeholders. In some cases, keeping the canvas very simple without examples and only three short options (e.g., optimizing, reforming, transforming) works best, while in other cases, participants need further elaboration (see Figure 4). Reflections on related facilitation issues are addressed in section five. To provoke critical reflections, one can opt to further assigning normative interpretations of categories to the canvas. For example, the upper row may be characteristic for approaches focusing on problem solving, technologies, narrow sustainability, and a focus on progress within the existing normal. The lower row may be characteristic for approaches focusing on (agency of) actors, institutions, long-term scenarios, broad sustainability, addressing social, economic, and environmental injustices in society. The left-side column can be seen as representing approaches in

which improvement is considered to be the sum outcome of the application of singular and isolated innovations, while columns to the right may represent approaches which focus more on system perspectives, synergies, complexity, and non-linearity. In this way, both rows and columns may also be seen as representing different paradigms and underlying assumptions regarding the type of change that is needed. In practice, initiatives will often not be characterized by a dot on the canvas, but rather by a combination of different (adjacent) focus areas relating to different strategies.
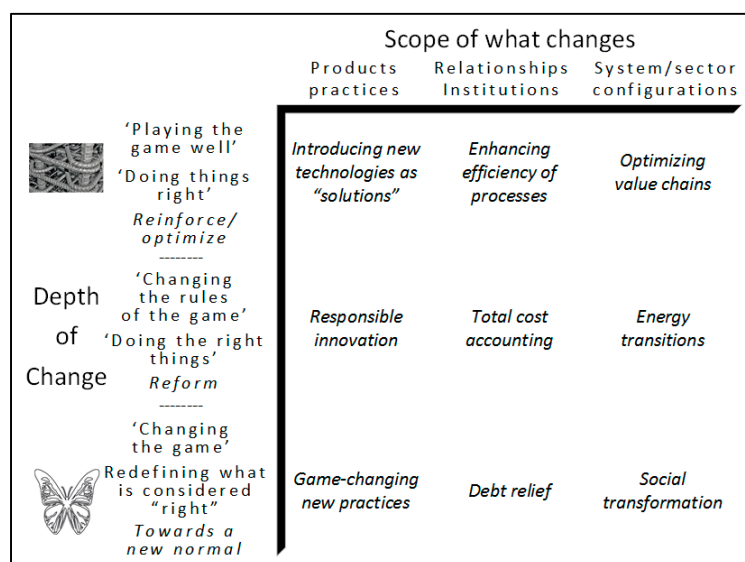

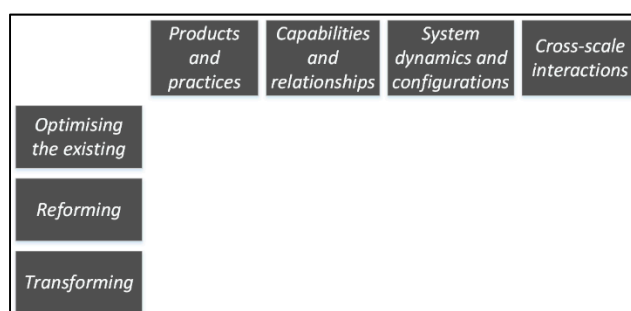**Figure 3.** Assigning meaning to the canvas-examples are indicative only.

Figure 4. Categories as assigned in the Bangladesh case, illustrating flexibility of the canvas.

3. Using the Canvas to Facilitate Interactive Visioning and Positioning

As there are different ways of contextualizing the canvas, it is essential to clarify (1) what is meant by the categories used and (2) what perspective this is about, e.g., is it about a vision or about the current focus of planning. In addition to its application to the Dutch MoFA, the canvas has been applied in different ways (versions) in Bangladesh, Peru, and Ethiopia (see **??** 2–4), proving its adaptability.

In the following, we present a brief outline of the steps that can be applied while facilitating the use of the canvas for strategic decision making and policy design, transdisciplinary research, or a multi-stakeholder partnership.

Box 2. Application in the Dhaka Metropolitan Project.

In 2019, a consortium of FAO with Wageningen University and Research started a project to support the development of a safe, sustainable and resilient food system for Dhaka City. The project applies the food systems approach to analyse, plan, implement, and monitor interventions. The canvas (see Figure 4), was used to provide an overview that allows project partners to decide on their scope and ambition. Whereas various short-term results can be achieved by looking at the first two columns (products/technologies and relationships/capabilities), it made consortium partners realize that they need to consider and probably also address the third column. Partners also started to consider the idea that the Theory of Change should also look at long term sustainable changes, required for the second row (addressing root causes/systemic failures) and the third row (redefining problems and re-envisioning potential for transforming at scale) [13].

Box 3. Application in Peru innovation in fisheries and aquaculture.

The government of Peru, in partnership with the WB, has decided to invest in the Peruvian fisheries and aquaculture sector with an ambitious long term innovation programme called *Programa Nacional de Innovacíon en Pesca y Acuicultura PNIPA* [14]. With support from Wageningen University and Research, strategies and models for innovation were discussed and applied, including the design and application of network innovation capacity [15]. The PNIPA team also wanted to elaborate its knowledge management strategy. An adapted version of Figure 4 was used for this purpose, and the team thereby ascertained that their initial ideas are situated in the first column (innovation as problem solving), with a focus on products and relationships, moving toward wider system conditions. The canvas made clear that they need to use the upcoming mid-term review to determine whether the second and third columns should also become part of the PNIPA programme ambition.

In the following, we present a brief outline of the steps that can be applied while facilitating the use of the canvas for strategic decision making and policy design, transdisciplinary research or a multi-stakeholder partnership.

Step 1   Participants score depth and scale of envisaged change

Before showing the canvas, ask participants to score on a scale of 0-6 the initiative, the vision for change, or policy intent, in terms of (1) the scope of change (complexity) involved and (2) the related depth of change involved (how different from before). For depth of change, scoring 0 implies merely superficial adjustments occurred, while for scope of change, scoring 0 implies that little/few were touched by the envisaged change. For depth of change, scoring 6 implies complete overhaul, while for scope of change, scoring 6 implies change affecting the wider society (multiple sectors/systems). Make sure the question is clear in terms of what exactly participants are asked to score.

Step 2   Participants explore orientations on the canvas

A large-size print of the canvas is attached to a wall. Participants are asked to write their name on a card and use the two scores as coordinates to position their name. This brings their scores new meaning, perhaps other than what they may have had in mind. Discuss their first impressions in terms of where they find themselves on the graph and the differences between the positions of the cards. This initial scoring is not a goal in itself, but rather a stepping stone into a discussion and exploration. It may therefore be helpful to remove the cards after this initial discussion in order to prevent the impression that they are fixed in those positions.

Depending on the intended focus of discussion and exploration, participants may, for example, exchange views on vision and reality, discussing the difference between what is (tentatively) planned and the vision for change, and aiming to find a perspective that they can agree on. Different types of stakeholders-from the private sector, public sector, and civil society-will have different visions and different ideas about what needs to change. The canvas cannot necessarily solve differences in opinions, but can help to articulate what different perspectives are involved to form a basis from which to look for common ground.

Box 4. Application in the CASCAPE programme in Ethiopia.

> With support from Wageningen University and Research, the CASCAPE (Capacity building for Scaling up of evidence-based best practices in Agricultural Production in Ethiopia) programme [16] collaborates with the Ethiopian government's Agricultural Growth Programme [17] to enhance agricultural productivity through the development and dissemination of demand-driven and evidence-based agricultural best practices and technologies. A more elaborate version of the canvas as presented in Figure 3 was used by a team of regional project implementers to reflect on the extent to which CASCAPE contributed to the scaling of agricultural innovations and the resulting transformation in the agricultural sector. The reflections highlighted how the evidence and results from early project successes, depicted in the first column, have contributed to wider system changes depicted in the second column. Project implementers highlighted how the success of individual best fit technologies and practices had allowed innovative approaches such as participatory action research and social inclusion to be progressively incorporated into policy dialogues. This in turn led to system changes that allowed stronger collaboration between a variety of stakeholders involved in agricultural research for development. The canvas allowed project staff to identify key topics in Ethiopia's agricultural research system that require continued attention and support.

Step 3　Participants explore implications for practice

The canvas initially facilitates a big-picture perspective. Having created a sufficiently shared perspective at that level, participants then explore implications for specific strategies, institutional arrangements, and so forth. The strategic scoping will lead to considering the readiness of partners to engage effectively and appropriately with the type of change they have in mind. Figure 5 illustrates how partners in system transitions can identify the capabilities necessary for the process [18]. Relational change is, for example, about new ways of interacting, collaborating, and partnering, or about making different choices regarding inclusion and participation.
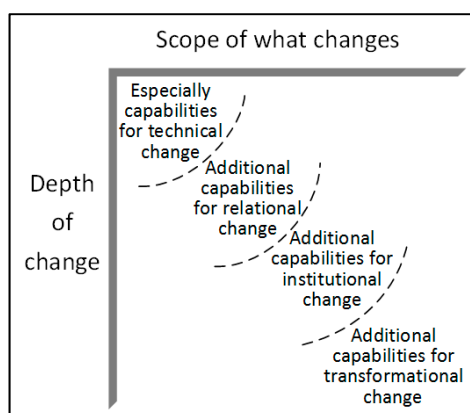

Figure 5. Considering types of needed capabilities in view of change ambitions to consider readiness of the partnership.

Step 4　Consolidating findings

The findings from the strategic scoping exercise need to be documented and consolidated so that they can be incorporated into the development or revision of a theory of change (or theory of transition), which will in turn inform management decision making. Other facilitation methods are more appropriate for the following step [4].

4. Further Opportunities for Connection and Application

In the previous two sections, we presented the essentials of the canvas, options of assigning different meanings to it, and ways of facilitating related multi-stakeholder sense-making processes. In this section, we briefly present a selected number of ways in which the canvas may be connected to other approaches, enabling useful crossovers in the context of sustainability transformation governance.

Another option of infusing the canvas with specific meaning is to use Dave Snowden's Cynefin framework, which has been widely applied for articulating complexity perspectives [19]. It distinguishes four levels of complexity (obvious or simple, complicated, complex, and chaos), indicating how these relate to each other, and articulating different options for matching planning and sense-making approaches. This can be particularly useful in considering and articulating implications of a particular strategic focus or ambition for an appropriate/matching theory of change and interventions. Figure 6 illustrates a possible way of integrating the Cynefin framework.
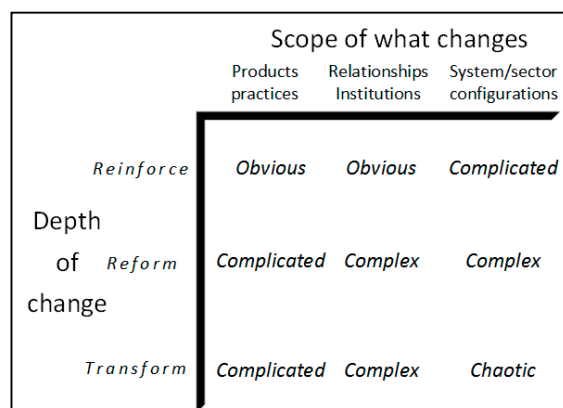
Figure 6. Approximate comparison with the Cynefin framework.

Yet another option for assigning specific meaning to the two axes would be to use two widely used frameworks in relation to sustainability transformations—the multi-level perspective on sustainability transitions [6] and Meadows' leverage points for intervening in systems [7]. The multi-level perspective (MLP) presents a dynamic view on system transitions to sustainability by articulating the way in which niche innovations interact with relevant system ("regime") configurations in a wider (societal) context ("landscape"). Leverage points are places in complex systems where interventions can set in motion disproportionately larger changes for the whole system. Meadows distinguishes twelve leverage points in increasing order of their effectiveness to produce such effects. Figure 7 shows how core categories of MLP and the Leverage Points can shape the dimensions of the canvas (cf. [20]).
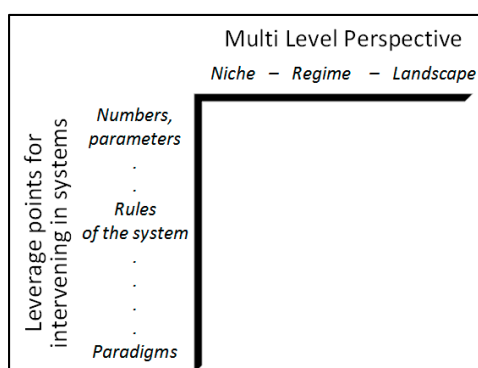

Figure 7. Connecting to the multi-level perspective and leverage points approach.

Finally, we want to highlight similarities with what Dentoni et al. [21] and Waddell et al. [9] present as the theory of large system change (LSC), which distinguishes between incremental change, reform, and transformation, creating a related typology of change actions along the lines of two axes: generative vs. non-generative, and collaboration vs. confrontation. They distinguish four types of change action: supporting change, co-creating change, paternalistic change, and forcing change. We would consider that to be a third axis for the canvas, but we do not elaborate on that here. Figure 8 illustrates how the canvas may be connected to LSC to create a merger of the two perspectives.
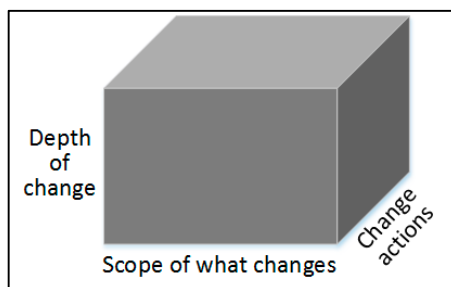
Figure 8. Connecting to the theory of large systems change.

The above options of framing the canvas indicate multiple opportunities for exploring an envisaged or already ongoing initiative from a variety of strategic angles, enabling the development of rich strategic perspectives. This can also support decision making regarding an appropriate strategic focus with respect to core values, ethical principles, and political priorities.

5. Discussion and Conclusions

In this short contribution, we presented a strategic scoping canvas, how it may be specified in different ways, and how it can be used to facilitate stakeholder interaction. It does not try to solve differences between stakeholder perspectives, but rather is meant to help clarify perspectives on strategic orientations and ambitions. By showing connections to relevant approaches in the field of sustainability transitions we demonstrated ways of complementing already existing approaches by offering options for facilitating interactive strategic scoping and sense-making.

The use of the strategic scoping canvas would ideally be a stepping stone towards facilitating the development of a theory of change and establishing a shared perspective on strategic intentions and orientations in relation to system transitions. In reality, it will often be used at a later stage when those leading an initiative realize that the initial stages of partnership development lacked a sufficiently simple and shared strategic outlook to sustain partnership efforts. In that sense, it may also be used as a tool for monitoring and evaluating a process.

The application of this procedure in four different contexts led to a number of lessons learnt. In the first place, there are multiple ways to facilitate interactive scoping using the canvas other than the ways we presented in the third section. Those facilitating the use of the canvas have the creative liberty to develop further facilitation methods. Secondly, we underscore the importance of facilitation, including the related importance of considering carefully what type of questions will facilitate useful application given the specific groups using it and their domain of work (e.g., policy, research, public-private partnership). Facilitation needs to factor in good understanding about the process stage: what kind of actors are already involved and who is missing, the political setting in which the initiative is based, and so forth. The canvas and facilitation process both need to be adapted accordingly. Thirdly, related to the above, it is important that the facilitator clarify what the canvas is meant to do (and what not). We found it to resonate particularly with practitioners and policy makers, while researchers tend to try to first understand all ins and outs before applying it. We have framed the diagram as a canvas, as we consider it to be similar to the use of rich pictures in soft systems methodology [10], in which participants start drawing and gradually expand the picture without first trying to develop an image in their minds or on separate pieces of paper. The picture-creating process is more important than the end result. In the same way, the scoping canvas is meant to create a platform for meaningful exchange, helping to clarify (different) perspectives on the subject matter. Finally, the facilitated application of the canvas can be a catalyst for critical reflection on already existing plans and portfolios, helping to articulate differences in visions, orientations, and interpretations among partners in sustainability transitions. Using some provocative (critical) perspectives such as suggested in section two can promote meaningful discussion and debate.

The canvas clearly has its limitations and we suggest not to try to assign more meaning to it than matches its intended simplicity. Also, it is not meant to replace existing methods and approaches but rather to complement and/or enhance them, as illustrated in this paper. It is flexible enough to allow for assigning different meanings to it and different ways of using it in facilitated processes, and we are interested to learn about alternative ways of making it useful.

References

1. Hölscher, K.; Wittmayer, J.M.; Loorbach, D. Transition versus transformation: What's the difference? *Environ. Innov. Soc. Transit.* **2018**, *27*, 1–3. [CrossRef]
2. Blythe, J.; Silver, J.; Evans, L.; Armitage, D.; Bennett, N.J.; Moore, M.-L.; Morrison, T.H.; Brown, K. The Dark Side of Transformation: Latent Risks in Contemporary Sustainability Discourse. *Antipode* **2018**, *50*, 1206–1223. [CrossRef]
3. Schlaile, M.P.; Urmetzer, S.; Blok, V.; Andersen, A.D.; Timmermans, J.; Mueller, M.; Fagerberg, J.; Pyka, A. Innovation Systems for Transformations towards Sustainability? Taking the Normative Dimension Seriously. *Sustainability* **2017**, *9*, 2253. [CrossRef]
4. Brouwer, H.; Woodhill, J.; Hemmati, M.; Verhoosel, K.; Van Vugt, S. Prelims—The MSP Guide: How to Design and Facilitate Multi-Stakeholder Partnerships. In *The MSP Guide: How to Design and Facilitate Multi-Stakeholder Partnerships*; Practical Action Publishing Ltd.: Warwickshire, UK, 2016.
5. Funnell, S.C.; Rogers, P.J. *Purposeful Program Theory: Effective Use of Theories of Change and Logic Models*; Jossey-Bass: San Francisco, CA, USA, 2011.
6. Loorbach, D.; Frantzeskaki, N.; Avelino, F. Sustainability Transitions Research: Transforming Science and Practice for Societal Change. *Annu. Rev. Environ. Resour.* **2017**, *42*, 599–626. [CrossRef]
7. Geels, F.W. Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Res. Policy* **2002**, *31*, 1257–1274. [CrossRef]
8. Meadows, D. *Leverage Points—Places to Intervene in Systems*; The Sustainability Institute: Hartland, VT, USA, 1999.
9. Waddock, S.; Dentoni, D.; McLachlan, M.; Meszoely, G.; Waddell, S.; Cornell, S. Large Systems Change: An Emerging Field of Transformation and Transitions. *J. Corp. Citizsh.* **2015**, *2015*, 5–30. [CrossRef]
10. Kurtz, C.F.; Snowden, D.J. The new dynamics of strategy: Sense-making in a complex and complicated world. *IBM Syst. J.* **2003**, *42*, 462–483. [CrossRef]
11. Checkland, P.; Scholes, J. *Soft Systems Methodology in Action*; Wiley: Chichester, UK, 1999.
12. Wigboldus, S.; Nigten, V.; Altaf, A. Synthesis of a Consultative Stocktaking Process to Inform the Dutch DGIS Strategic Knowledge and Innovation Agenda in Relation to SDG2. Available online: https://knowledge4food.net/wp-content/uploads/2019/10/191008_fbkp-consultation-minfa-fns-skia_online-report.pdf (accessed on 29 November 2019).
13. Support for Development of the Safe, Sustainable and Resilient Food System for Dhaka City. Available online: http://www.fao.org/bangladesh/news/detail-events/en/c/1149681/ (accessed on 29 November 2019).
14. Programa Nacional de Innovacíon en Pesca y Acuicultura. Available online: https://www.pnipa.gob.pe/ (accessed on 29 November 2019).
15. Klerkx, L.; Alvarez, R.; Campusano, R. The emergence and functioning of innovation intermediaries in maturing innovation systems: The case of Chile. *Innov. Dev.* **2015**, *5*, 73–91. [CrossRef]

16. CASCAPE-BENEFIT. Available online: http://benefit-cascape.org/ (accessed on 29 November 2019).

17. Agricultural Growth Program II. Available online: http://www.eiar.gov.et/index.php/agricultural-growth-program-ii (accessed on 21 November 2019).

18. Baser, H.; Morgan, P. *Capacity, Change and Performance*; Study Report; ECDPM: Maastricht, The Netherlands, 2008.

19. Fierro, D.; Putino, S.; Tirone, L. The Cynefin Framework and Technical Competencies: A New Guideline to Act in the Complexity. *INCOSE Int. Symp.* **2018**, *28*, 532–552. [CrossRef]

20. Göpel, M. *The Great Mindshift—How a New Economic Paradigm and Sustainability Transformations Go Hand in Hand*; Springer: Heidelberg, Germany, 2016.

21. Dentoni, D.; Waddell, S.; Waddock, S. Pathways of transformation in global food and agricultural systems: Implications from a large systems change theory perspective. *Curr. Opin. Environ. Sustain.* **2017**, *29*, 8–13. [CrossRef]