Supporting Social Ventures in Institutional Voids: The Emergence of a Transnational Entrepreneurial Ecosystem for East Africa

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Abstract

This study examines how social ventures mobilize institutional support in regions characterized by resource constraints and institutional voids. Based on field studies in East Africa, we find that social ventures increasingly benefit from a transnational entrepreneurial ecosystem—networks of organizations operating across geographic levels in support of new ventures. We find that intermediaries, such as social incubators, are critical in transnational ecosystem building by forming global-local alliances, running entrepreneurship events across levels, and linking local business and social opportunities to global development agendas. Findings inform research on social entrepreneurship and ecosystem formation in emerging economies.
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ABSTRACT

This study examines how social ventures mobilize institutional support in regions characterized by resource constraints and institutional voids. Based on field studies in East Africa, we find that social ventures increasingly benefit from a transnational entrepreneurial ecosystem – networks of organizations operating across geographic levels in support of new ventures. We find that intermediaries, such as social incubators, are critical in transnational ecosystem building by forming global-local alliances, running entrepreneurship events across levels, and linking local business and social opportunities to global development agendas. Findings inform research on social entrepreneurship and ecosystem formation in emerging economies.

Key words: transnational entrepreneurial ecosystem; social entrepreneurship; institutional voids; sub-Saharan Africa; intermediary organizations

INTRODUCTION.

Entrepreneurial ventures that combine social and commercial goals – so-called social or hybrid enterprises – have gained significant scholarly attention (Battilana and Lee, 2014; Haigh and Hoffman, 2012; Pache and Santos, 2013). One key driver of the formation of social enterprises is the pressing need for private actors to help address social and environmental issues when regular business, state, and philanthropic approaches are limited in their ability to do so (Boddewyn and Doh, 2011; Kickul and Lyons, 2012; Short et al., 2009). Social enterprises have become particularly important in emerging economies such as sub-Saharan Africa that combine limited or uneven economic prosperity, and continuous social and environmental problems (Harris et al., 2013; Kistruck and Beamish, 2010; Rivera-Santos et al., 2015).

The need for social enterprises is particularly high in regions that are characterized by resource constraints and so-called ‘institutional voids’, i.e., missing or ambiguous institutional support systems constraining business formation, economic exchanges and income generation (Khanna and Palepu, 1997). Sub-Saharan Africa is often mentioned as an example of a region challenged by this situation (George et al., 2016). Paradoxically, institutional voids, on the one hand, present an opportunity for social entrepreneurship since they typically coincide with limited or uneven economic growth and pressing social and environmental challenges (e.g. Mair et al., 2012; Zahra et al., 2008). On the other hand, such voids present a constraint for
social entrepreneurship since the infrastructure needed to support such enterprises is typically missing (Rodrick, 1996; Seelos and Mair, 2007). A good example are impact sourcing service providers (ISSPs), such as Craft Silicon, that originate in Kenya and are very effective in promoting inclusive workforce training and employment, but receive little support from local institutions (Manning et al., 2017). Aside from resource constraints, corruption and ineffective business promotion have created substantial hurdles for such enterprises. The social enterprise literature has not sufficiently addressed this paradox. While prior research has focused on drivers, tensions, and outcomes of social enterprises (e.g., Battilana and Lee, 2014), much less attention has been paid to enabling and constraining institutional conditions.

This study, thus, examines the following question: How do social ventures get institutional support in the presence of institutional voids? We argue and show empirically, based on rich data in East Africa, that social ventures operating under institutional constraints increasingly tap into globally dispersed resource pools that interconnect through what we call transnational entrepreneurial ecosystems (TEEs). We define these as sets of actors, functions and institutions (e.g. universities, incubators, accelerators) interacting across local and regional boundaries supporting the creation and growth of entrepreneurial ventures. The idea of entrepreneurial ecosystems (EEs) is not new. Scholars have identified EEs as critical institutional infrastructures supporting new ventures in accessing capital, talent, knowledge, technology, and markets, no matter whether ventures are primarily commercial (Motoyama and Knowlton, 2017; Spigel, 2017; Spigel and Harrison, 2018) or social mission driven (McMullen, 2018; Roundy, 2017; Thompson et al., 2018). However, prior research has conceived of EEs as primarily co-located sets of actors and services – so-called local EEs (LEE). We show that under conditions of local institutional and resource constraints, LEEs are insufficient or ineffective, and that TEEs are likely to become more important.

Based on our data and taking a field perspective on ecosystem formation (Thompson et al., 2018), we identify key properties of TEEs and drivers of TEE formation. We find that the TEE supporting social ventures in East Africa is a multi-layered infrastructure connecting local ecosystems, e.g., in Nairobi, Kigali and Kampala, with regional ecosystems, e.g., East Africa, and a global support network, including U.S. and European locations. We illustrate how the TEE has supported both consumer and businesses-oriented social
ventures. We further show that intermediaries, including social incubators and university centers, have played a central role in shaping the TEE by linking local business and social opportunities to global development agendas, by building alliances across globally dispersed resource environments, and by running events connecting actors across geographies. We also find that several ecosystem service providers, e.g. social incubators and accelerators, take on multiple roles in TEEs – as providers of ecosystem services, as ecosystem builders, and as ecosystem users in support of their own social mission.

This study has substantial implications for future research on social ventures and entrepreneurial ecosystems, especially in the context of emerging economies. First, it helps address the paradox of how social enterprises can mobilize institutional support in the context of institutional voids (Desa and Basu, 2013; Mair and Marti, 2009; Zahra et al., 2008). We specify and redefine the role of entrepreneurial ecosystems in this context (Spigel and Harisson, 2018; Webb et al., 2010), and shift attention from local to transnational EEs. Second, we elaborate on the various roles of intermediary organizations (see also Goswami et al., 2018) in providing and shaping ecosystem services, but also in using ecosystem resources to enhance their own service capacity. Third, we advance the utility of a field perspective in studying ecosystems (Zietsma et al., 2017; Thompson et al., 2018) by elaborating on how field dynamics contribute to the constitution but also fluidity of entrepreneurial ecosystems across geographic boundaries.

INSTITUTIONAL VOIDS AS SOCIAL BUSINESS OPPORTUNITY AND CONSTRAINT.

In the face of pressing social and environmental issues worldwide, and the limited resource and coordination capacity of governments, scholars and practitioners alike have shown increasing interest in the potential of social entrepreneurship to tackle some of these challenges (Hart and Christensen, 2002; Zahra et al., 2008; Dacin, et al., 2011; Short et al., 2009). We define social entrepreneurship in terms of activities “creating social value by providing solutions to social problems” (Dacin et al. 2011, p. 1204). We focus here on ‘hybrid enterprises’ or ‘social ventures’ that combine the pursuit of a social mission with a more commercially oriented revenue stream (Battilana and Lee, 2014; Smith et al., 2013; Jay, 2013; Haigh and Hoffman, 2014; Porter and Kramer, 2011).
Many social ventures, especially in emerging economies, are confronted with a dilemma. Social business opportunities often arise in situations where neither the state nor the market have the capacity to provide basic services, such as food supply, shelter, education, training, healthcare, and employment, to large parts of the population (Doh et al., 2017; Zahra et al., 2008). This is the case in many emerging economies, such as sub-Saharan Africa. However, the inability of state and market to provide basic services often goes hand in hand with institutional deficiencies, which not only constrain regular commercial businesses, but also hamper the financing and operation of social ventures (Bruton et al., 2013). Such deficiencies are often conceptualized as “institutional voids”, which include various “institutional conditions that hamper the ease by which buyers and sellers can interact” (Doh et al., 2017: 293), including corruption, excessive rents to a few actors or exclusion of entire segments of the population from market participation (Mair et al., 2012). Institutional voids are often listed as reasons why certain regions, such as sub-Saharan Africa, continue to struggle to develop globally competitive industries, generate lasting and secure income opportunities, and attract foreign direct investment (George et al., 2016).

Institutional voids provide numerous opportunities for social entrepreneurship and innovation (Mair and Marti, 2009). For example, the systematic exclusion of youth in slums and rural areas from formal employment in sub-Saharan Africa has motivated several entrepreneurs to engage in “impact sourcing” by recruiting and training disadvantaged youth for business service jobs (Manning et al., 2017). Similarly, Mair and Marti (2009) and Mair et al. (2012) describe how the exclusion of women from formal (and informal) labor markets in Bangladesh has motivated social intermediaries, such as BRAC, to engage in market development and inclusion activities supporting women. However, the very condition that seems to support social entrepreneurship – the presence of institutional voids – can turn into a significant constraint. Any commercial or social new venture typically relies on a range of external resources—from capital to talent, knowledge, technology, market access, and legitimacy—to get started (Lichtenstein and Brush, 2001; Sullivan and Marvel, 2011). To access those resources, entrepreneurs rely on various institutions from banks, to universities, incubators and business promotion agencies (Wright et al., 2016). However, economies that are characterized by institutional voids often lack formal and informal infrastructure needed to support new
businesses in general and social enterprises in particular (Seelos and Mair, 2007). Even if support institutions exist, they typically focus on commercial rather than social businesses. The study by Manning et al. (2017) illustrates this paradox. The authors describe how the social-business model of “impact sourcing” originated in South Africa, facilitated by underutilized community resources. However, due to a narrow government focus on supporting commercial enterprises, such social-business models—despite their fit with local economic conditions—never received institutional support.

This apparent paradox requires a fresh look into the institutional infrastructures supporting social enterprises in the presence of institutional voids. For this purpose, we next discuss the role of entrepreneurial ecosystems and intermediary organizations in supporting such enterprises and ecosystems.

RETHINKING THE SUPPORTING ROLE OF ECOSYSTEMS AND INTERMEDIARIES.

Entrepreneurial processes, including social entrepreneurship, happen in complex economic and institutional environments (Aldrich and Fiol, 1994; Thornton, 1999; Welter, 2011). To support new ventures as potential drivers of employment, innovation and wealth creation (Shane, 2000), policy-makers have been making significant efforts to develop local institutional environments that are supportive of new ventures, including social ventures (Audretsch et al., 2012; Autio et al., 2014; Isenberg, 2010). These environments are often called local entrepreneurial ecosystems (LEEs). They can be described as localized unions of institutions, policies, and communities of firms and professionals that jointly create and reproduce support infrastructures for entrepreneurial ventures (Spigel, 2017; Spigel and Harrison, 2018).

Within LEE, so-called ‘ecosystem service providers’ (ESPs) are particularly important. ESPs include incubators, co-working spaces, accelerators, and various funding institutions (Clayton et al., 2018). They provide critical resources and services, such as financial capital, talent, technology, legal support and social networks, that are tailored to the entrepreneurship process (Feldman and Zoller, 2012; Maskell, 2001; Spigel and Harrison, 2018). They help entrepreneurs become alert, recognize and exploit opportunities, and accumulate resources for growth (Ardichvili et al., 2003; Bygrave and Hofer, 1992). ESPs often focus on supporting commercial innovation-based and high growth potential enterprises (Spigel, 2017), thereby
following a ‘profit’ logic in assessing and promoting business ideas (McMullen, 2018; Roundy, 2017). However, as the range of business models has increased in recent years, from purely commercial to socially focused and somewhere in-between (Austin et al., 2006), several LEEs and ESPs have adapted to this, providing services supporting not only commercial but also social enterprises (McMullen, 2018; Roundy, 2017). One example is a LEE supporting social impact initiatives in Seattle (Thompson et al., 2018); another one is the LEE of Greater Boston that supports not only commercial high-tech ventures but also international social ventures targeting various markets (Vavilov and Manning, 2018).

Yet, most prior research suggests that most LEEs are located in advanced economies, such as the U.S. and Western Europe (Spigel, 2017). This is contrasting an empirical reality where entrepreneurial opportunities increasingly shift towards emerging economies (Bruton et al., 2013). The geographic disconnect between entrepreneurial support and entrepreneurial opportunity becomes even more apparent in the context of social entrepreneurship (Zahra et al., 2008, 2014). As argued above, the demand for social enterprise solutions is particularly high in regions characterized by resource constraints and institutional voids, whereas most LEEs happen to be located in resource-rich and institutionally highly developed environments, such as Silicon Valley or Boston (Spigel, 2017; Saxenian, 1994). Facing this situation, social entrepreneurs who focus on markets in least developed regions increasingly seek access to funding and other resources that are distributed across the globe (Desa and Basu, 2013). In turn, ESPs, such as social incubators, are adapting to this situation by setting up international operations and alliances with partners around the world (Casasnovas and Bruno, 2013; Lall et al., 2013).

As we analyze in detail below this has promoted the emergence of what we call transnational entrepreneurial ecosystems (TEEs). Extending the generic definition by Thompson et al. (2018), we define TEEs as sets of actors, functions and institutions interacting across local and regional boundaries supporting the creation and growth of new ventures in particular territories. We focus in particular on TEEs supporting social ventures, based on the case of East Africa. As we explain below, while TEEs may become more important for entrepreneurship in more general, these infrastructures seem particularly relevant in supporting social ventures operating in the contexts characterized by institutional voids.
To analyze TEE formation, we take a field perspective (see also Thompson et al., 2018). In general, DiMaggio and Powell (1983: 148) define organizational fields as “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products.” The field concept captures the “totality of relevant actors […] involved in a common enterprise” (p. 148) including firms and supporting institutions. Zietsma et al. (2017) further distinguish two types of fields — exchange fields, i.e., fields that “contain a focal population of actors and their interaction or exchange partners” (p. 396), and issue fields, i.e., fields that “form around a central issue” (Hoffman, 1999: 351). From this perspective, “supporting the creation and growth of new ventures” can be thought of as “a common enterprise” shared by ecosystem service providers, and addressing social and environmental challenges in developing and least developed countries through entrepreneurship can be seen as “a central issue” connecting field participants. Phillips and Tracey (2009) further argue that fields can emerge simultaneously at multiple geographic scales — from local, to regional, national and transnational. In a similar fashion, we seek to understand to what extent entrepreneurial ecosystems and ESPs operating in them have developed relationships, along with shared norms and principles of resource allocation, that span across geographic boundaries.

In the context of TEE emergence we are specifically interested in the role of “intermediaries”. In general, intermediaries can be perceived as "agents that link two or more parties to bring about specific activities" (Dutt et al., 2016: 818; Obstfeld, 2005). In the context of entrepreneurial ecosystems, intermediary roles are often taken by incubators, accelerators, and other ESPs. For example, Goswami et al. (2018) describe how accelerators in Bangalore provide entrepreneurs with knowledge and contacts, and in doing so, add to the overall capacity of the ecosystem to stimulate learning and quick feedback on business ideas. However, like other scholars, Goswami et al. (2018) primarily focus on LEEs and co-located intermediaries. Taking a dynamic field perspective, we broaden this view by looking at how intermediaries may share norms and develop ecosystem relationships across geographic boundaries. In this respect, we take an ‘activity-based’ rather than ‘institutional’ view on intermediaries (see also Long Lingo and O’Mahony, 2010;
Manning, 2010). From this perspective, various individuals and organizations, including entrepreneurs, firms and ESPs, can take on intermediary roles, by establishing connections between ecosystem players and by contributing to the “structuration” of ecosystems within and across geographic boundaries.

**DATA AND METHODS**

We adopt a qualitative case study approach to examine how a TEE can emerge to support social ventures in the presence of resource constraints and institutional voids. Qualitative methods in general, and case studies in particular, can be used to explore complex phenomena about which little is known or about which a novel understanding is needed (Strauss and Corbin, 1998; Yin, 2003; Eisenhardt, 1989). We thereby use the institutional field perspective (Zietsma et al., 2017) as a sensitizing device. In particular, it sensitizes for processes of field structuration, the importance of common agendas, mutual recognition and interaction between participants. However, the field concept does not “provide prescriptions of what to see” but only “suggests directions along which to look” (Blumer, 1954: 7).

Selecting an appropriate case to theorize about new phenomena, such as the emergence of TEEs, is critical. The challenge is to select a ‘special case’ (Siggelkow, 2007) whose understanding will help theorize about a larger phenomenon. We selected the case of East Africa, as well as the ‘embedded cases’ of Kigali (Rwanda), Kampala (Uganda), and Nairobi (Kenya) as specific locations within that region. Sub-Saharan Africa has been identified as fertile ground for social entrepreneurship (Harris et al., 2013; Kistruck and Beamish, 2010; Manning et al., 2017), but also as a region that continues to be challenged by resource constraints and institutional voids (Barnard et al., 2017; George et al., 2016). It is therefore an excellent case to study TEE formation. In addition, the three countries – Kenya, Rwanda, and Uganda – are among the most entrepreneurial in the world (GEM, 2015), making them very suitable for inclusion in this study.

We collected data from multiple sources, including interviews (n=68), archival data, participation observation in events and program development, which allowed for a very robust analysis of high validity (Yin, 2003). Data collection happened at multiple stages. The first round took place in 2012 on a field trip to Nairobi, Kenya. At that time, one co-author conducted a field study on the global outsourcing industry in
Nairobi. In that process, he discovered the emerging practice of “impact sourcing” – hiring and training of disadvantaged youth for outsourcing job, an example of social entrepreneurship. Following that discovery, the author collected more data on other forms of social and commercial entrepreneurship in Nairobi, as well as on local institutions supporting entrepreneurship, including co-working spaces, incubators, university centers. Overall, 14 semi-structured interviews were conducted at that time. This round revealed the importance of international funding for social entrepreneurship, such as Rockefeller Foundation’s Global Impact Sourcing Coalition, as well as the role of foreign ownership of local ecosystem players. Findings suggested that the local ecosystem was embedded in a global institutional network.

In 2016, both co-authors started examining the role of the Boston ecosystem in supporting international social ventures, in particular, those targeting markets in sub-Saharan Africa. Overall 35 interviews have been conducted – with university centers (e.g. MIT D-Lab), international social ventures (e.g. Sensen, DotLearn, OffGridBox), accelerators (e.g. VentureWell), venture capital funds (e.g. Blue Haven Capital), and international development agencies (e.g. USAID Global Development Lab). In addition, one author was able to participate in several events, including regional meetings conducted by the Aspen Network for Development Entrepreneurship (ANDE). Also, he became a participant observer in the development of several support programs by MIT D-Lab.

This experience, combined with the prior field trip to Kenya, inspired two field trips in 2018, focusing on how social and commercial entrepreneurship is supported in Kigali (Rwanda) and Kampala (Uganda). These trips were designed to examine how the Kigali and Kampala ecosystems (1) compare to Nairobi, and (2) connect with global hubs such as Boston in supporting both international and local entrepreneurs. Both field trips included series of interviews with social entrepreneurs, incubators, accelerators, co-working spaces, and university representatives. Overall, 10 interviews were conducted in Kigali, and 9 interviews in Kampala. In addition, one author was able to attend several events, including three pitching events (at a university in Kigali and at a social incubator near Kampala). Data collection was also complemented by an archival analysis of various reports on entrepreneurial ecosystems in sub-Saharan Africa, including reports released by ANDE, VC4A, World Bank, and Intellecap.
Data analysis was done in three major steps. First, data from all locations — Nairobi, Kigali, Kampala, Boston — was aggregated and cross-tabulated in an effort to ‘map’ the ecosystem supporting social entrepreneurship in Kenya, Rwanda, and Uganda. Data analysis revealed that ecosystem players operate and support entrepreneurship at multiple levels – local, regional and global. Based on that, key players and their relationships both within and across these levels were identified. Second, the ecosystem resource-seeking strategies of different social enterprises were analyzed and compared. Third, key mechanisms of ecosystem formation and the role of intermediaries were analyzed. Based on rich interview and participant observation data, the ecosystem-building activities of several ecosystem service providers, including MIT D-Lab, Hult Prize and Impact Hub, were examined in more detail.

**MAPPING THE TEE: LOCAL, REGIONAL AND GLOBAL LEVEL**

We find that the TEE supporting social ventures in East Africa operates on multiple scales simultaneously, whereby the ‘systemic quality’ of the TEE varies at different levels. The level of interaction, shared norms and mutual recognition between ecosystem actors is highest at the local level, stimulated by co-location effects. At the regional and global level, interactions are more temporary and dominated by specific ecosystem players. Finally, there are important feedback effects across levels. Next, we introduce important ecosystem players and their relationships across the three ecosystem levels. Figure 1 integrates all levels of analysis and illustrates relationships within and across these levels.

>>>>> INSERT FIGURE 1 <<<<<<

**Local Level**

TEE players at the local level operate in a particular local context. In this study we focus on the local contexts of Nairobi (Kenya), Kigali (Rwanda) and Kampala (Uganda). Each location has their own local entrepreneurial ecosystem (LEE), yet those ecosystems are increasingly interconnected through an emerging TEE, which particularly supports the formation of social ventures.
Nairobi is arguably the most highly developed LEE. In recent decades, Nairobi has become a central hub in East Africa for both commercial and social entrepreneurship. Entrepreneurship in Nairobi focuses on mobile applications and tech services, including so-called “impact sourcing”, i.e. the hiring and training of disadvantaged youth for data entry and other business services tasks. Notable ecosystem service providers (ESPs) in Nairobi include university incubators and accelerators, such as Strathmore University (with iBiz Incubator) and University of Nairobi (C4DLab incubator), as well as co-working spaces (e.g. The Foundry). Where as most local ESPs are commercially oriented, some focus on youth entrepreneurship and socially ventures, such as Making More Health Accelerator. Importantly, many incubators and accelerators in Nairobi are foreign-owned, were established by foreigners, or are managed by foreigners. Examples include Startup Garage, which was founded by Danish entrepreneur Kresten Buch, and Ongoza, which is led by Alexei Dunaway, a Stanford University graduate and a Fulbright scholar.

Kampala, Uganda, is the second most developed LEE among the three. Entrepreneurship in Kampala focuses mostly on agriculture, energy, and information and communication technology. The role of government in supporting entrepreneurship is less developed than in Kenya and Rwanda. Most ESPs in Kampala are privately owned. They include new venture incubators and accelerators, such as Design Hub, Innovation Village, and StartUp Uganda; many are in an early phase of formation. Importantly, even though Kampala has several universities, their role in the LEE has been relatively limited. Like in Nairobi, many incubators and accelerators are foreign-owned, were established by foreigners, or are managed by foreigners. Similar to Kenya, a number of organizations support youth entrepreneurship, such as Kyusa.

Kigali, Rwanda, is the youngest LEE among the three. Following the genocide in 1994, it took several years to re-build the political and economic infrastructure. Only recently, entrepreneurship was recognized by the government and local institutions as a potential vehicle of growth. For example, the African Leadership University (ALU) just launched their own entrepreneurship program. Most startups in Rwanda are focused on agriculture, financial services, and education. ESPs in Kigali include capacity development programs, incubators, accelerators and co-working spaces, such as kLab, Impact Hub and Inkomo. Similar to Nairobi and Kampala, many ESPs are foreign-owned or were established by foreigners. Examples include Impact
Hub, a social mission-driven co-working space headquartered in Vienna (Austria), and Inkomoko, an accelerator and social venture affiliated with the US-based African Entrepreneur Collective.

Comparing the three LEEs, they show important similarities and differences. As for similarities, all LEEs (1) support mostly commercial, but also increasingly social entrepreneurs; (2) combine a set of universities, incubators, accelerators and co-working spaces; (3) include new ventures and ESPs that are locally owned, but also many that are foreign-owned; (4) are embedded in national economies, but are also connected with each other through regional and global infrastructures that we specify below; (5) have large communities of well-educated young professionals with decent English language skills.

In terms of differences, the three LEEs differ in (1) density of enterprises and ESPs (with Nairobi the highest and Kigali the lowest); (2) age of LEE (Nairobi the oldest, Kigali the youngest); (3) specialization in sectors; (4) level of involvement of local government (low in Kampala; higher in Nairobi and Kigali). Related to this, each LEE is characterized by certain resource and institutional constraints, as we detail below. While all three LEEs lack support infrastructures, they are rather advanced – compared to other cities in the region – in providing university talent and supporting applied local entrepreneurship.

**Regional Level**

Another important ecosystem level supporting both social and commercial entrepreneurship in Kigali, Kampala and Nairobi is the regional level. While less interconnected than each LEE, it is similarly important for the development and implementation of entrepreneurial ideas. In our case, the ‘region’ is primarily the East African Community (EAC), which comprises of Tanzania, Kenya, Uganda, Rwanda, Burundi, and South Sudan. These countries are interconnected as part of the TEE in several ways. First, the EAC has its own common market for goods, labor and capital since 2010, and shares the goal of setting up a regional constitution and a monetary union in the near future. Second, countries within that region are connected geographically by sharing borders, long-term trade relations, and migration.

Both entrepreneurs and certain ESPs have driven regional interconnectedness. First, a number of entrepreneurs who started in Kigali, Kampala, or Nairobi have either already established operations in
multiple neighboring countries, or plan to do so. Examples include Bridge International Academies that entered Kenya as its first market and then grew into Uganda. Second, and perhaps more importantly, several ESPs operate and serve across all major LEEs within the region. For example, Angels Initiative with headquarters in Kampala provides impact investment services to ventures across East Africa. Third, some ESPs have adopted a ‘regional mission’ from the start. One example is the African Leadership University (ALU) in Kigali. Following the agenda of the Rwanda’s president to make Rwanda a leading regional hub for innovation, ALU has adopted the policy of recruiting students from all over the region. Following graduation, ALU students often return to their home country, but stay connected with each other as ALU alumni. Also, the staff of ALU has been recruited from the entire region, to match the cultural diversity of students and to promote innovation and learning at the university.

The emerging regional community of entrepreneurs along with an emerging regional support infrastructure has had an important impact on the LEEs of Kigali, Nairobi and Kampala. First, it has led to streamlining and interdependent development of ecosystem services. Second, it has broadened the spectrum of available services beyond local boundaries. Third, it has broadened the opportunity space for entrepreneurs and facilitated learning across local boundaries.

**Global Level.**

The global level of the TEE is the least systemically interconnected. Yet, it strongly impacts ecosystem activities and entrepreneurial processes both locally and regionally. It does so in at least two major ways: by driving and supporting so-called international social ventures targeting East African markets, and by providing resources and services for local entrepreneurs and ESPs in East Africa.

One major global influence comes from emerging connections between Kigali, Kampala and Nairobi with entrepreneurial ecosystems in Western economies. These include Boston, Silicon Valley, and other regions where ESPs that specialize in promoting mostly social entrepreneurship in sub-Saharan Africa operate. For example, in recent years, a number of enterprises have come out of Boston providing products and services tailored for base-of-the-pyramid markets. They belong to the category of ‘international social
ventures’ (ISVs). Their business model typically combines advanced technology they develop in partnership with universities in Boston and other cities with base-of-the-pyramid market strategies. For example, the Boston-originated social startup BrightGreen Renewable Energy provides affordable, clean, safe and eco-friendly charcoal briquettes for low-income households in Kenya.

In this regard, Kenya, Rwanda, and Uganda have become important entry markets for ISVs that seek to serve low-income consumers with innovative solutions at a larger scale. For example, Kenya became the first market for Bridge International Academies, a startup that provides education services to kids from low-income families. Sanergy, a Boston-originated startup, established its headquarter in Nairobi to develop and experiment with its sanitation services and business model in the Nairobi slums and expand from there. OffGridBox, a startup that we describe in detail below, considers Rwanda as its pilot market to prepare for scaling its operations to other emerging economies.

At the same time, the global ecosystem level has become increasingly important in supporting local ESPs in East Africa. For example, several ESPs, e.g. co-working spaces and incubators, are owned by corporations located in advanced economies. Thus, their business models and methodologies are often based on agendas, knowledge and experiences developed in advanced economies and later adapted to local settings. One good example is Design without Borders (DWB), a Norway-founded and Uganda-based consulting firm that applies practices of design to improve lives of people in low and middle-income countries and areas of crisis. While DWB takes a highly participatory approach, e.g. by involving local beneficiaries and engineers, the very methods of participation are drawn from experience developed in Norway.

Also, several international organizations co-sponsor and organize events in Africa to support local and international entrepreneurs, as well as local partner organizations. A good example is Impact Hub, a franchise co-working space and event organizer. Headquartered in Vienna (Austria), it has established operations in numerous countries, including Rwanda, Burundi, Tanzania, and Sudan. In addition to running co-working spaces, Impact Hub Rwanda for example provides education and consultancy services to its members and hosts numerous events focusing on social entrepreneurship. Through partnerships with various global organizations, such as World Wildlife Fund for Nature, Facebook, UNDP, and University of Zurich,
Impact Hub Rwanda has created a vibrant environment for the exchange of practices and resources. The importance of such organizations is illustrated by Venture Capital for Africa, an online platform: while 41% of startups in Kenya (out of 137 researched) received funding only from local investors, 45% were funded from both local and international investors, and 14% exclusively from international investors.

In addition, more and more universities with headquarters in advanced economies have set up campuses in East Africa. For example, in 2011, Carnegie Mellon University established a campus in Kigali to provide engineering education to African students. Stanford University created the Stanford Seed Transformation program that provides eight months management training to CEOs and founders of for-profit companies and social enterprises in various regions, including East Africa. In their unique position, such universities often support entrepreneurial events and competitions at multiple levels. Also, various global startup networks have established regional chapters in East Africa. For example, the East African chapter of the Aspen Network for Development Entrepreneurs (ANDE), a Washington D.C.-headquartered global network of organizations that supports entrepreneurship in emerging markets, now operates in Kenya, Tanzania, Uganda, Rwanda, and Ethiopia. These networks have promoted a diffusion of entrepreneurial practices supporting both commercial and social ventures in East Africa.

**USING THE TEE: FOUR EXAMPLES OF SOCIAL VENTURES**

Next, we analyze in more detail how different types of social ventures have utilized TEE resources and services, and how institutional constraints at the local level have contributed to the increasing use of TEE infrastructures. We distinguish four types of social ventures – by their target market and their origin (see Table 1). Type [1] are business-to-consumer (B2C) firms from the location or region within an emerging economy. Most of these firms are low-tech providers of goods and services to underserved parts of the population, e.g. rural areas. Type [2] are foreign-owned B2C firms, mostly from advanced economies, that operate in a location or region. Most of them are providers of relatively high-tech products and services to base-of-the-pyramid markets. Type [3] are business-to-business (B2B) firms with a social mission that
originate from the location or region. Examples include many impact sourcing service providers in Kenya. They serve both local and international clients. Type [4] are foreign-owned B2B firms with a social mission that support entrepreneurs operating within a location or region. Examples include consulting firms and ESPs that provide services to local startups while also promoting a social agenda through various activities.

While showing similarities in how they utilize TEE resources and services, the four types differ in how they enact and affect different levels of the TEE. Types [2] and [4] depend much more than Types [1] and [3] on technologies and methodologies from ESPs outside of the region. In turn, Types [3] and [4] have a much more profound effect on shaping the LEE than Types [1] and [2]. However, despite their different focus and orientation as social ventures, all four types have in common that their social mission and identity as social ventures are strongly influenced by the TEE services they use. We elaborate in detail next.

**Example Type [1]: Appropriate Energy Saving Technologies (AEST)**

AEST is an award-winning social enterprise in Uganda that employs women and youth and produces clean and affordable energy for cooking and heating. AEST is run by and for women (90% of management positions). Betty Ikalany, the founder, was born and raised in Uganda, but went abroad to work and study, especially in the Netherlands. However, rather than joining a UN organization, like several of her classmates did, she returned to Uganda to start a business. When Betty started a social enterprise, she had rather mixed experiences with local support institutions. For example, applying for government funding turned out a daunting task. High levels of corruption and a culture of favoritism have made it difficult for entrepreneurs to get local funding no matter how viable or attractive the business idea is. Betty remembers:

“So, even if your proposal is so good, sometimes you don’t go far, because they’re the ones to maybe give somebody whom they know.”

Likewise, Betty’s initial experience with skills and mentalities of local university graduates was rather negative. Several entrepreneurs, including Betty, have been challenged by local graduates’ sense of entitlement and lack of work ethic. One reason might be the traditional focus of young people in Uganda on
government jobs as the most prestigious. Government favoritism has also disadvantaged fast-pace, high-risk entrepreneurial firms and made such careers even less attractive for young people. Today, Betty uses an internship model to first test the work ethic of fresh hires, before offering a regular position:

“I ask students who come from different universities who want to do internship and they can do internship with me. But if I realize that you’re good enough, then I can be able to tell you or hire you if I see your attitude towards work is good.”

Disappointment with local institutional constraints and Betty’s diaspora experience played a major role in her efforts to reach out to *globally dispersed funding opportunities*. In particular, in 2014, she participated in the International Development Design Summit, an event run by MIT D-Lab in Uganda, and shortly after that she applied to the MIT D-Lab’s Scale-Ups Fellowship program, a one-year accelerator program to support entrepreneurs in bringing poverty-alleviating products to market. Betty was selected because her venture, AEST, was on the path to scale its operations, looking for external solutions to increase marketing and to establish sales outlets. Importantly, the program not only provided Betty with funding, but also provided technical and business mentoring. This became very important for Betty’s enterprise:

“In becoming a fellow, I was able to get a business mentor—and then also a technical mentor from the engineers assigned to me, one of the assigned specialist in the lab who would come to Uganda to support us through the period of the fellowship. […] That is one of the things that really helped us test our products and then also answer the questions that we have. […] The [business] mentor helped me to be able to work on my finances and able to understand what it means to have a capital.”

In addition, the Scale-Ups fellowship gave Betty an opportunity to get in touch with other fellows and also investors, thus further increasing the network of support organizations beyond the LEE. On top of that, through MIT D-Lab, Betty was put in touch with and got the opportunity to participate in the SE Forum Outreach Accelerator Programme, an accelerator program promoting sustainable development that is funded by the Swedish International Development Cooperation Agency. Also, Betty got invited as panelists to various events, in the U.S. and Europe, to introduce her approach to social entrepreneurship and to promote women entrepreneurs. Her global exposure would finally help Betty get selected as the Woman Entrepreneur of the Year, by the Global Alliance for Clean Cookstoves in 2017.
These experiences, in turn, had an important impact on Betty’s future engagements. For example, at the *regional level*, Betty’s numerous speeches and panel invitations inspired several other woman entrepreneurs in the region to follow her example. Her impact would also be visible at the *local level*. On the one hand, Betty would continue to speak on events, especially on alternative energy businesses. These events are important meeting points for both local entrepreneurs, and international funding organizations. Also, representatives of the local government would often participate (see Figure 1). On the other hand, Betty is now actively involved in changing the local mindset around entrepreneurship and careers in entrepreneurial firms. Specifically, Betty has been involved in building a new university program, together with partner organizations, to create, what she calls, a “new breed of entrepreneurs”.

Betty’s example shows how local social entrepreneurs in building and growing their enterprise navigate through multiple levels of support – local, regional, global – while also shaping this very support system. In particular, their engagement helps create new linkages between these levels, be it through events or new initiatives. Furthermore, the example shows the importance of certain globally dispersed support organizations, such as MIT D-Lab, in supporting local entrepreneurs and the ecosystem around them.

**Example Type [2]: OffGridBox**

OffGridBox is an international social venture that operates between Boston, Italy, and Rwanda and pursues a mission to provide affordable clean water and renewable energy in remote areas. OffGridBox was established in 2014 by two Italian engineers, Emiliano Cecchini and Davide Bonsignore, who worked together in La Fabbrica del Sole, a non-profit firm making clean energy products. The idea to launch OffGridBox came when they worked on an OXFAM project in rural South Africa and faced challenges with procuring small parts essential to installation of solar panels and a water purifying system from local sources. To address this problem, they decided to develop a modular solution and bring all parts, including even small screws, to remote areas in a container. Importantly, unlike AEST, the technology OffGridBox is based on was almost entirely developed outside the target market.
Looking for external funding, the founders applied for accelerator programs. Opportunities to get funding in their target markets were very limited. Even in Italy, funding was constrained. The founders therefore reached out to more globally dispersed funding sources. In particular, they applied to several accelerators in the U.S. and got accepted to TechStars Boston accelerator program. TechStars is a US-founded seed accelerator that specializes on supporting a wide-range of startups, including software, hardware, music, space, and social, and operates globally, including France, Israel, and South Africa.

Participating in this accelerator program has benefited OffGridBox in several ways. First, mentors advised on developing a business model around selling electricity as a service, a subscription model, and also an equity-free revenue sharing model as a value proposition to investors. In essence, the plan of OffGridBox is to attract project financing, install new units in remote areas, sell electricity to local customers and share revenues with investors from day one of operations. Second, participation in TechStars Boston accelerator program also shaped the geographical focus of OffGridBox. To explore the potential of subscription model to generate revenues, mentors advised to test it in one of the markets they want to operate in. OffGridBox decided to go to Rwanda. Emiliano explains this choice:

“We picked up Rwanda because we sold three boxes there and it is the easiest and most stable country to do business, at least in Eastern Africa, if not in the whole Africa. The country is booming and it is a perfect environment where you can easily and safely test your ideas. Rwanda’s support for green technology and innovation made it ideal for OffGridBox to start the pay-as-you-go model.”

In Rwanda, OffGridBox also tested a social component of its business model. After installing a unit, OffGridBox provides families in a community with a small lithium battery pack to charge phones and three LED lights, which then can be charged at OffGridBox unit. In Rwanda, OffGridBox calculated that the cost of energy services for families is three times less than the World Bank’s estimation for Rwanda. In addition, this unit provides access to free purified water. When a unit is installed in a community, OffGridBox hires and trains four local women as shopkeepers, providing them with a technical background.

After graduating from TechStars, OffGridBox took part in an accelerator program of MassChallenge, a Boston-based non-profit accelerator, and won its $100,000 award as the number one startup in cleantech.
As another major outcome of participating in this accelerator program, founders mention getting ties to Boston community. As a US Director of OffGridBox, explained:

“Now we're working with MIT Water Club to apply to another state funded grants which is the water challenge of how are you making efficiency in relation to water and energy. And we're working with them on a new desalination component.”

Over time, OffGridBox have also started to play a visible role in Boston entrepreneurial ecosystem. For example, Emiliano became a mentor for innovators of MIT Water Club and a judge at the MIT EnergyHack competition hosted by MIT Energy Club.

Similar to AEST, OffGridBox formed their identity as a ‘social enterprise’ over time. Both firms initially applied for accelerator programs in the U.S. to overcome challenges in their target markets, especially lack of local funding. In both cases, the social orientation of the accelerator programs that accepted their application – MIT D-Lab in case of AEST and TechStars and MassChallenge in case of OffGridBox – shaped the social identity of the enterprises. In case of AEST, the founder adopted the identity of a role model woman entrepreneur in her industry. Similarly, the OffGridBox founders explicitly added social and environment related value propositions to their main product.

**Example Type [3]: Craft Silicon**

Craft Silicon is an outsourcing service firm based in Nairobi, Kenya. It is an example of a so-called impact sourcing service provider, combining the business of serving both corporate clients with community impact. On the business side, Craft Silicon specializes in finance and accounting services, e.g. account management and transaction processing. As for their social mission, Craft Silicon on the one hand makes a social impact by serving microfinance institutions as clients; on the other hand, they run a semi-independent foundation that provides computer education to youth in urban slums. Interestingly, Craft Silicon developed their social business model at a time when social funding was rather constrained. Only more recently, they have been able to acquire funding and operational partners for their various operations.

From the very beginning in the early 2000s, providing business services to microfinance institutions was an important part of Craft Silicon’s business. Focusing on microfinance institutions, given their co-
location in many African countries, made a lot of business sense. Over time, Craft Silicon developed a strong reputation in this domain, which helped them establish in this niche and lower global competition from the highly populated market of IT service providers in finance and accounting. Over time, their focus on microfinance has also attracted ESPs at the global level, in particular Bill and Melinda Gates Foundation and the Dell Foundation, who now co-sponsor Craft Silicon’s business. Like in the cases of AEST and OffGridBox, the funding model has also shaped the ‘social identity’ of Craft Silicon as an enterprise. The founder explains:

“We provide software to microfinance, and microfinance provides services to many of the citizens of the country for the upliftment of their lives. So [these foundations] would be funding the institution directly, but IT [services] have become an integral part of their growth.”

At the same time, Craft Silicon runs a foundation that focuses on direct social impact in the local community. In collaboration with the Ministry of Education, this foundation runs a mobile training bus in slum areas to provide software training for free. While benefitting youth in slums, this training is also part of the impact sourcing hiring model of Craft Silicon: a limited number of graduates will be recommended to take part in more formal hiring and training at Craft Silicon. The initial selection of students, however, is done in coordination with the government office, according to a certain set of criteria:

“We have a bus. We have fitted computers inside the bus and this bus goes and parks itself let’s say into the slum areas, then students walk inside and then we give them education. It is solar powered bus with Internet. […] We work closely with the [Ministry of Education], you know, [they have] a government office there. So we work with them and we select the students and we have some criteria based on what we select, gender, the background, their knowledge etc.”

Unlike the microfinance aspect of their business, the training and hiring has been supported mainly by ESPs at the local and regional level of the TEE. Aside from government partners, Craft Silicon has also formed alliances with local universities, and it has acquired numerous other sponsoring organizations mainly from East African countries, including microfinance firms and smaller, more regionally focused development organizations. At the same time, especially their community training initiative has made Craft Silicon itself an important local ESP, as they have helped enlarge the talent pool in the ecosystem.

In sum, the example of Craft Silicon shows how the realization of a social business model in the context of East Africa is often the result of engagements with partners at multiple levels of the ecosystem –
agencies and foundations at the global level, government and other partners at the local and regional level. Also, this example shows how especially social ventures in the B2B space take multiple roles – in using TEE resources and services, and in also providing some of these services that other ventures can benefit from.

Example Type [4]: Inkomoko

Inkomoko represents the fourth type of social venture – a foreign-owned socially oriented B2B service provider. Inkomoko is the Rwanda branch of the US-based African Entrepreneur Collective, which focuses on generating training and business development opportunities for African entrepreneurs. The manager of Inkomoko identifies the organization as both an ‘accelerator’ and a ‘social business’. Their business model consists of two semi-independent branches. One branch focuses on providing business training, bookkeeping, and technology tools to local startups who pay for this service. The second branch focuses on providing very similar services to Congolese and Burundian refugees in camps and urban areas – for free. In 2017, Inkomoko worked with 170 regular and 700 refugee entrepreneurs.

To implement their social business model, Inkomoko has developed a rather sophisticated funding structure and hiring model. To get access to refugee camps and to finance business training, Inkomoko has been working with alliances of global and local ecosystem partners. In terms of funding, one major partner has been the U.S. Department of State. For the actual implementation, Inkomoko collaborates with the local government. Especially, getting access to camps requires support and legitimacy from local authorities:

“[Getting] access to camps is not an automatic thing. We need to work directly with the Ministry of Disaster Management and Refugee Affairs. That’s on the part of the government.”

Another interesting example of a global-local alliance is Inkomoko’s work with USAID, a major US-based development agency. One USAID program in collaboration with the Rwandan government is Private Sector Development Agricultural Growth (PSDAG). To implement such programs, USAID often works with partners on the ground who specialize in particular aspects of business development. Inkomoko has become the ‘accelerator partner’ for USAID in this program. Currently, PSDAD supports nine agricultural businesses,
from rice processing to dairy, that use Inkomoko services. Inkomoko gets paid by USAID, and the start-ups get grants from USAID so that they can take classes at Inkomoko for free:

“They have a grant from the project and the grantees have to go through business development, getting proper management skills before they get the entire amount of grant they were awarded.”

Another important component of ecosystem support is Inkomoko’s use of volunteer business experts from European partner universities. Specifically, Inkomoko has been working with ESSEC Business School in Paris to recruit MBA students to assist with the local training of entrepreneurs. These students benefit from hands-on experience of working with entrepreneurs, while ‘giving back’ to the community as volunteers:

“We have a few partnerships with the ESSEC Business School from Paris, the MBA program. […] [These MBA students] provide a lot of skills, from bookkeeping tools to marketing strategies to anything that we see a business needs. […] Their gain is […] giving back to society or to the community. They engage in work directly with an entrepreneur. They learn from that process.”

By contrast, Inkomoko has not been successful in hiring and using students from local universities in Kigali. Not only have locally trained students often lacked the technical and business know-how needed to assist Inkomoko’s training, but their willingness to work for Inkomoko as volunteers has been very limited. Often they are much more interested in working abroad.

In sum, similar to Craft Silicon, Inkomoko not only uses but also provides TEE resources and services. Inkomoko has become one of the most important ESPs in Kigali. Also, similar to OffGridBox, much of Inkomoko’s expertise comes from global partners outside the LEE. In particular, they have benefited from partnerships with U.S. and European schools to offer latest methodologies to local clients.

**SHAPING THE TEE: THE ROLE OF INTERMEDIARIES**

Above we illustrated how, facing resource constraints locally, start-ups in East Africa have reached out for ecosystem support at multiple levels – local, regional and global. At the same time, we find that the emergence of a transnational entrepreneurial ecosystem (TEE) has been actively promoted especially by internationally operating ecosystem service providers (ESPs) who have served as ‘intermediaries-in-practice’ by creating important linkages across ecosystem levels as well as between local opportunities and global
development agendas. Next, we describe core mechanisms by which certain ESPs have contributed to the structuration of the TEE supporting social ventures in East Africa.

**Building ecosystem alliances across geographic levels**

One key mechanism by which ecosystem relationships and shared practices have emerged across levels are alliances between global and local ESPs. For example, to support social innovation and entrepreneurship, the Boston-based university center MIT D-Lab has been building alliances with ESPs in East Africa, including Social Innovation Academy and Kyusa in Uganda, and Ongoza and EmpServe in Kenya. In 2018, MIT D-Lab launched the Innovation Ecosystem Builder Fellowship program to connect and equip local ESPs with funding and technical expertise to better support social entrepreneurs and innovators at the local level. The first cohort of ESP partners included accelerators and incubators in Kenya, Uganda, India, and Brazil.

Kyusa is one of MIT D-Lab’s local ecosystem partners in Uganda. Kyusa specializes in providing business and entrepreneurship-related training to disadvantaged youth. The alliance with MIT D-Lab has benefited Kyusa in multiple ways and has thereby contributed to greater interconnectedness within the ecosystem. First, Kyusa has benefited from getting financial and technical support. One element has been the collaboration with an MIT D-Lab’s intern who has helped Kyusa professionalize their processes, e.g., through the use of monitoring and evaluation tools, which has increased the capacity of Kyusa to provide ecosystem services at local level. This has promoted a streamlining of ESP practices across geographic levels, thus contributing to further integration of the TEE. The Kyusa’s founder remembers:

“I have an MIT D-Lab intern at the moment who is helping us develop monitoring and evaluation systems but also to analyze what are the right indicators, what are the tools – we’re going through the loops now. […] One of the things we noticed, we had a high success rate within the Kampala area where we have [implemented new tools] and a very low success rate specifically in some old business setup.”

Another benefit of these alliances has been the increasing exposure of local partners to other participants in the ecosystem. Oftentimes, organizations like Kyusa would operate in very isolated ways before teaming up with partners like MIT D-Lab. As an alliance partner, Kyusa representatives would get invited to events and
trainings along with other organizations operating in the location and region. The Kyusa founder remembers how she became ‘aware’ for the first time of the larger ecosystem in which she was embedded:

“Being in the fellowship [made it] possible [to get] a whole lot of exposure to thinking beyond what I'm doing to seeing the larger picture, to seeing the ecosystem beyond Kampala. What about Rwanda? What about the region? What about the continent? […] And you realize the issue is actually the same.”

This example shows how these alliances have been an important mechanism of field structuration of the ecosystem across geographic levels. Effects include greater mutual awareness of local and regional ESPs as well as sharing and professionalization of norms and practices.

**Running multi-scale events with local entrepreneurs**

Another important mechanism of TEE formation is events that are organized at multiple levels. Events bring people together temporarily and contribute to the formation of relationships and roles with the ecosystem. Many events take place at local level. These include meet-ups and local pitch competitions that are organized by locally operating ESPs in Kampala, Kigali and Nairobi (see Figure 1). While connecting local ESPs and entrepreneurs, these events often also feature international experts who are hired to evaluate local entrepreneurial ideas. One co-author happened to get invited to several of these events in Kigali and Kampala. Aside from organizing local events, some ESPs specialize in organizing multi-scale events – at the local, regional and global level. One example is the Hult Prize competitions.

The Hult Prize was established in 2010 by Ahmad Ashkar, an MBA student of the Hult Business School in Boston, and Bertil Hult, a founder of EF Education First, with support from United Nations Foundation. The Hult Prize is an annual global competition for entrepreneurs that aim to address pressing social problems, such as energy poverty, food security, and water access. The first stage of this contest is held at multiple universities across the world, e.g., University of Rwanda and Carnegie Mellon Africa. Winners will take part in a competition at a country level. Winners of a country level contest participate in a regional level competition. Finally, winners of regional level competitions participate in a global contest conducted in London, UK. Each stage increases exposure of participants to sponsors and gives access to support services outside the location (see Figure 1).
The local Hult Prize chapter in Kigali, Rwanda, not only organizes the prize competitions but also helps participating universities get their student cohorts ready for the competition. In other words, these events have a mobilizing effect and they incentivize local universities to develop professional capacities in team-building and training local entrepreneurs. The local Hult Prize manager in Rwanda explains:

“Basically what happens while organizing within the university is—first of all, it’s the best of things—recruiting teams, organizing trainings or looking for people who can actually train the teams when it comes to design thinking and picturing business model compass. [...] later on [...] you can be able to have the top teams from within the university to compete against each other within the country and then be able to proceed on to what you call the globe accelerator.”

Once entrepreneurial teams go through different stages of competition – from local, to regional and global – they get exposed to different levels of competition and evaluation. The multi-level design makes sure however that entrepreneurial solutions are applicable to local contexts while standing the test of professional evaluation at the regional and global level. Thus, in order to win, solutions are not expected to be ‘novel’ at the global level, but rather ‘cutting edge’ in applying global solutions to local problems. The Hult Prize representative of Rwanda illustrates that with one of the recent winning teams:

“The winning team actually was working with biogas at the university. [...] It’s not a new solution but bringing in a business model to biogas is novel. And also, there were students who were doing biotechnology and microbiology and they’re trying to increase the yield of biogas as well.”

Aside from effectively evaluating the feasibility of entrepreneurial ideas and social innovation solutions, these prize competitions have helped connect the different geographic levels of the ecosystem. The organizers of the Hult Prize are very aware of how these prize competitions help structure the TEE, and how they at the same time help compensate for local resource and institutional constraints:

“How do we still stay connected on a global level but making sure that the context is local. So, we make sure we build an ecosystem given the resources that are available within the country with partners around that specific country.”

In sum, the importance of multi-scale events stems from their clustering and field-configuring effects, especially under conditions in which local entrepreneurs would typically not get exposed to practices and competitive evaluation at the regional and global level. Also, such events are important to compensate for the lack of regular interaction between ESPs at the regional and global level.
Linking local business and social opportunities to global development agendas

A third mechanism of TEE formation has been the individual and coordinated effort of various ESPs, especially at the global level, to expose both international and local entrepreneurs to current global development agendas. For example, MIT D-Lab has engaged in various activities to put entrepreneurial ideas into a larger development framework. First, as a university center at MIT, D-Lab has developed specialized courses for students who are interested in innovation and international development, including “Design for Complex Environmental Issues”, “Humanitarian Innovation”, and “Gender and Development” to help frame social innovation ideas. A number of MIT graduates, who got exposed to these courses, ended up developing entrepreneurial ideas that were very much influenced by a larger development agenda. Examples include Moringa Connect, Imara Tech, and WeCyclers, all of whom operate in Africa today.

At the same time, MIT D-Lab has helped social entrepreneurs incorporate their social innovation ideas into feasible business models. To do that, in 2012, they launched the Scale-Ups Fellowship, an accelerator program. This program focuses on two types of entrepreneurs – MIT graduates who started international social ventures, and social entrepreneurs in Tanzania, Uganda, Kenya, India, and other countries. In support, the program provides $20,000 grants, access to mentors, as well as innovation and business training. By 2018, Scale-Ups Fellowship has supported 33 entrepreneurs, with two thirds of portfolio being MIT graduates. A program manager also supports selected entrepreneurs after they graduate from the program. Fellows also gather annually at the MIT D-Lab’s retreat event in Boston.

“Nighty percent of our social entrepreneurs are India or Africa […] We try to keep the [selection process] fairly consistent -- are [entrepreneurs] able to scale a venture, will they be able to take advantage being a part of our program, attract co-founders and people to work with them… We also provide ongoing support […] if someone was a fellow three years ago, we continue to work with them even after the fellowship year […] we continue to develop resources for them, just because we're such a small cohort.”

Another example is the UN development partnerships of Impact Hub in Rwanda. Aside from running co-working spaces in different countries, Impact Hub has managed to co-organize several social innovation projects under the umbrella of larger development themes. For example, UNDP has taken an interest in developing the capacity of farmers to better respond to climate change. They selected Impact Hub as their innovation partner. With the help of UNDP funding, and in collaboration with local government agencies,
Impact Hub ran a hackathon in Rwanda to bring together developers to create smart ways of improving the dissemination of climate and weather information to farmers. Part of this undertaking was the development of mobile applications for easy access to weather information:

“This is about bringing developers and programmers together to tackle challenges. It’s mostly testing technologies to improve the connection of climate data and also prototyping apps to disseminate this data. They send information to the farmers or to vulnerable populations in general.”

In running such projects, Impact Hub takes an intermediary position between global development agencies and programs and the LEE. Thereby, Impact Hub translates the very lack of local infrastructure – here, constrained access of farmers to reliable weather data – into an entrepreneurial opportunity for developers from the region. This, in turn, has a larger impact on the ecosystem itself. Not only does Impact Hub help set up ecosystem linkages between local ESPs, e.g., universities and government agencies, and global ESPs, e.g., development agencies, but they inform these linkages with a ‘central issue’, e.g., climate change, that impacts the direction of ecosystem support for entrepreneurial and innovation activities.

DISCUSSION

This study has examined the following question: How do social ventures get institutional support in the presence of institutional voids? Based on rich data in East Africa, we find that social ventures operating under institutional constraints increasingly tap into globally dispersed resource pools that interconnect through what we call transnational entrepreneurial ecosystems (TEEs). We defined these as sets of actors, functions and institutions (e.g. universities, incubators, accelerators) interacting across local and regional boundaries supporting the creation and growth of entrepreneurial ventures.

Comparing TEEs with local entrepreneurial ecosystems (LEEs) (see Table 2), both can be seen as manifestations of institutional fields (Thompson et al., 2018). They are “areas of institutional life” (DiMaggio and Powell, 1983) that are constituted by actors – ecosystem service providers (ESPs) and entrepreneurs – who mutually recognize each other as ecosystem participants and who share a common concern or a “central issue” (Hoffman, 1999) – here: pursuing social business opportunities. Certain ecosystem services, such as
financial and professional support, and a shared understanding of ‘business sense’ and ‘social impact’, are constitutive for both LEEs and TEEs in supporting social ventures (Thompson et al., 2018).

However, whereas LEEs are typically characterized by co-location of ecosystem resources (Spigel, 2017), our study indicates that in a TEE ecosystem resources are distributed across local, regional and global levels. Thereby, LEEs and TEEs become interconnected. For example, LEEs in Kampala, Kigali and Nairobi have become integral part of a TEE supporting social ventures in East Africa. In this process, ESPs and social ventures at the local level develop resource linkages with ESPs at the regional and global level. We illustrated this by showing how various social ventures in East Africa – from B2C to B2B enterprises, from locally grown to foreign-owned ventures – have accumulated resources from all levels of the TEE. We also showed how especially international ESPs have played a key role as intermediary ‘ecosystem builders’ by strengthening resource linkages and the sharing of norms and practices across ecosystem levels. They have done so by forming global-local ESP alliances, by organizing multi-scaled events for entrepreneurs, and by linking social and business opportunities at the local level to global development agendas.

Our study has several broader implications for future research. First, we help address the paradox of how social enterprises can mobilize institutional support in institutional voids (Desa and Basu, 2013; Mair and Marti, 2009; Zahra et al., 2008) by shifting focus from local to transnational entrepreneurial ecosystems (TEEs). Second, we elaborate on the complex roles of social mission-driven international ecosystem service providers (ESPs) as intermediary organizations in not only providing and shaping ecosystem services, but also in using ecosystem resources to enhance their own service capacity. Third, we advance the utility of a field perspective in studying entrepreneurial ecosystems (Thompson et al., 2018).

First, our study suggests that in prior literature the notion of entrepreneurial ecosystems (EEs) has been applied too narrowly on commercial enterprises and locally bounded ecosystems (Acs et al., 2017; Spigel, 2017). Also, most studies have focused on advanced economies, with a few exceptions (Goswami et al., 2018; Mrkajic, 2017). Our findings suggest that, especially in the context of emerging economies and social enterprises, an extended view of EEs is needed to fully understand why some regions have higher rates
of social entrepreneurship than other regions, and how entrepreneurs mobilize institutional support under resource constraints and facing institutional voids. We do not suggest to abandon the conventional notion of EEs as geographically bounded systems (Acs et al., 2017; Qian et al., 2012). Rather, our findings point to the increasing internationalization and interconnectedness of institutional infrastructures, knowledge flows, and value systems across geographic levels supporting entrepreneurial endeavors in particular regions. Our notion of TEE is designed to capture that phenomenon.

Specifically, our study suggests that TEE infrastructures spanning local, regional and global levels of support seem particularly relevant for social ventures. This is because many social ventures especially in emerging economies seem to neither find sufficient support at the local level nor can they solely rely on global support. On the one hand, LEEs in emerging economies often lack local support for implementing their ideas. Also, gaining legitimacy for pursuing a mission of social change may be challenging (Austin et al., 2006; Mair et al. 2012). This is why global support can become important. On the other hand, social ventures often depend on strong community support to implement their mission (see e.g. Manning et al., 2017; Mair et al. 2012; Thompson et al., 2018). This is why social ventures, while reaching out to global ESPs, continue to depend on a local support system. This may explain why social entrepreneurs reach out to support at all levels and why TEE infrastructures become important. However, future research needs to better understand the tensions arising from these multiple dependencies. To what extent do value systems of ESPs at different levels conflict with each other? For example, our data suggests that while many international ESPs may support training youth in slums, some local government officials would rather like to see the slum gone entirely and support youth in gentrified areas instead.

Furthermore, we need to better understand how and to what extent TEE infrastructures are used by social and commercial ventures differently. Especially in the context of emerging economies, prior research suggests that TEE structures have emerged to serve commercial enterprises as well, for example in support of global business-to-business services (Bresnahan et al., 2001; Saxenian, 2005). In this regard, we also encourage future research to go beyond the scope of this study and track systematically how different types of social and commercial entrepreneurs navigate TEEs in search for critical resources in their entrepreneurial
journey. For this purpose, the notion of entrepreneurship as a multi-stage process – from spotting opportunities to exploitation and growth (see Bygrave and Hofer, 1992; Webb et al., 2010) – can be a useful guiding principle. For example, at what stages in the entrepreneurship process do entrepreneurs mobilize resources locally rather than globally? To what extent do TEEs provide distributed resource pools accounting for these entrepreneurial patterns? How do TEEs vary in their capacity and effectiveness to support entrepreneurs throughout the entire entrepreneurship process?

Second, our study extends recent research on the critical role of ESPs, such as university centers and accelerators, as intermediary organizations in the formation of entrepreneurial ecosystems. Whereas prior studies have focused primarily on the intermediary role of ESPs in sharing knowledge, connecting ecosystem players, and adding to the collective support capacity of ecosystems (Goswami et al., 2018), our findings suggest that ESPs can play a central role in connecting different geographic ecosystem levels – local, regional and global – through their various activities.

Specifically we find that forming global-local alliances and regularly initiating events at multiple levels play an important role as mechanisms of ecosystem formation. Prior research has focused on alliances between multinationals and local NGOs in support of social entrepreneurship (e.g. Webb et al., 2010), or on alliances between co-located ESPs in support of social and commercial enterprises (e.g. Spigel, 2017). Our findings suggest however that, in addition to that, alliances between ESPs across geographic levels can be important for sharing knowledge and values supporting ecosystem formation in general and TEE formation in particular. We also find that the organization of events seems crucial for the functioning and formation of TEEs. The events ESPs organize, e.g., prize competitions, pitching events, and meet-ups, affect ecosystem formation in multiple ways. They serve as ‘temporary clusters’ (Maskell et al., 2006) in bringing ecosystem players together, stimulating interaction and raising mutual awareness about common agendas, such as poverty alleviation and clean affordable energy. They act as ‘field-configuring’ events (Garud and Rappa, 1994; Schussler et al., 2014) in establishing different roles of ecosystem players. Also, they help connect different geographic layers of the TEE. Our findings thus suggest that future research needs to take the
intermediary roles of ESPs in ecosystem formation – from forming alliances to organizing events – much more seriously, especially in the context of transnational ecosystems.

Another key finding is that ecosystem roles and effects of social-mission driven ESPs may be much more complex and multi-faceted than previously suggested. We find that one major role of ESPs is to connect local commercial and social opportunities with global development agendas. This has at least two major implications. First, it increases support and funding opportunities for local entrepreneurs, thereby shaping the very identity of these entrepreneurs. The examples of AEST and OffGridBox showed how founders became more conscious of the social impact they made through the ESPs that supported them. The question of identity formation can enrich prior research on ecosystems around social entrepreneurship (Thompson et al., 2018; Roundy, 2017; McMullen, 2018). At the same time, the growing debate on identity formation of social enterprises (Wry and York, 2017) can benefit from paying more attention to the role of ecosystems and ESPs in shaping identities. Second, we show how the interest of social-mission ESPs in connecting local opportunities with global development agendas turns them into ecosystem players that not only provide ecosystem services and shape “central issues” within the ecosystem, but that also “use” the ecosystem to pursue their own social agenda. To many ESPs, such as MIT D-Lab, supporting entrepreneurs is not an end in itself but a means towards tackling grand challenges such as poverty and climate change. By teaming up with global development agencies and local entrepreneurs, such ESPs become intermediaries of global governance (Abbott et al. 2015) in assisting global programs with local implementation. We need to better understand these complex role relations in the context of social entrepreneurship.

Third, our study demonstrates the utility of the field perspective in studying entrepreneurial ecosystems across geographic levels. First, the field perspective suggests that “areas of institutional life” (DiMaggio and Powell, 1983) can emerge across geographic boundaries and at multiple geographic levels simultaneously (Manning et al., 2012; Phillips and Tracey, 2009). TEEs show similar characteristics. Second, a field perspective sensitizes for ongoing dynamics of ecosystem formation and structuration (see also Thompson et al., 2018), e.g., through field-configuring events, the entrance of new field players, and the
renegotiation of logics and values of field interaction. Such a dynamic view is essential to come to grips with the fluid nature of TEEs, especially at the regional and global level.

Our findings also suggest that TEEs resemble what Zietsma et al. (2017) call “interstitial issue fields” combining different logics of interaction (see also Hoffman, 1999). Specifically, TEEs become arenas where “local” and “regional” issues – promoting employment, growth and entrepreneurship – get connected with “global” issues – development, alleviating poverty, tackling grand challenges. Over time, the local and global issue dimensions get loosely coupled, allowing for both local and global dynamics of issue development. For example, while global concerns stay the same, local entrepreneurship policies may change; likewise, while local concerns about employment and growth stay the same, new global agendas may appear on the horizon. Future research needs to examine those issue dynamics to better come to grips with how TEEs support social entrepreneurship. Also, do some ‘issues’ promote the formation of TEEs rather than others? And how do ecosystem actors combine local and global issues to avoid conflict between them?

Finally, our findings have important implications for entrepreneurial practice and policy-making by exploring the social entrepreneurs’ resource seeking strategies not only on the local level, but also on regional and global levels. Policy-makers, especially those in resource-constrained environments, can also benefit from this research by taking into account the importance of aligning local support strategies with regional and global agendas, such as sustainability, international development, and poverty alleviation.


Bitzer V, Hamann R. 2015. The business of social and environmental innovation. In The business of social and environmental innovation. Springer; Cham: 3-24


APPENDIX: Figures and Tables

Figure 1. Simplified illustration of a Transnational Entrepreneurial Ecosystem

Intl Org – International Organization
A/I – Accelerator / Incubator
LSV – Local Social Venture
ISV – Intl Social Venture
C – Coworking Space
Uni – University
G - Government
Leg – Treaty
E – Event

Transnational Entrepreneurial Ecosystem

Global Level
Regional Level
Local Level
Table 1. Four types of social ventures

<table>
<thead>
<tr>
<th>Enterprises originating from the location/region</th>
<th>Enterprises with a social mission serving individual consumers</th>
<th>Enterprises with a social mission serving other businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] Local B2C enterprises:</td>
<td>e.g. Low-tech manufacturers and service firms (AEST, Agriworks)</td>
<td>[3] Local B2B enterprises:</td>
</tr>
<tr>
<td>[2] Foreign/intl B2C enterprises:</td>
<td>e.g. high-tech manufacturers and service firms (Offgridbox, Bridge International Academies, d.light)</td>
<td></td>
</tr>
<tr>
<td>[4] Foreign/intl B2B enterprises:</td>
<td>e.g. foreign-owned social incubators and accelerators (Inkomoko, Design without borders, Impact Hub)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Major dimensions of local and transnational entrepreneurial ecosystems

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Local entrepreneurial ecosystem</th>
<th>Transnational entrepreneurial ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Co-located ecosystem service providers (ESPs) supporting co-located social and commercial enterprises</td>
<td>Globally dispersed, but interconnected ecosystem service providers supporting enterprises in particular location/region</td>
</tr>
<tr>
<td>Entrepreneurship supported</td>
<td>All types, but mostly commercial innovation-based ventures</td>
<td>All types, but mostly social mission driven ventures in developing economies</td>
</tr>
<tr>
<td>Level of operation</td>
<td>Local</td>
<td>Embedded: local, regional and global</td>
</tr>
<tr>
<td>Availability of critical resources</td>
<td>Co-located // Resources are provided by local ESPs (e.g. universities, banks, incubators)</td>
<td>Distributed // Resources are provided by local and international ESPs (universities, incubators, development agencies)</td>
</tr>
<tr>
<td>Interaction and resource linkages</td>
<td>Concentrated locally; very sporadic outside location</td>
<td>Dispersed across levels (local, regional, global) at different levels of intensity</td>
</tr>
<tr>
<td>Type of an institutional field</td>
<td>Issue field formed around creation and growth of innovation-based entrepreneurship</td>
<td>Interstitial issue field formed around entrepreneurship as means to address social and environmental challenges</td>
</tr>
</tbody>
</table>