

Article

# Turning Farmers into Business Partners through Value Co-Creation Projects. Insights from the Coffee Supply Chain

Elena Candelo <sup>1</sup>, Cecilia Casalegno <sup>1</sup>, Chiara Civera <sup>1,\*</sup> and Fabrizio Mosca <sup>1</sup>

Department of Management, University of Turin, Corso Unione Sovietica 218bis, 10134 Turin, Italy; elena.candelo@unito.it (E.C.); cecilia.casalegno@unito.it (C.C.); fabrizio.mosca@unito.it (F.M.)

\* Correspondence: chiara.civera@unito.it; Tel.: +39-348-792-4950

Received: 4 February 2018; Accepted: 26 March 2018; Published: 29 March 2018



**Abstract:** This study examines the empowerment of low-power, vulnerable stakeholders of global, complex supply chains as one effective strategy to increase value co-creation and to moderate the vulnerabilities that threaten supply chain resilience. Previous scholars have indicated the necessity of investigating the concept of value co-creation further by including various stakeholder perspectives and suggesting systems of evaluation. This research thus focuses on low-power smallholder farmers within the coffee supply chain by qualitatively evaluating the effectiveness of value co-creation projects. The study also analyzes the extent of development and the nature of empowerment initiatives designed conjointly by nongovernmental organizations (NGOs) and coffee roasters that are addressed to farmers. The mixed qualitative methodology includes a literature review, interviews, focus groups, and content analysis of 20 value co-creation projects conducted in various developing and emerging coffee-producing countries. The research proposes a theoretical framework employed to conduct focus groups with Brazilian coffee farmers. This framework empirically demonstrates that these farmers are in the process of becoming business partners of the coffee supply chain thanks to various empowerment initiatives, common to most of the analyzed projects, that appear to moderate specific vulnerabilities of the coffee supply chain and therefore benefit supply chain resilience.

**Keywords:** value co-creation; supply chain resilience; supply chain vulnerability factors; stakeholder empowerment; low-power stakeholders; coffee industry

## 1. Introduction

Globalized supply chains have increased in both complexity and vulnerability in recent years [1–4] for several reasons, including growing outsourcing [5], redistribution of resources and power inequalities [6–8], stakeholders' interdependent linkages and tangled relationships [9], and cultural and geographical barriers that create differences in knowledge, understanding, and relational influences [10]. Firms at the center of such complex mechanisms of relationships, sourcing, and production are thus required to develop and implement strategic actions that can anticipate and overcome vulnerability factors to increase supply chain resilience while continuing to create value for all stakeholders [2,11–13].

The more complex the supply chain, the higher the need to involve a plurality of stakeholder groups in a process of value co-creation [14] through an inclusive, participatory, and collaborative logic [4,15–17]. Regulation of the evolving linkages throughout the supply chain imposes the prioritization of resources and the identification of groups of stakeholders who are critical for value co-creation and can contribute to supply chain resilience with their own resources, capabilities, skills, and knowledge in cooperation with the firm [18].

This study of the coffee supply chain has focused on low-power, vulnerable stakeholders [7,19,20] who work as coffee extractors in the coffee business. This is a long, complex, and idiosyncratic supply chain in which low-power stakeholders face issues such as climate change and market instability within greater asymmetries of information. The supply chain also relies on the same people for the quality of the coffee and business survival [21–23]. In the context of this research, “low-power stakeholders” are smallholder coffee farmers who are unable to “sanction or modify activities that affect them” [7] (p. 285) and who “exercise direct influence on corporations” [10] (p. 432); at the same time, they are critical resource providers [18] for raw material quality and business productivity.

Several scholars [24–26] have argued that when firms (in this particular case roasters) interact with low-power stakeholders to increase supply chain resilience, empowerment actions become crucial to favor higher and more effective participation of all stakeholders in value co-creation projects. Such actions involve a set of activities through which low-power stakeholders acquire (i) balanced relationships; (ii) fair achievement of expectations [8]; and (iii) a homogeneous level of capabilities, skills, and knowledge to gain influence over events and other important matters. However, given that value co-creation projects generally take place between economic and social actors [14] (typically in the coffee supply chain between nongovernmental organizations (NGOs) and roasters and addressed to low-power stakeholders) a qualitative evaluation of value is even harder to achieve [15,17]. The discourse on value creation and co-creation among stakeholders thus requires further development [9,27,28].

This paper seeks to provide one qualitative evaluation of empowerment actions addressed to low-power stakeholders within value co-creation projects in the coffee industry and to investigate whether empowered stakeholders are enabled to participate in the value co-creation and to contribute to overcoming various vulnerability factors within the chain. The study poses two main research questions to this end:

- RQ1: How can the effectiveness of empowerment actions to moderate the effects of vulnerability factors within the coffee supply chain be qualitatively evaluated?
- RQ2: Do current empowerment actions within specific value co-creation projects enable coffee farmers to turn from being vulnerable to becoming business partners? If yes, how?

In order to respond to the RQs, a conceptual framework of empowerment dimensions for qualitative evaluation was first created based on a literature review on empowerment and supply chain vulnerability factors. The framework was then enriched through (i) focus groups conducted with coffee farmers who work on a specific value co-creation project in Brazil led by a leading Italian coffee roaster; (ii) content analysis of 20 value co-creation projects conducted in cooperation with the same leading Italian roaster, other competitors, and NGOs working in the field in developing and emerging countries of coffee extraction; and (iii) interviews with various stakeholder groups who take part in value co-creation projects within the coffee industry.

The framework serves two main purposes. First, it was used as theoretical background to identify a qualitative scale of evaluation of the effectiveness of empowerment actions in overcoming certain vulnerability factors within the coffee supply chain. Second, the framework was employed to qualitatively evaluate whether empowerment actions addressed to coffee farmers who work on a specific value co-creation project in Brazil are changing from vulnerable groups to business partners within the projects. These two factors have allowed a discussion of how low-power stakeholders become business partners of value co-creation projects and actively contribute to making the coffee chain more resilient. To this end, an empowerment model that identifies specific empowerment initiatives was designed and will be discussed as a practical contribution of the study. The framework, the refined methodology, and the empowerment model can all be replicated and applied to similar investigations of long and complex supply chains [29].

The remainder of the paper is organized as follows. Section 2 briefly describes (i) the literature background on supply chain resilience and value co-creation; (ii) the empowerment of low-power,

vulnerable stakeholders; and (iii) the potential contribution of empowerment in moderating the effects of vulnerability factors within a supply chain. Section 3 illustrates the characteristics of the coffee supply chain and low-power stakeholders, who are the object of this study. Section 4 explains our chosen methodology. Section 5 illustrates the results of the study, followed by a discussion in Section 6 in response to the research questions. The paper then summarizes the study's main contributions, explains its limitations, and provides avenues for future research (Section 7).

## 2. Literature Background

### 2.1. Resilience and Value Co-Creation

From a variety of disciplines, “resilience” can be defined as the capacity of a supply chain to reduce potential vulnerabilities and resist turbulence [2,29]. Svensson [13], who links resilience to supply chain vulnerability, describes resilience as deviations from the standard that were not expected as well as related negative consequences. Supply chains are exposed to numerous vulnerability factors, the threats of which grow alongside the growth of globalization, technological innovations, and specialization [5]. Petitt et al. [2] developed a framework to anticipate, mitigate, and overcome supply chain vulnerabilities; the authors drew solutions from extant academic sources and adopted focus groups for that specific outcome. Among the variety of possible available solutions, strategies of collaboration and adaptation might help to overcome disruptions and ensure supply chain resilience [4]. The challenge is to cope with unexpected events and their consequences while continuing to create value for all stakeholders [12,13]. For this reason, the concepts of value creation and value co-creation are central to moderate vulnerabilities through a joining of interest among stakeholders [16], the involvement of stakeholders in business decisions [30], and by establishing effective dialogue, decision sharing, and actions [31,32].

Although the academic literature has extensively discussed value creation as a concept, scholars lack common frameworks to evaluate the contribution of value creation projects to supply chain resilience. As many authors have acknowledged, the discourse on value creation for stakeholders requires further development, especially related to the qualitative evaluation of value creation from a variety of stakeholder perspectives [9,27,28,33]. This process becomes even more complex when referring to value co-creation [15,17]. As an activity that takes place between economic and social actors [14], value co-creation involves more complex mechanisms of cooperation and collaboration among stakeholders and an equitable spreading of responsibilities. Scholars have suggested that one powerful means of value co-creation is represented by joint cross-sector partnering [9,34], which could include various stakeholder groups, including suppliers, NGOs, business partners, allies, universities, and customers, working together to co-produce value [17,35,36]. Involving a plurality of stakeholder groups with different interests, responsibilities, and backgrounds and aligning them to the same goals to co-create value entails considering differences in power, vulnerability, capabilities, skills, and knowledge [2,6].

Under this logic, a direct link exists between stakeholder value co-creation and creating the conditions that will allow all groups to express their voices [7] and to contribute fairly to the value creation, especially when cross-sector partnerships include stakeholders who are in a position of limited power [7]. That is why empowerment—the process through which low-power stakeholders acquire resources, knowledge, and skills to gain influence over events and other important matters [24–26]—is crucial for such stakeholders to fully participate in the value co-creation process and to make a greater and more significant impact on the supply chain.

The next section explains the meaning of empowerment and the relevance of such a strategy for vulnerable, low-power stakeholders in taking part in value co-creation projects.

## 2.2. Empowerment of Low-Power, Vulnerable Stakeholders

Stakeholder empowerment entails the perception of self-efficacy and control and the acquisition of resources, knowledge, and skills to participate in collective actions to effect change [37]. Empowering stakeholders means to activate processes that will turn the stakeholders from a condition of limited influence over events happening in the supply chain and over relationships with the supply chain's actors to a higher capacity to exert changes and to contribute to the value creation through knowledge enhancement, direct participation, and full involvement and awareness [38,39]. Empowerment becomes crucial within supply chains that deal with and rely on stakeholder groups who are low powered and vulnerable while simultaneously being critical resource providers for the company and being key to supply chain survival and development [18]. In the context of this study, low-power and vulnerable stakeholders are conceptualized as those stakeholder groups typically placed at the upper end of the supply chain who live in low-income households among marginalized communities and whose voices are generally not considered legitimate [19,20]; this condition decreases their ability to make valuable decisions and to understand the key role they play.

The literature on empowerment reveals that the development, creation, and transfer of specific capabilities, skills, and knowledge can contribute to improving the condition of low-power, vulnerable stakeholders within the supply chain and create the basis for such stakeholders to actively take part in and benefit from value co-creation projects [7,8,38,39]. In particular, the main empowerment processes are related to (i) the strengthening of collaborative advocacy [40]; (ii) the creation of organizational structures and cooperatives to strengthen decision-making processes and favor collaborative governance [9,41,42]; (iii) the favoring of cooperation and dialogue both among low-power stakeholders and between low-power and more powerful stakeholders in order to increase awareness [23,43]; (iv) the intensification of training to increase competences [38]; (v) the improvement of adaptability practices [44–47]; and (vi) the favoring of new business creation and entrepreneurial solutions [48].

When considering certain supply chains that communities of low-power and vulnerable stakeholders typically base their livelihoods on, it is necessary to include the concept of community empowerment. Community empowerment is an action addressed to allow people who share neighborhoods, workplaces, experiences, and the same issues and concerns to obtain and increase their power and to exert influence over conditions relevant to their community by enhancing experiences, competences, and group structure to make the community more resilient as well [49,50].

This study will demonstrate that empowerment actions addressed to low-power, vulnerable stakeholders present many similarities with the typical strategies and actions put in place to overcome some of the supply chain's vulnerabilities. The next section illustrates the empowerment areas that can be strategized to overcome some of the vulnerability factors within supply chains.

## 2.3. Overcoming Vulnerability through Empowerment

Pettit et al. (2010) [2] proposed an exhaustive framework of vulnerability factors that can block supply chain resilience. Their framework includes seven factors with several sub-factors, including (i) turbulence—unexpected changes in the environment; (ii) deliberate threats—intentional threats caused by humans or other resources, such as finance-related resources; (iii) external pressures—i.e., competition, sustainability, social changes, and pressures from innovation; (iv) resource limits—shrinkages and constraints caused by resource availability; (v) sensitivity—related to the conditions of products and process integrity; (vi) connectivity—characteristics of the network and interdependencies; and (vii) supplier/customer disruptions—supplier reliability and customer disruption). In the same work, the authors suggest that in order to overcome those vulnerability factors, a set of fourteen specific capabilities need to be developed. Among these capability factors, the authors found that those concerned with efficiency, adaptability, anticipation, collaboration, organization, and financial strengths were strictly related to the empowerment processes as described in the previous section.

In particular, by merging capability-related factors to such processes, the authors summarized and grouped a set of capabilities, skills, and attitudes in their framework of empowerment dimensions. The framework describes four main dimensions of empowerment that can allow the participation of low-power stakeholders in value co-creation projects, improve their outcomes, and increase the overall resilience of the supply chain, including the ‘business mindset’ [37–39,48], ‘cooperation’ [40], ‘adaptability’ [44–47], and ‘interaction and awareness’ [23,31,51].

The ‘business mindset’ refers to the set of attitudes and behaviors in which stakeholders are enabled to reduce threats from the external environment, recognize potentialities, and then turn these factors into business opportunities by supporting low-power stakeholders with funds and organizational structures. ‘Cooperation’ occurs through a set of joint efforts to enhance the value created by the business and the relationships. Enabling low-power stakeholders to develop a cooperative strategic posture with other stakeholder groups [16] is a necessary step for value to spread inside and through the community. ‘Adaptability’ is the process through which stakeholders (i) are allowed to understand and face the changes within the external environment and the business; (ii) react promptly to any changes; and (iii) ideally, anticipate the changes. The ‘interaction and awareness’ dimension refers to the set of principles and tools that can lead stakeholders to a higher consciousness of their role within the business, the environment, and the community; interaction and awareness are primarily based on communication activities initiated by more powerful stakeholders.

Within each dimension, capabilities, skills, and attitudes can be more or less developed based on the effectiveness of the empowerment actions, as shown in Table 1. Based on the theoretical premises described above, the framework was employed and strengthened in the present study to respond to RQ1: “How can the effectiveness of empowerment actions to moderate the effects of vulnerability factors within the coffee supply chain be qualitatively evaluated?”

**Table 1.** Framework of empowerment dimensions.

Empowerment Dimensions (Capabilities, Skills, Knowledge)	Scale of Empowerment Dimensions Development		
	Low	Medium	High
Business Mindset [37–39,48] Cooperation [40] Adaptability [44–47] Interactions and Awareness [23,31,51]			

### 3. The Research Context: Coffee Supply Chain and Low-Power Stakeholders

The coffee industry presents several unique characterizations and complexity in the configuration of the relationships among stakeholders. The coffee business has a long and “specific” supply chain, which for many years has been exposed to criticisms about its sustainability and responsibility, especially regarding the coffee industry’s strong link to some of the poorest areas of the world in which coffee is extracted [23,52,53].

Four major actors are involved in the supply chain, from the upper end to the roaster. First, groups of local suppliers (usually not organized) provide coffee beans for small farmers. Second are the producers, who are often small local farmers and family business owners; they number an estimated 25 million people [54] and are primarily responsible for the extraction of 70% of coffee beans globally [55] and for the quality of the finished product. The third group of actors are first- and second-level traders, who bargain directly with the local farmers. The fourth group consists of coffee exporters, who collect and export products [56].

The literature suggests that smallholder farmers face numerous threats. These low-power stakeholders rely on large corporations within instable markets and are exposed to severe climate change issues within their cultivations, which can jeopardize their entire livelihoods [44,45,57], increase the supply chain’s vulnerability, and endanger supply chain resilience. Another reason

for greater complexity at the upper end of the supply chain (where low-power stakeholders operate) is the asymmetric and imperfect information available to low-power stakeholders when establishing relationships with the other actors in the supply chain [23,58,59]; this lack of information impedes their trading capabilities. One example is represented by the difficulties in trading with first-level traders, who tend to push the price down and to underestimate the quality of the coffee [56]. Imperfect information can often lead actors to make unsustainable decisions and consequently maintain or even augment the disparities in their market power [23]. Empowering smallholder farmers on the business and quality of their coffee and establishing the power conditions for farmers to understand their common interests in supply chain improvement (and to be able to express their voices in the community [7,8,39,50]) are key steps to overcoming supply chain vulnerability through the farmers' full participation in value co-creation projects.

In the coffee industry, projects of value co-creation are typically conducted through the cooperation of corporations (i.e., roasters), NGOs, and low-power stakeholders (farmers); such projects' primary goal is to improve the farmers' lives and work. Collaborations between NGOs and businesses are widely seen as being crucial to decrease vulnerability and to meet economic, social, and environmental objectives throughout the supply chain, thus increasing supply chain resilience [35,36]. This situation is particularly valid in the coffee context, where issues such as climate change and market instability caused by information asymmetries can only be faced through a common strategy [16]. Under this logic, the key role that empowerment plays is clear in improving the quality of relationships and in aligning the interests and knowledge of critical resource providers, since these factors influence the quality of the coffee, the ability for future generations to grow coffee, and the overall sustenance of the supply chain.

To summarize, the main vulnerability factors within the coffee supply chain that can be addressed through value co-creation projects are:

- poor education,
- complex and instable political and economic conditions within a given country,
- market and pricing instability,
- reduced trading capabilities and negotiation power,
- asymmetry of information,
- climate change, and
- lack of business continuation.

Based on the above theoretical premises, the second research question was formulated as follows:

RQ2: "Do current empowerment actions within specific value co-creation projects enable coffee farmers to turn from being vulnerable to becoming business partners? If yes, how?"

#### 4. Methods

This investigation employed a mixed qualitative approach based on semi-structured interviews, focus groups, and qualitative content analysis in order to provide an answer to the two research questions.

##### 4.1. Data Collection

The first set of data was collected among primary sources (semi-structured interviews), secondary sources (content analysis of value co-creation projects and institutional sources), and relevant literature. The aims of this data and information collection were to (i) test and refine the framework of empowerment dimensions; (ii) to analyze the value co-creation projects implemented in partnership with a leading Italian coffee roaster, some of its competitors, and NGOs related to low-power stakeholders as well as to enhance the resilience of the upper level of the supply chain; (iii) select the value co-creation projects that are more suitable for conducting focus groups with farmers in terms of

impacts and performances already achieved and therefore measurable; and (iv) test the keywords that emerged from the focus groups with the farmers.

The second set of data was gathered through focus groups conducted with smallholder farmers working on a specific value co-creation project in Brazil. The aim of the focus groups was to enrich the framework of empowerment dimensions developed in the literature with keywords that would qualitatively evaluate the contributions of empowerment actions addressed to farmers within value co-creation projects.

First, the cross-country study considered 20 value co-creation projects conducted in the following developing and emerging countries: Brazil, Colombia, the Dominican Republic, Ethiopia, Guatemala, Haiti, Honduras, India, Indonesia, Peru, Tanzania, Uganda, and Vietnam. Semi-structured interviews [60] were conducted with managers of the leading Italian roaster, and via Skype with NGO representatives during the early stage of the research. The aim was to gain support for drawing questions for the focus groups and to obtain key information on best practices of empowerment conducted in emerging and developing countries. The interviews also helped to identify the most relevant value co-creation projects for which the focus groups should be conducted with farmers. Specifically, the interviews were conducted with the corporate social responsibility manager, the chief sustainability officer, the press office manager, the field project officer of the leading Italian roaster, and five representatives of Save the Children, Oxfam, and the German charitable foundation Hanns R. Neumann Stiftung (HRNS); these groups were working in the field in the aforementioned developing and emerging countries. A total of nine people were interviewed on multiple occasions from July 2015 to March 2017 to obtain insights and evidence about the value co-creation projects and empowerment actions and to test the keywords that emerged from the focus groups. A total of 30 interviews were conducted, as some respondents were involved more than once in order to gather more in-depth information. Interviews were recorded, transcribed verbatim, and summarized. Furthermore, secondary data and information was collected from reports and documents of value co-creation projects from the year 2007 provided by the NGOs that were involved as well as from an investigation of project contents published on the International Coffee Organization (ICO) website. The data was gathered on multiple occasions spanning 18 months starting in July 2015.

Second, a focus group methodology was adopted in order to build the keywords for the framework and to qualitatively evaluate the contribution of empowerment actions addressed to farmers within value co-creation projects. The use of this methodology can produce more in-depth information through interactive discussions [61]. The focus group methodology was a good fit for the present research, because such groups involve people who have been previously selected by NGOs. The group members were then assembled to comment on the subject of the research from their personal experience and to discuss the subject in an organized way [62,63]. Focus groups are useful for the issue under investigation, as they pay attention to groups' attitudes, beliefs, and opinions on a given topic [63,64]. Five focus groups (15 people each) were conducted among farmers who work in Brazil's main coffee-extraction area. The area (Lambari, in the state of Minas Gerais) was chosen as a pilot project for this kind of analysis because the value co-creation project was concluding by the time the focus groups were held. The focus groups were conducted over a period of four months between 2016 and 2017 and were moderated by the authors via Skype conference calls and HRNS members in Brazil.

The group discussions were supported by the semi-structured questionnaire [65] shown in Table 2 (full questionnaire available in Appendix A), which was set up in accordance with managers and NGO members and was based on the theoretical framework of empowerment dimensions developed within the literature. Accordingly, the questions were phrased in such a way that would allow farmers to provide open responses that the authors could then identify and build keywords around. The questionnaire was conducive to testing the effectiveness of the value co-creation projects in relation to the capabilities, skills, and attitudes (named empowerment dimensions) required to overcome the various vulnerability factors. A ranking method with the questions was used, according to which the

farmers were asked to rank the capabilities, skills, and attitudes that they perceived they would need (or actually already possessed) within the value co-creation projects and to create value in the future.

Figure 1 illustrates the methodology flow considering the research steps, the employed procedure at each step and the set of information as outcomes of data collection.

Table 2. Questionnaire for the focus groups.

Question Number	Content	Keywords Identification
Q.1	Which kind of contact do you have with the roaster?	1. 2. 3.
Q.2	What do you want to achieve or to be in 5 years?	1. 2. 3.
Q.3	What do you need for achieving your goals?	1. 2. 3.
Q.4	Which resources you need for achieving your goals?	1. 2. 3.
Q.5	Where do you find the people needed?	1. 2. 3.
Q.6	Where do you find the resources needed?	1. 2. 3.
Q.7	Where do you mainly spend your money on?	1. 2. 3.
Q.8	Rank the relevance of these following topics for your business (from 1-poor to 5-very relevant)	Climate Change; Roasters' engagement to the project; NGO engagement to the project; training programs on quality and productivity; financial advisory; nature and fairness of payments; social inclusion; youth inclusion; women inclusion; human rights; access to education

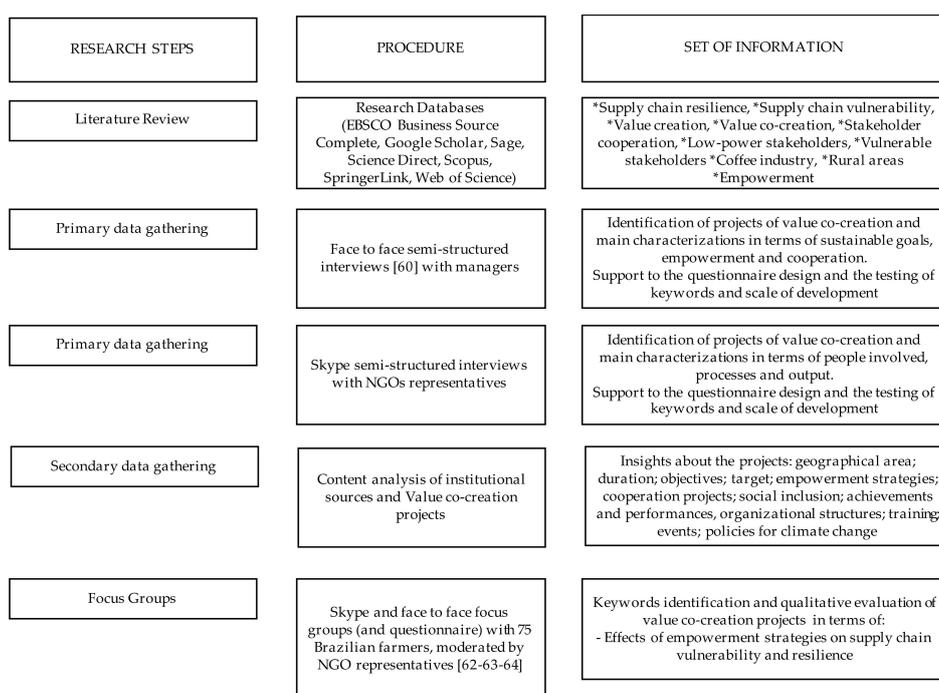


Figure 1. Methodology procedure.

#### 4.2. Data Analysis

The study employed data triangulation [66] among primary sources (interviews), secondary data and information (project reports and documents), and a systematic literature review (to build the framework of empowerment dimensions).

The framework of empowerment dimensions developed in the literature was utilized to qualitatively evaluate the contribution of empowerment actions within value co-creation projects. In order to do so, we needed to develop a qualitative scale to explain the degree of development of each empowerment dimension against value co-creation. Keywords could explain low, medium, or high levels of extent of development of the ‘business mindset’, ‘cooperation’, ‘adaptability’, and ‘interaction and awareness’ dimensions. To identify the most appropriate keywords and to cluster the keywords in low, medium, and high levels of development of empowerment dimensions, the results from the focus groups, where farmers were asked to discuss the specific questions reported in Table 2, were used. Those discussions were then turned into keywords to explain the extent of the development of skills, capabilities, and attitudes. The first seven questions were open-ended questions to allow discussion; Q8 included a set of given keywords (prepared by the authors) that the farmers ranked in terms of relevance, based on a five-point Likert scale, with 0 = no relevance and 5 = very relevant.

Afterward, the keywords that emerged (and their categorization) were further tested by making use of the following:

1. the literature on empowerment and the coffee industry;
2. the opinions of managers and NGO representatives;
3. qualitative content analysis of value co-creation projects, this technique is widely used to interpret and systematize a wide range of qualitative information within text data coming from print or electronic form, observations, interviews, open-ended survey questions and focus groups [67,68]; and
4. ATLAS.ti (scientific Software Development GmbH, Berlin, Germany)—a type of software employed for qualitative analysis, data management, and coding, which was used for further testing of the emergent keywords. We followed the principle of thematic analysis and found that ATLAS.ti supported the investigation in keeping track of emergent levels (low, medium, and high) and in identifying the frequency of keywords within each level and each dimension.

A frequency analysis of the keywords that had emerged from the farmers’ open-question responses was then conducted to qualitatively evaluate the extent of the development of skills, capabilities, and attitudes among farmers. The authors identified a maximum of three keywords per response. Table 2 reports the questionnaire employed for the focus groups; Table 3 illustrates the framework for the focus group analysis and points out the questions that supported the keywords’ identification.

**Table 3.** Framework for the focus group analysis.

Empowerment Dimensions (Capabilities, Skills, Knowledge)	Scale of Empowerment Dimensions Development			Questions
	Low	Medium	High	
Business Mindset [37–39,48]				Q.2; Q.3; Q.7
Cooperation [40]				Q.3; Q.6
Adaptability [44–47]				Q.4; Q.7; Q.8
Interactions and Awareness [23,31,51]				Q.1; Q.5

## 5. Results

### 5.1. Keywords that Identified the Empowerment Dimensions' Development

The first set of results produced within the focus groups referred to the identification of keywords that reflected different scales of empowerment dimensions' development levels (low /medium/high) against each empowerment dimension. The discussion within the focus groups allowed the extrapolation of a set of keywords for each question (as reported in Table 4) and to respond to RQ1: "How can the effectiveness of empowerment actions to moderate the effects of vulnerability factors within the coffee supply chain be qualitatively evaluated?". The scale of empowerment dimensions' development allowed for a qualitative evaluation; the scale illustrated that the "low" classification referred to a lower capacity to develop each empowerment dimension (business mindset, cooperation, adaptability, and interactions and awareness), while "medium" reflected an average development of empowerment dimensions, and "high" corresponded to higher farmer capacity to develop those dimensions.

**Table 4.** Keywords showing the empowerment dimensions' development.

Empowerment Dimensions (Capabilities, Skills, Knowledge)	Scale Of Empowerment Dimensions Development			Questions
	Low	Medium	High	
Business Mindset [37–39,48]	family; house; quantity; cash; entertainment	productivity; production; financing; better pricing; nature and fairness of payments; cash flow; expenses	quality; knowledge; competences; sustainable production; certification; financial advisory; investments; farm; youth inclusion	Q.2; Q.3; Q.7
Cooperation [40]	institutions; myself; family	banks; financial resources; NGOs support in suppliers identification	representatives; organizations; associations; cooperatives; shared technology; advisory	Q.3; Q.6
Adaptability [44–47]	supervision; family	free technical assistance	climate change; shared practices; training; understanding; experience	Q.4; Q.7; Q.8
Interactions and Awareness [23,31,51]	intermediaries; first level traders; absence of contact	second level traders; low contact; municipalities	direct bargaining; roaster; importers; transparency in cooperation; high contact; society; women inclusion	Q.1; Q.5

For the 'business mindset' dimension, more farmers' responses were oriented to their own interests and those of their families, which resulted in keywords such as 'family', 'house', 'quantity', 'cash', and 'entertainment'; the least vulnerable factors were overcome by a strong business mindset. Throughout the spectrum of development, however, the more the farmers' responses focused on the competitive advantages of their business and business continuation (which resulted in keywords such as 'quality', 'knowledge', 'sustainable production', 'investments in the business', 'financial advisory', and 'youth inclusion'), the higher the extent of development of the empowerment dimensions.

For the 'cooperation' dimension, the scale went from lower development to higher development, depending on the stakeholder groups whom farmers recognized and relied on to achieve their goals as well as on the typology of institutions and stakeholder groups they had built partnerships with. Low development of cooperation resulted in farmers relying on family or institutions, while higher development was achieved when farmers had their own representatives, advisors, and formal organizational structures that they could make use of for external relationships. This dimension resulted in keywords such as 'associations, cooperatives, shared technology, and advisory'.

In the 'adaptability' dimension, the lower extent of development was reflected by farmers who concentrated on their own families and were guided by supervisors in each choice they made. In contrast, higher development was achieved when farmers showed a higher capacity to recognize external changes and challenges, and they knew which means were the most suitable to be

adapted. This dimension resulted in keywords such as ‘climate change’, ‘share practices’, ‘training’, ‘understanding’, and ‘experience’.

The ‘interactions and awareness’ dimension was relevant to the relationships found throughout the coffee supply chain. This dimension showed that the more farmers stated their direct relationships with roasters, importers, and members who operated at the lower end of the supply chain, the higher the development of their interactions and awareness.

## 5.2. Qualitative Evaluation of Empowerment Development

The second set of results produced within the focus groups referred to the frequency of keywords identified after analyzing farmers’ responses. These results allowed for the qualitative evaluation of empowerment dimensions’ development, which helped to respond to the first part of RQ2: “Do current empowerment actions within specific value co-creation projects enable coffee farmers to turn from being vulnerable to becoming business partners?”. Table 5 reports the frequency of the answers expressed in percentages for each keyword. (Given that three responses for each farmer were considered, the overall percentage sum for each dimension may not add up to 100).

The table illustrates that, overall, empowerment actions for value co-creation projects had positively contributed to increasing the business mentality of farmers at a high level. For instance, for the ‘business mindset’ dimension, out of all three responses the farmers provided that the keyword quality was built from, they referred to ‘quality’ in 85% of cases. This means that the analysis of keywords utilized for the responses and discussions within the focus groups underlined a general understanding of the relevance of more evolved forms of their approach to the market. As for the two dimensions of ‘cooperation’ and ‘adaptability’, a balanced percentage of responses between medium and high development of the empowerment dimensions was found. A low and medium extent of development was found for the ‘interactions and awareness’ dimension. In this case, keywords such as ‘first-level traders’ and ‘low contact’ were highly referred to (in 67% of cases each). To confirm such lower development, in only five percent of cases did farmers use the keyword ‘direct bargaining’, seven percent of cases highlighted ‘transparency in cooperation’, and four percent mentioned ‘high contact’.

**Table 5.** Qualitative evaluation of empowerment development.

Dimensions	Keywords	Frequency of Answers (%)—Extent of Development		
		Low	Medium	High
Business Mindset	Better pricing		95	
	Farm			92
	Financing		92	
	Productivity		90	
	Financial advisory			88
	Quality			85
	Production		82	
	Nature and fairness of payments		77	
	Investments			70
	Knowledge			70
	Sustainable production			64
	Cash flow		45	
	Competences			44
	House	42		
	Family	35		
Expenses		35		
Certification			35	
Youth inclusion			27	
Cash	22			
Entertainment	22			
Quantity	10			

Table 5. Cont.

Dimensions	Keywords	Frequency of Answers (%)—Extent of Development		
		Low	Medium	High
Cooperation	Financial resources		90	
	NGOs support in suppliers' identification		92	
	Banks		85	
	Organizations			77
	Cooperatives			77
	Associations			65
	Advisory			45
	Representative			43
	Family	42		
	Shared technology			32
	Institution	32		
	Myself	20		
Adaptability	Free technical assistance		85	
	Training			85
	Climate change			75
	Shared practices			60
	Experience			56
	Understanding			45
	Supervision	45		
	Family	32		
Interactions and Awareness	Municipalities		72	
	Low contact		67	
	First level traders	67		
	Second level traders		56	
	Intermediaries	35		
	Society			30
	Roaster			22
	Women inclusion			12
	Importers			10
	Absence of contact	10		
Transparency in cooperation			7	
Direct bargaining			5	
High contact			4	

## 6. Discussion

In keeping with the methodology and data analysis, two findings related to the study will be now discussed, the first of which is the usefulness of the framework of empowerment dimensions for qualitatively measuring the effectiveness of empowerment actions related to the vulnerability factors within the supply chain (RQ1). In particular, it will be discussed how, by developing the dimensions of business mindset, cooperation, adaptability, and interaction and awareness, the vulnerability factors the study considered within the coffee supply chain can be moderated. For the second factor, the results demonstrated that, in Brazil, coffee farmers are in the process of turning from low-power stakeholders to business partners of the value creation projects (RQ2 part one). Furthermore, by referring to specific empowerment actions conducted within the project in Brazil and, more broadly, in all the countries that have been considered, the researchers will qualitatively point out a set of empowerment initiatives common to all projects that were addressed to increase business mindset, cooperation, adaptability, and interaction and awareness and to turn farmers into partners of the coffee supply chain (RQ2, second part).

For the first factor noted above, by testing the framework of empowerment dimensions, an acknowledged scale for qualitatively evaluating the extent of development of each dimension was provided. The identified keywords reflected the extent to which empowerment acted as a means to moderate the effects of vulnerabilities specific to the coffee supply chain.

For the “business mindset” dimension [37–39,48], for instance, respondents who stated that they would spend their money on “drinking at the bar” or “having fun with friends” (which was classified under the keyword “entertainment”) showed a low business mindset and a weak capacity for moderating the threats related to business continuation and poor education. In particular, the focus on short-term objectives to spend their money underlined the fact that the farmers had a low capacity to recognize the challenges to their business continuation or to invest in education for their children, thus augmenting their future chances of participating in business development or of contributing to economic value creation within the coffee community. In contrast, the respondents who stated that they were more focused on cash flow, production, better pricing, and capabilities transfer to their successors (i.e., youth inclusion) highlighted a more enhanced attitude toward facing factors such as market and pricing instability, reduced trading capability, and business continuation, confirming what supported by the literature on empowerment [1–3,7,8]. Such vulnerability factors could be minimized in the future, since such farmers responded that in five years they hoped to be better trained, more able to gain quality certification, and in a better position to invest in their own businesses.

For the “cooperation” dimension [40], the focus groups revealed that the weakest community was the one in which people did not know how to identify and interact with the organizations that were able to empower them, as underlined by Ählström and Sjöström [36]; they were more likely to think that their only source of a livelihood could be found among their own family members or within local institutions. This situation was a clear output of asymmetry of information [7,23]. In contrast, the support that banks, NGOs, and cooperatives can provide was evident in the creation of organizational structures and cooperatives that (for instance) facilitated farmers in facing market and pricing instability, augmenting trading capabilities and advocacy power, and increasing their chances of better understanding local political and economic conditions. This finding confirms what scholarship supports relating to the key role played by sustainable collaborative governance for enhancing stakeholders’ power and supply chain resilience [40–42].

Within the “adaptability” dimension [44–47], the keywords showed a higher or lower capacity to moderate factors such as climate change (i.e., “climate change” and “training”) and poor education (“training” and “understanding”). Focus group participants saw adaptability as a dimension primarily connected to the climate change issue; when they declared that they would invest their money in developing shared practices to conjointly face such issues, they showed a higher extent of adaptability development and a cooperative strategic posture allowing higher adaptability [16]. Similarly, when respondents stated that training and experience were the key resources necessary to enhance the protection of coffee plants (for instance), they proved that training both empowers them and makes them highly adaptable [38]. This situation could lead them to avoid all the vulnerability factors mentioned above and to improve the resilience of the supply chain.

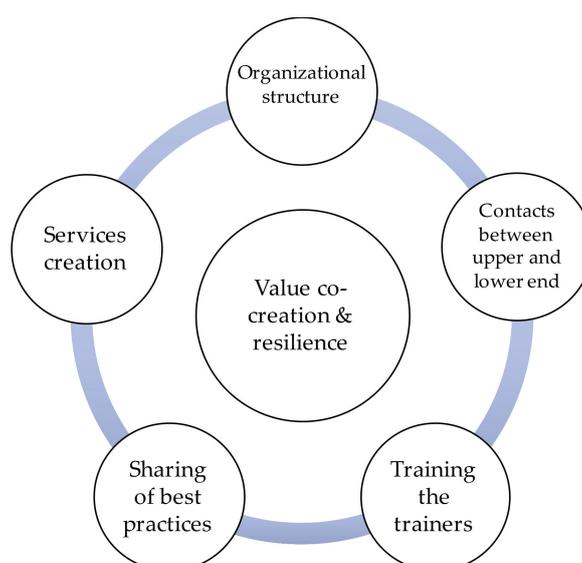
Finally, the “interactions and awareness” dimension [23,31,32,51] showed keywords such as “intermediaries” and “first-level traders” to underline low power in trading capabilities and negotiation power, while “second-level traders”, “direct bargaining”, “transparency in cooperation”, and “inclusion of women” highlighted a growing development of interactions and awareness. Participants who stated that they had frequent and direct contact with roasters and NGO members showed higher empowerment development, since they were aware that they represented critical actors along the supply chain and they could augment their negotiation power with first-level traders. Furthermore, the inclusion of women in business indicated a growing social and cultural community development that positioned the family business toward the future, confirming that empowerment is a multi-faceted concept entailing social and cultural change of mindset at first [7,10,38].

For the second factor noted above, in light of the results shown in Table 5, the value co-creation projects had apparently turned the focus group participants from vulnerable coffee farmers to business partners within the coffee supply chain. The evidence supports the idea that empowerment actions are effective ways to moderate the effects of vulnerability factors within the coffee supply chain [2,3,7,8]; the evidence showed that the majority of participants were developing a medium-high

business mindset, cooperation, and adaptability. These results confirm that empowerment may be achieved by first allowing the strengthening of each family business and the capacity of the business actors to identify key people to cooperate with and to develop adaptation to the environment [37–40,44,45,48,57]. Afterward, once farmers gain awareness of their own businesses, they will start to realize that they are part of a wider network of relationships, interests, and opportunities for value co-creation [14,18,23,58,59]. Farmers confirmed that empowerment actions are necessary to increase the benefits of participating to value co-creation projects [7,8,38,39]. They also underlined that value co-creation projects are crucial to moderate vulnerabilities within the supply chain and in their everyday life, because taking part to such projects favor the sharing of interests [16], their involvement in business decisions [30], and their awareness through effective dialogue [31,32].

In this regard, the results stress that the Brazilian farmers examined in this study had not yet achieved high development of the interactions and awareness dimension, since the first- and second-level traders still had much stronger negotiation powers than the farmers did [56]. This situation was because of the farmers' small size and the nature of coffee, which is considered a commodity and therefore has the peculiarities of a future. It is also worth noting that, in general, value co-creation projects have a long gestation period, and it takes a longer time than with any other empowerment project that is addressed to different categories of stakeholders to see the tangible results of the empowerment of vulnerable stakeholders, as these actions entail a complete shift of mindset within the people and community [14,17]. Value co-creation projects started in Brazil in 2010 and are expected to provide evidence of high levels of development of empowerment dimensions within the next few years, ideally with the inclusion of the younger generations. Brazil is an emerging country, and some observers have criticized the government's policies for facilitating farmer participation throughout the whole supply chain. This study demonstrated that empowerment dimensions are overall highly developed and are in the process of turning farmers into business partners of the value co-creation project underway in Brazil.

The discussion will be now turned to how this process happens by also considering projects that have been undertaken in other countries as well as the insights gathered from the interviews conducted there. Data triangulation allowed the identification of an empowerment model (Figure 2) to illustrate the initiatives of empowerment that were common to most of the 20 analyzed value co-creation projects in various countries. The model outlines five main activities that are intended to strengthen the four dimensions of empowerment (see Table 1) and ultimately the resilience of the supply chain [2,3,45,49].



**Figure 2.** Empowerment model.

Overall, this study has confirmed that the cooperative strategic posture [16] represents a pillar for empowerment initiatives to be undertaken among farmers, and that climate change is the main challenge to coffee production in most of the countries that have been examined [23,52,53]. Many project reports have stated that the resilience index (developed on a variety of vulnerabilities, including environmental and agronomic factors) shows that production systems in various project areas are vulnerable to the effects of climate change. The cross-country investigation showed that, no matter the geographical area, value co-creation projects have been tailored to the specificities and needs of the low-power stakeholder group, primarily in terms of empowerment. Five main empowerment initiatives appeared to be implemented most often, with the aim of increasing the development of farmers' capabilities, skills, and knowledge: (i) organizational structure and cooperatives; (ii) contacts between the upper and lower ends of the supply chain; (iii) "training the trainers" programs; (iv) the sharing of best practices; and (v) service creation. These initiatives are discussed below.

**Organizational structure and cooperatives.** This set of initiatives aims to facilitate farmers in creating cooperatives and strengthening their organizational structures; the objective is to improve their capability to advocate, their negotiation skills, and their bargaining power. In Tanzania, for instance, the HRNS Foundation has begun a cooperation with the Moshi University of Business and Cooperative Studies (MUC) to offer training courses to introduce cooperatives, different cooperative laws, and cooperative accounting, all of which aim to strengthen the skills of farmers' agriculture and marketing cooperative societies.

Similarly, in Brazil, the HRNS Foundation designs training programs for leaders of project organizations to improve both management and entrepreneurial skills in existing farmers' cooperatives; the programs also favor the creation of new cooperatives. In Ethiopia, the foundation has supported eight primary cooperatives through leadership capacity building by forming the Amhara Coffee Farmers' Cooperative Union (ACFCU). The HRNS Foundation in India has been involved in helping to create MAS, a farmers' company that became financially independent of other institutions in 2013; MAS includes 400 producers, all of whom have shares in the organization. MAS is improving its organizational structure through a series of training programs delivered by the foundation. At the same time, MAS is also involved in the design and delivery of training programs for its members to improve the nature of relationships with traders and seed suppliers (who have become more oriented toward organic and bio-input in recent years).

In Haiti and the Dominican Republic, Oxfam set up the Whole Farm Plan Methodology—a project that aims to spread technological innovations in small-scale farming areas where coffee extractors often struggle with bargaining-power issues and with maintaining efficiency. The methodology allows for the growth of economic opportunities and contributes to the protection of the environment with small-scale production in both countries. The program was designed to strengthen the formation of cooperatives and their organizational structures at all levels of the value chain—from production, to marketing and promotion, to design production, to promotional and marketing strategies—using a participatory approach. The stronger organizational structure moderates the vulnerabilities of the coffee supply chain through the quality coffee obtained by (i) applying appropriate technology packages to diversify production; (ii) developing advocacy skills; and (iii) strengthening technical and marketing capabilities. All of these strategies make farmers a more powerful stakeholder group.

**Contacts between the upper and lower ends of the supply chain.** This set of actions favors dialogue and direct contacts among farmers, importers, and roasters. The creation and strengthening of a functional union of cooperatives in Ethiopia is an example of how a more powerful organization can market coffee on behalf of its members directly with the importers, thus avoiding any kind of intermediaries. The MAS organization in India arranges director and staff participation in local and international fairs and exhibitions to obtain insights about new trends in the coffee market and to spread information about their activities in the field.

**Training the trainers.** These actions are designed to favor the farmer-to-farmer approach for improving interactions and awareness capabilities; they are also strongly linked to the sharing of best

practices, which are explained in more detail in the next paragraph. Through “training the trainers” programs, NGOs aim to make farmers become trainers themselves who will then develop a deep consciousness of (i) what they do for a living; (ii) the key role they play within the coffee supply chain; and (iii) their contributions to business continuation by increasing the farmers’ responsibilities and by creating new potential jobs that can be done at the upper end of the supply chain. In this regard, the HRNS Foundation in Tanzania has continued to promote and strengthen the farmer-to-farmer approach by training farmers in how to become trainers for technical aspects and best agricultural practices related to coffee growing.

**Sharing of best practices.** This set of empowerment initiatives is related to the capacity to develop useful interactions among stakeholder groups on a variety of topics relevant to the coffee industry; the aim is for trained farmers to share best practices with smaller, lower-power groups. The activation of Farmer Fields Schools in most of the countries examined in this study is one example of such empowerment action. These schools include periodic meetings among farmers, NGOs, roaster management, and technical experts as well as exchange visits at different farmers’ growing lands to spread knowledge and evidence about good agricultural practices, sustainable solutions, climate-smart agricultural processes, and innovative cultivation methods. In India, thanks to this approach, several trials of new fertilizers and seeds (such as the “Coffee Booster”) have been conducted in selected coffee-growing lands and have caught the attention of various groups of farmers, who have begun to appreciate the strategic implications of sharing seeds and knowledge in order to increase their productivity. In Ethiopia, several training programs and public events have been designed to spread the approach of involving women among farms and cooperatives.

**Services creation.** These actions entail NGOs supporting the creation of service organizations (which may or may not include farmers) in order to provide advisory and consulting for technical aspects of coffee growing (such as land, soil, and fertilizer analysis) as well as various marketing, governance, and financial and commercial issues. The creation of service organizations can also favor youth participation, in the sense that the upcoming generations (who might otherwise refuse to take part in the process of coffee extraction) can become coffee experts, thus guaranteeing business survival in terms of services provision; the youth can also contribute to increased farmer specialization and technical knowledge. The MAS organization in India, for example, has a specialized unit that has been appointed to deliver services to members and to strengthen relationships with local federations that are lobbying various governments to obtain grants and other benefits to coffee farmers. Doing so contributes to increasing the power of the service organization, making it more appealing both for future service providers and for farmers. In Brazil, the HRNS Foundation has supported the creation of a cooperative that specializes in marketing the specialty coffee produced in the region; in this cooperative, farmers can be trained and, afterward, become trainers themselves.

The set of empowerment initiatives described above that emerged from the content analysis of the value co-creation projects, as well as the evidence from the interviews, both support the idea that, especially in complex supply chains, the way in which value co-creation projects are designed and conducted responds to the need of diminishing power imbalances [7,8,14,38]. Doing so allows those involved to switch to a network logic in which all stakeholders can bring value to the relationships they establish and the activities they conduct, either conjointly or individually [1,16,40]. This situation benefits not only farmers’ own livelihoods but also increases the resilience of the whole coffee supply chain by moderating some of the most concerning vulnerability factors [2,3].

## **7. Conclusions, Theoretical Contributions, and Managerial Implications**

This research has focused on low-power, vulnerable stakeholders in the coffee supply chain. It has demonstrated that empowerment that is addressed to such a stakeholder group can be a means to develop specific skills, capabilities, and knowledge that favor stakeholder participation in value co-creation projects and can therefore serve to moderate some of the vulnerability factors typical of the coffee supply chain.

Two main theoretical contributions have been provided through this work. First, a theoretical framework of empowerment dimensions was designed based on relevant general studies from the literature on empowerment. The framework synthesizes literature on empowerment drawn from various disciplines and identifies four dimensions of empowerment that can be utilized for a qualitative evaluation of value co-creation projects. The framework was strengthened through (i) content analysis of 20 value co-creation projects in various coffee-producing countries; (ii) interviews with stakeholders at different levels; and (iii) focus groups conducted with 75 coffee extractors (farmers) in Brazil. In this way, it was possible to confirm the framework's theoretical validity and to identify a scale of dimensional development that could allow a qualitative evaluation of the effectiveness of empowerment in moderating the vulnerabilities of the coffee supply chain. By developing the framework, the authors seek to advance the academic debate on value co-creation involving low-power stakeholders, which seems to be in need of further development of qualitative evaluation methods for value co-creation [9,15,17,19,27,28,33]. Second, the author conceptualized a direct link between empowerment, value co-creation and supply chain resilience [1,3,7,8,10,14]. It has been demonstrated that empowerment actions are key enablers for increasing the partnership creation within value co-creation projects, enhancing their outcomes and augmenting the resilience of the supply chain. Turning vulnerable stakeholders into resilient business partners can benefit the whole supply chain and this can happen only if the process is undertaken in an inclusive, participatory, and collaborative way [4,6,9,14–17,49]. Empowerment is one effective means for allowing such a system in a long and complex supply chain involving low-power, vulnerable stakeholders [7,8].

This research has also provided two outcomes for practitioners. First, the theoretical framework of empowerment dimensions was employed to empirically test the effectiveness of empowerment actions in enabling coffee farmers to become business partners of a specific value co-creation project in Brazil. The framework proved to be a useful tool for early qualitative evaluation; through group discussion based on the dimensions that were identified, the framework allowed for the identification of best practices of empowerment within value co-creation projects as well as areas for future improvement. In this regard, the framework, as well as the methodology that was employed to test the framework's validity, can be adopted and adapted by the management of firms and NGOs that interact with vulnerable stakeholders in similarly global and complex agri-food supply chains characterized by power uncertainties and relational complexities [29], such as the cocoa or tea supply chains.

Secondly, the cross-country investigation on 20 value co-creation projects permitted the development of a managerial empowerment model that can be utilized by practitioners to more effectively design empowerment initiatives addressed to increase the outcomes of value co-creation projects and supply chain resilience.

The research has certain limitations related to the single area of Brazil in which the focus groups were conducted. Brazil is generally considered an emerging country, and therefore it has already overcome some of the threats typical of developing countries, at least in terms of institutions. In this regard, institutions can play a crucial role in supporting empowerment and smallholder farmers' social inclusion by working closely with NGOs and roasters in the field. To overcome this limitation, the authors plan to extend the use of focus groups to developing countries such as India and Ethiopia, where, through content analysis, several empowerment initiatives underway in those countries that were also underway in Brazil have already been detected within the present stage of the research. This study was also a first attempt at developing and using a framework to qualitatively evaluate empowerment dimensions linked to value co-creation; it is thus planned to further test the framework with various farmers in different countries.

**Author Contributions:** E.C., C.C. and C.C. conceived the study, designed the focus groups, and analyzed the results. F.M. contributed to the discussion of the results. All authors co-wrote the literature background and conclusions.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix

Appendix A  
Questionnaire for Focus Groups

Name:.....  
.....  
Area:.....  
.....  
Project:.....  
.....

How long have you been working as coffee farmer?  
.....  
.....  
.....  
.....

How big is the land you own?  
.....  
.....  
.....  
.....

How many people - including yourself - are there in your household?  
.....  
.....  
.....  
.....

Are there some heirs for your land? How many?  
.....  
.....  
.....  
.....

Has any roaster or NGO member ever tested your perception of cooperation projects?  
.....  
.....  
.....  
.....

Q.1 Which kind of contact do you have with the roaster? List 3 things or situations  
1.  
2.  
3.

Q.2 What do you want to achieve or to be in 5 years? List 3 things or situations  
1.  
2.  
3.

Q.3 What do you need for achieving your goals? List 3 things or situations  
1.  
2.  
3.

Q.4 Which resources you need for achieving your goals? List 3 things or situations  
1.  
2.  
3.

Q.5 Where do you find the people needed? List 3 things or situations  
1.  
2.  
3.

Q.7 Where do you find the resources needed? List 3 things or situations  
1.  
2.  
3.

Q.7 Where do you mainly spend you money on? List 3 things or situations  
1.  
2.  
3.

Q.8 Rank the relevance of these following topics for your business (from 1 –poor to 5 –very relevant)  
Climate change.....  
Roasters' engagement to the project .....  
NGOs engagement to the project .....  
Training programs on quality and productivity.....  
Financial advisory.....  
Nature and fairness of payments.....  
Social inclusion.....  
Youth inclusion.....  
Women inclusion.....  
Human rights.....  
Access to education.....

Q.9 Do you feel responsible for the quality of the coffee? .....

Q.10 Do you feel responsible for the income increase? .....

Q.11 Do you feel responsible for the quality and future achievements of your life? .....

**Figure A1.** Full questionnaire employed for focus groups

## References

1. Li, R.; Dong, Q.; Jin, C.; Kang, R. A New Resilience Measure for Supply Chain Networks. *Sustainability* **2017**, *9*, 144. [[CrossRef](#)]
2. Pettit, T.J.; Fiksel, J.; Croxton, K.L. Ensuring supply chain resilience: Development of a conceptual framework. *J. Bus. Logist.* **2010**, *31*, 1–21. [[CrossRef](#)]
3. Pettit, T.J.; Croxton, K.L.; Fiksel, J. Ensuring supply chain resilience: Development and implementation of an assessment tool. *J. Bus. Logist.* **2013**, *34*, 46–76. [[CrossRef](#)]
4. Christopher, M.; Peck, H. Building the resilient supply chain. *Int. J. Logist. Manag.* **2004**, *15*, 1–14. [[CrossRef](#)]

5. Cranfield University. *Supply Chain Vulnerability: Executive Report*, School of Business, Cranfield, UK; Cranfield University: Bedford, UK, 2002.
6. Li, Z.; Xu, Y.; Deng, F.; Liang, X. Impacts of Power Structure on Sustainable Supply Chain Management. *Sustainability* **2017**, *10*, 55. [CrossRef]
7. Dawkins, C.E. The principle of good faith: Toward substantive stakeholder engagement. *J. Bus. Ethics* **2014**, *121*, 283–295. [CrossRef]
8. Dawkins, C. Agonistic pluralism and stakeholder engagement. *Bus. Ethics Q.* **2015**, *25*, 1–28. [CrossRef]
9. Freeman, R.E.; Wicks, A.; Harrison, J.; Parmar, B.; de Colle, S. *Stakeholder Theory: The State of the Art*; Cambridge University Press: Cambridge, UK, 2010.
10. Greenwood, M.; Van Buren, H.J., III. Trust and stakeholder theory: Trustworthiness in the organisation–stakeholder relationship. *J. Bus. Ethics* **2010**, *95*, 425–438. [CrossRef]
11. Pickett, C. Prepare for supply chain disruptions before they hit. *Logist. Today* **2006**, *47*, 22–25.
12. Folke, C. Resilience: The emergence of a perspective for social–ecological systems analyses. *Glob. Environ. Chang.* **2006**, *16*, 253–267. [CrossRef]
13. Svensson, G. Dyadic vulnerability in companies’ inbound and outbound logistics flows. *Int. J. Logist.* **2002**, *5*, 13–43. [CrossRef]
14. Casali, G.L.; Perano, M.; Moretta Tartaglione, A.; Zolin, R. How Business Idea Fit Affects Sustainability and Creates Opportunities for Value Co-Creation in Nascent Firms. *Sustainability* **2018**, *10*, 189. [CrossRef]
15. Alves, F.S.; Segatto, A.P.; De-Carli, E. Theoretical framework about relational capability on inter-organizational cooperation. *J. Ind. Integr. Manag.* 2016. [CrossRef]
16. Strand, R.; Freeman, R.E. Scandinavian cooperative advantage: The theory and practice of stakeholder engagement in Scandinavia. *J. Bus. Ethics* **2015**, *127*, 65–85. [CrossRef]
17. Saarijärvi, H.; Kannan, P.K.; Kuusela, H. Value co-creation: Theoretical approaches and practical implications. *Eur. Bus. Rev.* **2013**, *25*, 6–19. [CrossRef]
18. Pfeffer, J.; Salancik, G.R. *The External Control of Organizations: A Resource Dependence Perspective*; Stanford University Press: Palo Alto, CA, USA, 2003.
19. Ahen, F. Responsibilization and MNC–Stakeholder Engagement: Who Engages Whom in the Pharmaceutical Industry? In *Stakeholder Engagement: Clinical Research Cases*; Springer: Cham, Switzerland, 2017; pp. 87–112.
20. Derry, R. Reclaiming marginalized stakeholders. *J. Bus. Ethics* **2012**, *111*, 253–264. [CrossRef]
21. Loconto, A.; Simbua, E. Making Roofs for Small Holders Cooperatives in Tanzanian Tea Production: Can Fair Trade Do that? *J. Bus. Ethics* **2012**, *108*, 451–465. [CrossRef]
22. Hwang, H.B.; Chong, C.S.P.; Xie, N.; Burgess, T.F. Modelling a complex supply chain: Understanding the effect of simplified assumptions. *Int. J. Prod. Res.* **2005**, *43*, 2829–2872. [CrossRef]
23. Potts, J. Building a Sustainable Coffee Sector Using Market Based Approaches: The Role of Multi Stakeholder Cooperation, 2003. United Nations Conference on Trade and Development, iisd. Available online: <http://www.ico.org/documents/sustain1.pdf> (accessed on 28 March 2018).
24. Rappaport, J. Studies in empowerment: Introduction to the issue. In *Studies in Empowerment: Steps toward Understanding and Action*; Routledge: London, UK, 1984; pp. 1–7.
25. Zimmerman, M.A. Taking aim on empowerment research: On the distinction between individual and psychological conceptions. *Am. J. Community Psychol.* **1990**, *18*, 169–177. [CrossRef]
26. Perkins, D.D.; Zimmerman, M.A. Empowerment theory, research, and application. *Am. J. Community Psychol.* **1995**, *23*, 569–579. [CrossRef] [PubMed]
27. Jones, T.M.; Felps, W. Stakeholder happiness enhancement: A neo-utilitarian objective for the modern corporation. *Bus. Ethics Q.* **2013**, *23*, 349–379. [CrossRef]
28. Lankoski, L.; Smith, N.C.; Van Wassenhove, L. Stakeholder judgments of value. *Bus. Ethics Q.* **2016**, *26*, 227–256. [CrossRef]
29. Liu, S.Y.; Yen, C.Y.; Tsai, K.N.; Lo, W.S. A Conceptual Framework for Agri-Food Tourism as an Eco-Innovation Strategy in Small Farms. *Sustainability* **2017**, *9*, 1683. [CrossRef]
30. Devin, B.L.; Lane, A.B. Communicating engagement in corporate social responsibility: A meta-level construal of engagement. *J. Public Relat. Res.* **2014**, *26*, 436–454. [CrossRef]
31. Burchell, J.; Cook, J. It’s good to talk? Examining attitudes towards corporate social responsibility dialogue and engagement processes. *Bus. Ethics Eur. Rev.* **2006**, *15*, 154–170. [CrossRef]

32. Burchell, J.; Cook, J. Stakeholder dialogue and organizational learning: Changing relationships between companies and NGOs. *Bus. Ethics Eur. Rev.* **2008**, *17*, 35–46. [[CrossRef](#)]
33. Harrison, J.S.; Wicks, A.C. Stakeholder theory, value, and firm performance. *Bus. Ethics Q.* **2013**, *23*, 97–124. [[CrossRef](#)]
34. Austin, J.E.; Seitanidi, M.M. Collaborative value creation: A review of partnering between nonprofits and businesses: Part I. Value creation spectrum and collaboration stages. *Nonprofit Volunt. Sect. Q.* **2012**, *41*, 726–758. [[CrossRef](#)]
35. London, T.; Hart, S.L. Creating a Fortune with the Base of the Pyramid. In *Next Generation Business Strategies for the Base of the Pyramid*; FT Press: Upper Saddle River, NJ, USA, 2011; pp. 1–18.
36. Åhlström, J.; Sjöström, E. CSOs and business partnerships: Strategies for interaction. *Bus. Strategy Environ.* **2005**, *14*, 230–240. [[CrossRef](#)]
37. Papineau, D.; Kiely, M.C. Participatory evaluation in a community organization: Fostering stakeholder empowerment and utilization. *Eval. Program Plan.* **1996**, *19*, 79–93. [[CrossRef](#)]
38. Mena, S.; de Leede, M.; Baumann, D.; Black, N.; Lindeman, S.; McShane, L. Advancing the business and human rights agenda: Dialogue, empowerment, and constructive engagement. *J. Bus. Ethics* **2010**, *93*, 161–188. [[CrossRef](#)]
39. Rowe, W.E.; Jacobs, N.F.; Heath, G. Facilitating development of organizational productive capacity: A role for empowerment evaluation. *Can. J. Program Eval.* **1999**, *14*, 69–92.
40. Bartunek, J.M.; Foster-Fishman, P.G.; Keys, C.B. Using collaborative advocacy to foster intergroup cooperation: A joint insider-outsider investigation. *Hum. Relat.* **1996**, *49*, 701–733. [[CrossRef](#)]
41. Wang, J.; Ran, B. Sustainable Collaborative Governance in Supply Chain. *Sustainability* **2018**, *10*, 171. [[CrossRef](#)]
42. Ansell, C.; Gash, A. Collaborative governance in theory and practice. *J. Public Adm. Res. Theory* **2008**, *18*, 543–571.
43. Prato, B.; Longo, R. *Empowerment of Poor Rural People through Initiatives in Agriculture and Natural Resource Management*; OECD: Paris, France, 2012.
44. Peck, H. Drivers of supply chain vulnerability: An integrated framework. *Int. J. Phys. Distrib. Logist. Manag.* **2005**, *35*, 210–232. [[CrossRef](#)]
45. Fiksel, J. Sustainability and resilience: Toward a systems approach. *Sustain. Sci. Pract. Policy* 2006. [[CrossRef](#)]
46. Capra, F. *The Web of Life: A New Scientific Understanding of Living Systems*; Anchor: Buffalo, NY, USA, 1996.
47. Wheatley, M.J. *Leadership and the New Science*; Barrett-Koefler: Oakland, CA, USA, 1994.
48. Prahalad, C.K. Bottom of the Pyramid as a Source of Breakthrough Innovations. *J. Prod. Innov. Manag.* **2012**, *29*, 6–12. [[CrossRef](#)]
49. Salvia, R.; Quaranta, G. Place-Based Rural Development and Resilience: A Lesson from a Small Community. *Sustainability* **2017**, *9*, 889. [[CrossRef](#)]
50. Fawcett, S.B.; Paine-Andrews, A.; Francisco, V.T.; Schultz, J.A.; Richter, K.P.; Lewis, R.K.; Lopez, C.M. Using empowerment theory in collaborative partnerships for community health and development. *Am. J. Community Psychol.* **1995**, *23*, 677–697. [[CrossRef](#)] [[PubMed](#)]
51. Kumar, V.; Pansari, A. Competitive advantage through engagement. *J. Mark. Res.* **2016**, *53*, 497–514. [[CrossRef](#)]
52. Blowfield, M.; Dolan, C. Fairtrade Facts and Fancies; What Kenyan Fairtrade tea tell us about Business Role as development agent. *J. Bus. Ethics* **2010**, *93*, 143–162. [[CrossRef](#)]
53. Valkila, J.; Haaparane, P.; Niemi, N. Empowering Coffee traders? The coffee value chain from Nicaragua Fair Trade Farmers to Finnish Consumers. *J. Bus. Ethics* **2010**, *97*, 257–270. [[CrossRef](#)]
54. Watson, K.; Achinelli, M.L. Context and contingency: The coffee crisis for conventional small-scale coffee farmers in Brazil. *Geogr. J.* **2008**, *174*, 223–234. [[CrossRef](#)]
55. Graeub, B.E.; Chappell, M.J.; Wittman, H.; Ledermann, S.; Kerr, R.B.; Gemmill-Herren, B. The state of family farms in the world. *World Dev.* **2015**, *87*, 1–15. [[CrossRef](#)]
56. Upendranadh, C.; Subbaiah, C.A. *Small Growers and Coffee Marketing-Issues and Perspective from the Field*; Centre for Development Studies: Kerala, India, 2012.
57. Bjorvatn, K.; Milford, A.B.; Sjørgard, L. Farmers, Middlemen and Exporters: A Model of Market Power, Pricing and Welfare in a Vertical Supply Chain. *Rev. Dev. Econ.* **2015**, *19*, 31–44. [[CrossRef](#)]

58. Bush, S.B. *Derivatives and Development: A Political Economy of Global Finance, Farming, and Poverty*; Springer: Cham, Switzerland, 2012.
59. Guasch, J.L.; Polastri, R. Trade and Competitiveness in Peru. In *An Opportunity for a Different*; Giugale, M., Fretes-Cibil, V., Newman, J., Eds.; The World Bank: Washington, DC, USA, 2007.
60. Bernard, H.R. *Research Methods in Cultural Anthropology*; Sage: Newbury Park, CA, USA, 1988.
61. Goldman, A.E. The Group Depth Interview. *J. Mark.* **1962**, *26*, 61–68. [[CrossRef](#)]
62. Gibbs, A. *Focus Groups*; Social Research Update: Guildford, UK, 1997; p. 19.
63. Carey, M. The Group Effect in Focus Group: Planning, Implementing, and Interpreting Focus Group Research. In *Critical Issues in Qualitative Research Methods*; Morse, J., Ed.; SAGE Publications: London, UK, 1994; pp. 225–241.
64. Morgan, D.L.; Kreuger, R.A. When to use focus groups and why. In *Successful Focus Groups*; Morgan, D.L., Ed.; SAGE: London, UK, 1993.
65. Reed, M.S.; Graves, A.; Dandy, N.; Posthumus, H.; Hubacek, K.; Morris, J.; Prell, C.; Quinn, C.H.; Stringer, L.C. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *J. Environ. Manag.* **2009**, *90*, 1933–1949. [[CrossRef](#)] [[PubMed](#)]
66. Yin, R.K. *Applications of Case Study Research. Applied Social Research Methods Series*; SAGE Publications: Thousand Oaks, CA, USA, 2003.
67. Hsieh, H.F.; Shannon, S.E. Three approaches to qualitative content analysis. *Qual. Health Res.* **2005**, *15*, 1277–1288. [[CrossRef](#)] [[PubMed](#)]
68. Rosengren, K.E. *Advances in Content Analysis*; SAGE Publications Incorporated: London, UK, 1981; Volume 9.



© 2018 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).