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# **Towards a Theory of Managing Wicked Problems through Multi-Stakeholder Engagements: Evidence from the Agribusiness Sector**

## **EDITOR'S INTRODUCTION**

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## **Abstract**

Part Two of our Special Issue on wicked problems in agribusiness, “*Towards a Theory of Managing Wicked Problems through Multi-Stakeholder Engagements: Evidence from the Agribusiness Sector*,” will contribute to four open questions in the broader fields of management and policy: why, when, which and how multi-stakeholder engagements (MSEs) are effective actions for managers and policy-makers to deal with wicked problems. MSEs across private, public and non-profit sectors have been considered the collaborative paradigm of the 21st century to move beyond market and state failures (Austin 2000). Moreover, the agricultural and food arena provides a unique context to analyze managerial and policy decisions to undertake (or not undertake) MSEs. This is because agricultural and food chains face the highest number of urgent, interlinked wicked-problem issues that are scientifically uncertain, change over time and determine value conflict among stakeholders (Dentoni et al. 2012). Such issues include food security, climate change, deforestation, obesity, the use of technology in food production, violation of human rights and animal welfare.

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## Introduction

Part Two of our Special Issue, “*Towards a Theory of Managing Wicked Problems through Multi-Stakeholder Engagements: Evidence from the Agribusiness Sector*,” adds seven new articles to the ten previously published in Part One in December 2012 (Dentoni et al. 2012). These articles provide an important contribution to our broad initial question, which—thanks to the influence of Peterson (2013), in this issue—can be reformulated as: *why, when, which and how are multi-stakeholder engagements (MSEs) effective actions for managers and policy-makers to deal with wicked problems in the food and agribusiness sector?* This introductory article will first discuss how the “why, when, which, and how questions” are still largely open for debate in the rapidly advancing field of management practice and theory. Second, we discuss the contributions made by the authors in this supplemental issue in tackling the question. Third, it will identify and suggest questions to advance the field of managing wicked problems and multi-stakeholder engagements in agribusiness.

## The Open “Why, When, Which and How” Questions

### (1) *Why are MSEs Effective in Dealing with Wicked Problems?*

This question involves the vision of leaders in agribusiness (Table 1). Why do (or should) managers choose to allocate scarce resources (such as capital and time) to involve large numbers of stakeholders in making decisions and taking actions which could be made with a restricted number of stakeholders, or just internally within the organization? Part of the answer is given by Freeman’s stakeholder theory which states that strategies which provide benefits, or at least minimize harm, to a broader range of stakeholders are most effective for the long-term growth and survival of an organization (Freeman 2010). Yet, co-developing strategies and actions with multiple stakeholders—undertaking “multi-stakeholder engagements” (Dentoni et al. 2012a), goes beyond simply considering stakeholders when making individual organizational decisions (Selsky and Parker 2005). The question of how much value is created by MSEs for organizations and for society, and thus the question of why should agribusiness managers undertake MSEs, is still open and requires further investigation (Partnership Resource Center 2012).

### (2) *When are MSEs Effective in Dealing with Wicked Problems?*

This question involves the *strategy* of leaders in the agricultural and food sector (Table 1). What are the conditions external to the organization that require, or do not require, undertaking MSEs? And what are the resources within the organization that are necessary to undertake MSEs, including the human and professional skills of individuals within the organization? So far, the literature does not provide applicable recommendations to managers. In terms of external conditions, political Corporate Social Responsibility (CSR) theory finds that firms need to invest in MSEs and collaborate with non-profit and public sectors when trans-boundary issues reduce the deliberative power of governments (Scherer and Palazzo 2011). Internally, learning theories recommend that firms need to be efficient in scanning, choosing, acquiring and integrating knowledge from stakeholders (Teece 2007) when undertaking MSEs (Ferrell et al. 2010). This requires leaders with appropriate competencies (Bolden and Gosling 2006; Dentoni et al. 2012b). While widely generalizable, these theories do not provide managers with an actionable set of

recommendations; thus a “mid-range theory” (Merton 1968) emerging from MSE practice in agribusiness is still much needed (Dentoni et al. 2012).

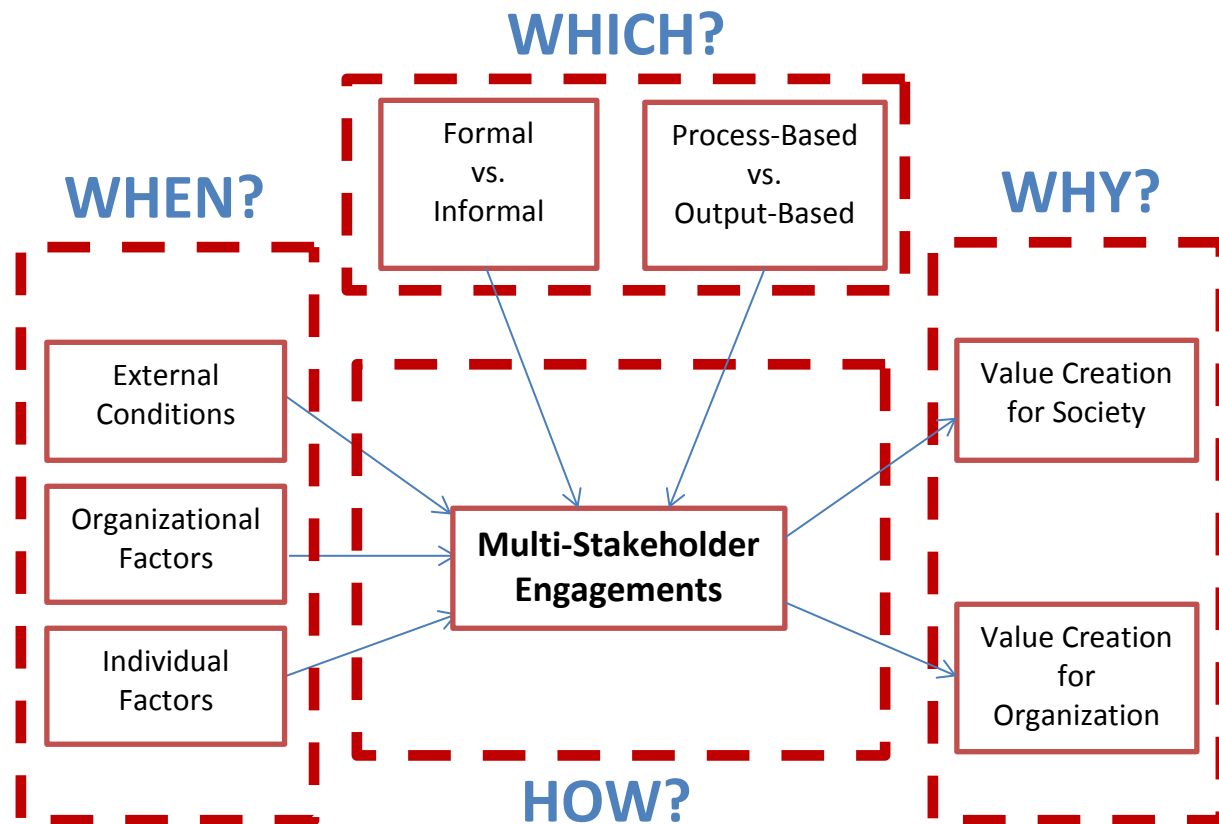
*(3) Which MSEs are Effective in Dealing with Wicked Problems?*

This question involves the *organization* of MSEs by agribusiness leaders (Table 1). Suppose that a manager decides to undertake MSEs, what are the governance mechanisms that maximize learning and value creation for the engaging members and society as a whole; minimize the transaction costs of engagement and, yet, ultimately moderate the wicked problem at hand? The literature has been very thorough in describing a continuum of governance mechanisms from informal multi-stakeholder networks, dialogues and relations (Roloff 2008) to formal multi-stakeholder alliances and partnerships (Rondinelli and London 2003; Backstrand 2006; Parmigiani and Rivera-Santos 2011); as well as generic multi-stakeholder collaboration, initiatives and processes (Hemmati et al. 2002; Utting 2002; Everett and Jamal 2004). Recent literature has also classified MSEs’ organizational forms on the basis of their aim of developing process-based legitimacy, i.e. obtaining consensus through transparent and inclusive processes, versus output-based legitimacy, that is, achieving consensus through documented results of joint action (Mena and Palazzo 2012). Yet, no research has drawn relationships between available governance mechanisms and the impact of MSEs, leaving agribusiness managers still without any clear recommendations for participation in MSEs.

*(4) How are MSEs Effectively Dealing with Wicked Problems?*

This question involves the *implementation* of MSEs by agribusiness managers in the agricultural and food sector (Table 1). In other words, what are the “micro-processes” used by managers to deal with the wicked problems at hand through MSEs given their specific context and conditions? Recent literature has widely explored the micro-processes leading MSEs to either succeed or fail (Seitanidi and Lindgreen 2010; van Huijstee and Glasbergen 2010), yet not with reference to wicked problems. This is an important missing piece: how do managers and their organizations realize that they are facing a wicked problem, and which steps do they take in discussing the nature of the shared problems with their stakeholders, and finally tackling them through MSEs? Again, these are open questions where theory still cannot help practitioners in agribusiness.

These four open questions are highly relevant for agribusiness managers and provide justification for this Special Issue.



**Figure 1.** The Inductive Framework of the Special Issue based on the Question: Why, When, Which and How Are Multi-Stakeholder Engagements Effective to Deal with Wicked Problems?

### Authors' Contribution to the Special Issue

The articles selected and published in the second part of our Special Issue provide an empirical contribution to the four questions above and complement the findings presented in part one of this Special Issue (Table 1). The first two articles by Peterson (2013) and Waddell et al. (2013) provide “grand” views of addressing wicked problems through MSEs. Based on his examination of thirty sustainable innovation projects undertaken by the Dutch public-private partnership TransForum in 2004-2010, Peterson (2013) further builds theory based on the experience provided by van Latesteijn and Rabbinge (2012). In particular, he proposes that MSEs lead to a combination of positive outcomes for society and for the MSE process itself when the stakeholder team is diverse and strongly engaged from the start of the project; and when the participants of the MSE go through a purposive process of reflection and action learning (Peterson 2013). When the conditions discussed by Peterson (2013) are met, companies that participate in MSEs have the opportunity to reduce transaction costs associated with vertical or horizontal coordination in supply chains affected by wicked problems. In other words, by anticipating and managing conflict, MSEs are able to reduce potential future conflicts that might lead to increased transaction costs among stakeholders (Williamson 1979). Based on the case of the Southern African Food Lab and its participation in the GOLDEN for Sustainability network on food, agriculture and nutrition (FAN), Waddell et al. (2013) discusses the importance of

linking multiple MSEs within learning networks to achieve scale, pilot and scale experimentation, and to reach coherence of action. The case from Waddell et al. (2013) provides a counter-example that supports and builds on the case of the five multi-stakeholder partnerships<sup>1</sup> that were designed to address the sustainability of Brazilian soy (Hospes et al. 2012).

Three articles discuss the role of *formal partnerships to tackle wicked problems through MSEs*. Based on the case of the Sustainable Food Lab, a community of practice whose members count more than fifty members among agribusiness corporations, NGOs and universities, Hamilton (2013) discusses the challenges of building a MSE with a diverse and influential team of stakeholders that promote organizational learning and leadership development and provide a pre-competitive space for stakeholders to collaborate on business-driven innovations aimed at enhancing the sustainability of the *mainstream* food system. Hamilton (2013) also explicitly responds to Bitzer (2012) questioning the effectiveness of bottom-up governance of food supply chains beyond local markets. Moreover, Hamilton (2013) provides another route how MSEs can achieve legitimacy; that is, through learning processes rather than trust-based processes of compliance and acceptance (Scholten and Glasbergen 2012). Wubben and Isakhanyan (2013) discuss when and how MSEs are effective to tackle wicked problems based on their experience with European R&D on sustainable bio-fuels. They find that multi-stakeholder partnerships deal with wicked problems effectively through a combination of transparent top-down goal-setting and decentralized bottom-up participation. In particular, MSEs are effective when central financing is matched with local funding to achieve locally adapted solutions to shared problems (Wubben and Isakhanyan 2013). Finally, Blok et al. (2013) discuss the MSE mechanisms that Rabobank adopted to integrate its goals of market expansion with food security and smallholder inclusion in Africa. This view complements Connolly's GLIMPSE view that private agribusiness companies are crucial actors in tackling wicked problems in Africa in a context where the public sector solutions has proven to fail (Connolly 2012). At the same time, this view of the primary role of business in tackling wicked problems contrasts with the view of integrating public and private action and empowering local civil society organizations to truly tackle wicked problems (Pesqueira and Verburg 2012).

The final two articles in this Special Issue discuss the role of developing informal networks to tackle wicked problems through MSEs. Based on the Italian case of "Marche d'Eccellenza" branding, Cavicchi et al. (2013) discuss the key role of universities can play as partners, trainers and facilitators of a group of small and medium enterprises with conflicting goals and values. In a different context, Bos et al. (2013) discuss the role of NGOs as partners and facilitators in the introduction of a new animal welfare label across multiple actors within the Dutch pork supply chain. Similarly to Pieters et al. (2012), both cases propose that one actor in the multi-stakeholder network can provide the missing resource to make a MSE effective. In the Marche case, the missing resource was a partner with a network-building capability and mission (Cavicchi et al. 2013). In the Dutch pork supply chain, it was a NGO partner willing to take a "conflict moderator" role and facilitate decisions among multiple businesses (Bos et al. 2013).

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<sup>1</sup> These partnerships ultimately failed to coordinate with each other to address the sustainability of the soy supply chain. In fact, this coordination failure has arguably increased the "wickedness" of the initial problem (Hospes et al. 2012).

**Table 1.** Key Authors' Contributions to the Four Open Questions in this Special Issue

Area of Business Management	Broad Open Questions	Authors' Contributions
<b>Vision</b>	<u>Why</u> MSEs are effective in dealing with wicked problems?	<p>...Because MSEs lead to a combination of <b>system outcomes</b> (on people, planet and profit) and <b>process outcomes</b> (improved governance mechanisms for future MSEs) (Peterson 2013).</p> <p>...Because MSEs develop <b>leadership capabilities</b> such as issue sophistication, value chain and organizational strategy, and personal capacities to engage people across organizations and the industry (Hamilton 2013)</p> <p>...Because MSEs in inclusive networks <b>speed up learning, achieve coherence</b> across multiple MSEs and thus <b>generate large systems change</b> (Waddell et al. 2013).</p>
		<p>When there is an actor with a <b>network-building mission and capability</b> (Cavicchi et al. 2013)</p> <p>...When the stakeholder team in MSEs is <b>collectively influent and diverse</b> (Hamilton 2013).</p> <p>...When the business members in MSEs have the <b>strategic interest of integrating profit and social goals</b>; such as increased market for lending through smallholder inclusion (Blok et al. 2013)</p> <p>...When the non-profit members adopt a “<b>moderate conflict model</b>” and impose <b>clear “limiting conditions”</b> in negotiations (Bos et al. 2013).</p>
<b>Strategy</b>	<u>When</u> MSEs are effective in dealing with wicked problems?	<p>...MSEs with combination of <b>transparent top-down goal-setting</b> and <b>decentralized bottom-up participation</b> with the aim of local implementation (Wubben and Isakhanyan 2013).</p>
		<p>...MSEs with <b>formalized tools</b>, approaches, supply chain engagement processes, organizational commitments, and industry-wide agreements (Hamilton 2013)</p> <p>...MSEs that are <b>part of learning networks</b> connecting multiple MSEs within an eco-system such as the food, agriculture and nutrition chain (Waddell et al. 2013)</p>
<b>Organization</b>	<u>Which</u> MSEs are effective in dealing with wicked problems?	<p>...Through <b>experimentation in action</b>, action learning, purposive new knowledge creation, trans-disciplinary collaboration and reflection (Peterson 2013).</p> <p>...Through “stratified invitations”, process- and goal-oriented coaching, <b>decision-making split between central financiers and decentralized funders</b> (Wubben and Isakhanyan 2013).</p> <p>...Through convening and sensing process of interviews, dialogue workshops, learning journeys and <b>rapid cycle prototyping of innovation ideas</b> (Hamilton 2013)</p> <p>...Through <b>non-profit taking the lead</b> (through small steps) in <b>aligning businesses</b> in the supply chain to co-create a new product standard, label or brand (Bos et al. 2013).</p> <p>...Through scientific development of “experiments” based on methodologies such as communities of practice, mapping, learning histories and outcome mapping in a supportive and non-intrusive manner (Waddell et al. 2013).</p>
<b>Implementation</b>	<u>How</u> MSEs are effective in dealing with wicked problems?	

## So What Is Next?

This Special Issue selected, analyzed and compared seventeen empirical cases of MSEs and the associated wicked problems from Africa, Latin America, Asia, US and Europe. Overall, this led to advancing the theory on why, when, which and how multi-stakeholder engagements (MSEs) are effective actions for managers and policy-makers when managing wicked problems. This theory can sharpen the vision and advance strategic, organizational and operational recommendations for agribusiness managers and policy-makers who are dealing with wicked problems (Table 1).

Although many insights concerning the different factors, types, and processes of MSEs, the question of measuring and thus testing the impact of MSEs on society in a context of wicked problems remains open. The impossibility of disentangling the causes and outcomes is in the nature of wicked problems. This still prevents theories on MSEs and wicked problems from being tested quantitatively, even though the field of agribusiness is extremely rich with relevant examples and data. Future studies identifying accurate or at least approximate measures of impact, even if only applicable to one specific wicked problem, would greatly help test theories and support experimentation, prototyping and learning in the current MSE practice.

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