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Editorial overview: Towards an inclusive food systems approach for sustainable food and nutrition security

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Current Opinion in Environmental Sustainability 2019, 41:93–96

This review comes from a themed issue on **Sustainability** science: inclusive business: a multi-stakeholder issue

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For a complete overview see the Issue

https://doi.org/10.1016/j.cosust.2019.07.002

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Introduction

Inclusive business has emerged as an instrumental approach to economic, social and environmental business goals [1]. As the concept continues to develop, it moves beyond the relatively narrow economic focus of value chain interventions [2–4]. Instead, inclusive business problematizes inclusiveness as a dynamic process of innovation and partnerships that challenge established inequalities and power imbalances [1,5]. By focusing on these innovations and partnerships inclusive business enables new ways of thinking about and redefining the terms of incorporating wider societal goals like social justice and environmental sustainability into economic practice [6].

In this paper we reflect on the findings of a special issue on inclusive business. Based on the collective findings of 13 papers we argue for a new conceptualization of inclusive business beyond value chains that focuses attention on a dynamic set of innovations and partnerships set within the context of sustainable food systems [7]. A food systems perspective can enable a more precise understanding of the interlinkages between the practices of actors involved in production, trade and consumption, as well as a broader set of conditioning social and socio-environmental relations [8]. By making these practices and relations explicit, a food systems approach to inclusive business can also identify how the business and policy actors can foster affordable, applicable and accessible (termed here as 'triple-A') innovations for supporting Bottom of the Pyramid (BoP) consumers, producers and entrepreneurs to build towards inclusive and sustainable outcomes.

The papers in the special issue were broadly organized into four themes questioning the viability of inclusive business by and for the BoP. These were (1) access to finance, (2) enabling (digital) technologies, (3) new partnership and processes of learning, and (4) linking economic goals to social and environmental sustainability [9]. In this concluding paper we first synthesize the key lessons from these papers and themes before outlining we see as a new framework for understanding 'inclusive food system'.

Key lessons

We identify eleven key lessons from the special issue that demonstrate the need for a systems approach that incorporates governance, innovation for BoP inclusive and sustainable food systems.

First, BoP consumers, producers, workers and entrepreneurs operate at the interface between the informal and formal economy. BoP producers, consumers and entrepreneurs face many 'hidden costs' that limit their income earning opportunities and render their 'businesses' unprofitable. These include economic, social and political 'costs', leading to capacity and resource constraints and thresholds to inclusion [1,9–13]. Understanding what practices and relational constraints make up the formal/informal interface is a starting point for overcoming the limitations of inclusive business.

Second, formal business and policy actors and institutions tend to overlook the contributions of BoP's to local food systems, as well as their priorities and needs. The results of this oversight is that food quantities, qualities and flows produced and marketed by and sold to the BoP go largely unrecorded in official statistics [14–17]. To better understand processes of inclusion and exclusion, even within the context of local food systems, new forms and modes of information collection targeted at the BoP are needed.

Third, gender and other social categorizations based on ethnicity and age, influence BoP participation and outcomes in the food value chain. Capacity building fosters empowerment, but social upgrading is a societal broader process that requires involvement and commitment by multiple actors and institutions. The latter requires a gender-aware business and governance framework [1,17]. Incorporating gender awareness as a central pillar of business and governance is therefore key to the promotion of inclusive business.

Fourth, bottom-up innovations are highly effective in responding to day-to-day agri-business challenges. Such innovations are often times invented by the BoP themselves, but are neither shared with nor valued by other stakeholders. Simply put, innovative technologies can be professionalized and upscaled when validated by broader groups of stakeholders [1,18]. Greater attention in both research, policy and practice therefore needs to be given to fostering *in situ* 'bottom up' innovation processes.

Fifth, the BoP lack critical connections to businesses and government actors and institutions. This limits their potential interaction with other food value chain actors and institutions, and limits their access and use of supportive services (e.g. finance, ICT, capacity building, extension services) [16,19]. New approaches by donors, business and NGOs alike therefore need to be developed that can overcome structural barriers to making such connections.

Sixth, social learning between the BoP, business and government stakeholders can identify feasible strategies for mitigating economic, social and environmental tradeoffs in business processes. Sharing group-based risks and organizing through cooperatives can foster sustainable social learning processes and help to mitigate or disconnect trade-offs between viable business interests and attaining social and environmental values [10,20–23]. New methodologies that support social learning in a way that overcomes power relations therefore need to be developed and employed.

Seventh, scientific innovations benefit the BoP when these are affordable, accessible and adaptive (triple-A). Their added value within a resource constrained context requires the validation by BoP users. Mutual validation — by both scientific research and the lived realities of the BoP — is thus important for any type of innovation to pay off [11,14, 18]. Achieving triple-A outcomes therefore needs to be incorporated into BoP innovation.

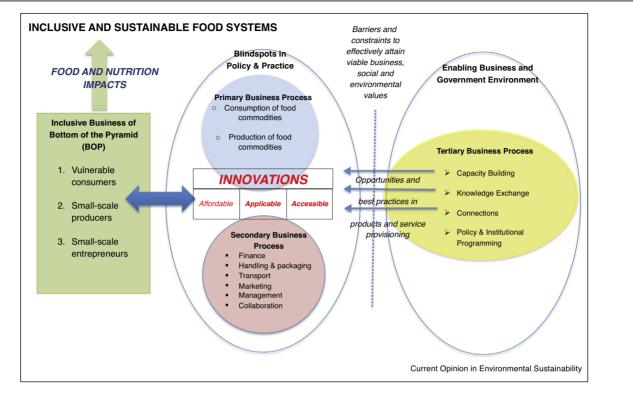
Eighth, financial and business products and services need to be attuned to the capabilities and needs of the BoP to effectively reduce vulnerability and risk. These products and services can achieve this goal by improving consumption smoothing, savings and the agri-business planning cycle, as well as linking to win-win goals like climate smart agriculture [11,23]. Such interventions can enable BoP's to become more reliable supply and demand partners in both the local and global food system.

Ninth, *ICT's that are used to create 'hyper-transparency' in local food systems, are both an opportunity and a threat to the BoP.* Digitization can enhance inclusive agri-business by creating better access to farm-level information, markets, financial services (e.g. mobile money, mobile financial services) and assurance models. However, it can also create new inequalities due to lack of ICT literacy, access to digital networks and platforms, and ethical infringement [12,16]. Inclusive business approaches therefore need to be attuned to the role and social outcomes of ICTs.

Tenth, circular economy strategies (e.g. waste reduction cycles, closing animal nutrient loops) provide a viable business opportunity to the BoP. However, these business opportunities are largely dependent on the reduction of agri-business input costs and/or the enlargement of input–output ratios [14,17]. While early indications that circular economy strategies can support BoPs, further research is needed to understanding how these strategies can support inclusiveness.

Finally, durable horizontal and vertical linkages are key to reducing social, economic and environmental harm on the BoP. Such harm can relate to the influence and interests of large(r) companies, and focus on avoiding small producers being crowded out from new business sectors, innovations and value chain linkages [10,18,22]. To achieve these vertical and horizonal linkages both clear public (state) and private (NGO and corporate CSR-based) governance arrangements will play a key role.





Analytical framework for assessing food and nutrition impacts of inclusive business from a BoP perspective.

A food systems approach to inclusive business

We argue that these key lessons point to the need for a new analytical framework for understanding inclusive business as inclusive food systems. Building on the above insights we identify process of governance and innovation of central importance to realization of BoP inclusive sustainable food systems. The conceptual and theoretical building blocks of this framework are presented in Figure 1.

Processes of innovation are a central focal point understanding how business processes can be positively transformed to impact on food security — in terms of food access, availability, nutrition, and sustainability. From the perspective of the BoP, we argue that innovation need to be seen as both top down and bottom up developing and disseminating new ideas, technologies and ways of doing. In any case, a clear focus is needed on ensuring that these innovations are 'triple-A' — that is affordable, applicable and accessible for the BoP.

We also argue that innovation for inclusive food systems should be understood as taking place within three distinct stages of the business process. First, primary business processes, which include production and consumption. Second, secondary business processes that include finance, packaging and handling and packaging, transport, marketing, management, collaboration. Third, tertiary business processes, including capacity building, knowledge exchange, policy and institutional programming, and through connections. It is especially the these tertiary processes that require greater attention, in terms of how they shape the enabling business and governance environment in a way that prioritizes the needs of the BoP, facilitates mutual validation of knowledge between the BoP and other stakeholders in the food value chain, and fosters connections and supportive legal, financial and capacity building connections and collaborations.

Both primary and secondary business processes of the BoP, and innovations therein, are currently blind spots in policymaking and rarely acted upon. Moreover, these blind spots limit the vision and scope to identify new opportunities and best practices in service provisioning amidst prevailing barriers and constraints. Yet, linking-up the primary and secondary business processes of the BoP to tertiary business processes is key to professionalizing and upscaling their food production, consumption and marketing sustainably and grounded in more inclusive conditions.

Conclusion

Business and policy actors play a key role in redefining the terms through which BoP producers can be favorably incorporated into the business of sustainable food systems. The key lessons and inclusive sustainable food systems framework introduced in this paper can be distilled into five key conclusions that can provide guidance for researchers, policy makers and practitioners moving forward:

- When studying the role of inclusive business by and for the BoP, it is important to distinguish between BoP as consumers, producers and entrepreneurs. The realized food and nutrition impacts may be different for each.
- 2) The business processes of the BoP, as well as their respective barriers and constraints, practical knowledge and innovations, are typically a blind spot for policymakers and business sector actors. As a result, food quantities, qualities and flows and who gets what, how, when and why, go unrecorded.
- 3) The breakdown of inclusive business processes into primary, secondary and tertiary business processes is helpful to reveal the principal BoP barriers and constraints to innovation, and identify possible entry points for effective engagement with local food security system actors and organizations
- 4) Innovation for the benefit of the BoP requires triple-A approach — that is affordable, applicable and accessible. Top-down scientific innovations need to meet the BoP test of AAA, which can be different for different BoP user groups.
- 5) Inclusive business moves in steps, and is by no means a linear process. Sometimes, constraints need to be resolved in one domain, before progress can be made in another domain (two steps back, one step ahead). Inclusive business should instead be seen as a dynamic, interactive process that takes into consideration the practices and relations within the wider food system.

Together these insights constitute the core ideas behind the proposed inclusive food systems framework we have introduced. They demonstrate the need for a food systems approach that considers the complex interplay between BoP actors and the broader business and governance environment, from which innovation for BoP should emerge, and synergetic connections and collaborations could build-up towards more inclusive and sustainable food systems.

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