Dynamics of entrepreneurship at the Base of the Pyramid: From emergence of entrepreneurial action to opportunity exploitation in the case of vegetable farmers in Benin

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ABSTRACT

The assumption that entrepreneurship is a critical factor in expanding employment, creating wealth and reducing poverty at the Base of the Pyramid (BoP) in developing countries has led to the development of many initiatives to strengthen the entrepreneurial activities of poor people. Despite the fact that entrepreneurship is seen as a strategy in combating poverty, however, the entrepreneurial dynamics at BoP settings are still unclear. Based on focus group discussions and interviews we conducted with people engaging in vegetable farm businesses in Benin, we inductively analyse the entrepreneurial process at the BoP. We learn that the process trigger can be exogenous factors such as challenging situations and disruptive events. Based on this, we elaborate on the characteristics of the process and on the dimensions that influence, how opportunities are developed and exploited. We provide a process-based view of entrepreneurship at the BoP, suggesting the need for consistency between individual, behavioural strategies and contextual elements.

KEY WORDS: entrepreneurship, developing countries, Base of the Pyramid (BoP), entrepreneurial dynamics, poverty alleviation, challenging situations, disruptive events

1. Introduction

Persistent poverty continues to be a challenge in Sub-Saharan Africa. Rural poverty rates remain high and persistent (51%), and the absolute number of the poor has been increasing since 1993 (Word-Bank, 2008). Consequently, poverty reduction is a priority in many countries in Sub-Saharan Africa. To facilitate economic growth and reduce poverty, it is increasingly recognized that multi-dimensional perspectives should be taken. These perspectives include market-based approaches to generate social as well as economic value for the poor (Miller et al., 2012).
Entrepreneurship has been suggested as a potential path to move up in the socioeconomic ladder (Ahlstrom, 2010, Alvarez et al., 2015, Baumol and Strom, 2007, Bruton et al., 2008, Bruton et al., 2013b). The general idea of entrepreneurship as solution to poverty (Bruton et al., 2013b) is that poverty can be reduced by using the market economy to engage the Base of the pyramid (BoP) - low-income people - in economic activities (Collier, 2008, Easterly, 2007). This view is based on the fact that some entrepreneurs at the BoP level, the so-called productive, growth oriented (Nichter and Goldmark, 2009, Mano et al., 2012, Grimm et al., 2012, Amin and Islam, 2015, Li and Rama, 2015) or transformative entrepreneurs (Bruton et al., 2015, Sridharan et al., 2014, Tobias et al., 2013) were able not only to create economic value for themselves, but also to provide economic and social value for the community at large, raising millions of people out of extreme poverty.

However, many poorer individuals, and especially those in rural areas in developing countries or underprivileged minority groups (Bourguignon and Verdier, 2000) may find the prospect of social mobility infeasible owing to significant barriers to pursuing their desires (Corak, 2013; Fujiwara-Greve and Greve, 2000). Substantial streams of literature exist on microenterprises in developing countries and reveal a host of factors that constrain the entrepreneurial endeavour of smallholders. These factors include but are not limited to, lack of financial capital and cash reserves, deficient managerial skills, inadequate advisory services, deficiencies in technology, insufficient support services, ineffective property rights, lack of access to credit and difficult access to markets (See, DeBerry-Spence and Elliot (2012), Ton (2008)). Factors also include formal institutional voids (Khavul and Bruton, 2013, Mair and Marti, 2009, Mair et al., 2012), uncertain institutional environment (Beugré and Offodile, 2001, Dia, 1996), and a relative market failure due to the lack of market-based institutions and facilitating rules. These constraints make their entrepreneurial efforts extremely challenging.

Many end up discouraged and wondering if their fate has been dictated by a lack of real opportunity (Corak, 2013), genetic heritability (Benjamin et al., 2012) or ‘birth and fortun’ (Smith, 2010). However, the growing dissemination of knowledge throughout the world alongside the successful experiences of other entrepreneurs in developing countries (Bruton et al., 2013b, Tobias et al., 2013) foment ‘animal spirits – a spontaneous urge to action rather than inaction. Becoming an entrepreneur is potentially a way to pursue such animal spirits. Relatively chronic poverty causes societal turmoil that ultimately may lead individuals to do whatever they can to move up in the socioeconomic ladder, particularly those individuals from poorer households (Bruton et al., 2013b, Sachs, 2006)

Yet, the stages of the process by which endogenous entrepreneurs create value and innovative solutions and the dimensions affecting the way the process unfolds are still assumed rather than theoretically and empirically examined. In other words, the
entrepreneurial process at the BoP is still unclear and this has not received much attention. Along these lines, recent research found that there is a paucity of empirical research and lack of conceptual clarity on theoretical models and empirical evidence to guide our understanding of local entrepreneurship at the BoP in developing countries. In line of these gaps, several entrepreneurship scholars (Kiss et al., 2012, Webb et al., 2013) and academics in other fields in business and economic development (Bruton et al., 2013a, McGahan, 2012, Webb et al., 2009, Yang, 2011) called for in-depth studies of the entrepreneurship process at the BoP. Taken together, these issues suggest that, despite the relevance of extant theories on entrepreneurship, scholars lack a process theory of how an entrepreneurial action emerges and evolves in poverty settings. The objective of this paper is to explore how the poor become entrepreneurial.

The empirical investigation grounded in understanding this phenomenon is based on in-depth case study of farmers involved in vegetables production in Benin - one of the least developed countries in Sub-Saharan Africa – with the goal of developing a process model of entrepreneurship at the BoP. In doing so, we aim at pursuing two related objectives. First, by contrasting the emerging insights from our empirical study with mainstream entrepreneurship perspectives, we model the stages of business entrepreneurship of smallholders in a setting of extreme poverty and formal institutional voids. To this end, a set of propositions is developed to guide our analysis. Second, we identify variables that drive and moderate the shift from one stage to the next.

This article is structured as follows. First, the theoretical background is developed. Second, the methodology used to gather data and the research setting are presented. Third, the empirical results and the subsequent theoretical analysis are discussed. Finally, we outline the main conclusions and implications for research and practice.

2. Theoretical background

In this section, we review the literature on entrepreneurial process triggers. It is proposed that the key to initiating the process of entrepreneurship is multidimensional, and lies within individual members of society, processes and contexts (Karatas-Ozkan et al., 2014). Next, we examine research looking at the entrepreneurial processes.

2.1. Entrepreneurial process trigger

A number of models have been developed that propose entrepreneurship as a process of emergence (Steyaert, 2007) or a process of becoming (Bruyat, 1993), through a number of sequential stages. The focus of these models has been the initial or pre-venture stages (Shane and Venkataraman, 2000) and the post start-up activities (Bruyat, 1993, Scott and Bruce,
At the first stage of such emergence, the process is influenced by a number of factors. Two types of triggers are commonly used to explain this stage: (1) the individual-level and (2) the context conducive to entrepreneurial behaviour.

On the one hand, individuals are heterogeneous in both their beliefs and desires, and these differences help explain why some decide to become entrepreneurs and why others prefer managerial tasks or other related roles. The decision to pursue an entrepreneurial career is influenced by a number of psychological and non-psychological factors (Amit et al., 2001). Non-Psychological characteristics are education or prior knowledge, career experience, age and social position, income, unemployment and the family situation but also opportunity cost for an alternate use of time (Venkataraman, 1997). The psychological framework generally focuses on human attributes such as need of achievement (McClelland, 1961), cognition, intention or willingness to bear risk (Brockhaus and Horwitz, 1986, McMullen, 2011), individual’s alertness to entrepreneurial opportunities, self-efficacy (Chen et al., 1998), internal locus of control, and tolerance for ambiguity (Begley and Boyd, 1987). Based on this, it can be argued that the key to initiating the process of entrepreneurship lies within individual attributes, and non-psychological factors that lead some people and not others to engage in entrepreneurship process.

On the other hand, the situational perspective on entrepreneurial behaviour suggests that environmental or situational factors may trigger individuals to set up a business, independently of individual-level factors. This exogenous dynamic includes factors such as job displacement, previous work experience, availability of business opportunities and various resources (Barney, 1991), and governmental or stakeholder influences.

While the individual-level perspective focuses on intentional, motivational factors or evolutions in individuals’ perceptions, the situational perspective emphasizes the importance of exogenous dynamics as a trigger of the entrepreneurial process. Consequently, past research and theorizing suggests that individuals will engage in entrepreneurial action under the influence of these two main variables in isolation or in combination. What is less known, however, is why do some individuals at BoP level make decisions to engage in entrepreneurial businesses instead of limiting they engagement to traditional farming or becoming employed? To be clear, scholars have noted that the entrepreneurial process, including the factors behind individuals’ choices to become entrepreneurs at the BoP, is still unclear and calls for in-depth studies of this process (Bruton et al., 2012, Kiss et al., 2012, McGahan, 2012, Webb et al., 2013, Webb et al., 2009). In the next section, we briefly describe the other stages of the process of the entrepreneurship phenomenon according to different perspectives.
2.2. Theoretical perspectives of and entrepreneurial process

A number of theoretical perspectives have been used in process-based studies of entrepreneurship (Steyaert, 2007). As interest in entrepreneurship as a domain of research has intensified, new theoretical perspectives that recently emerged to explain the processes that underlie entrepreneurial action and are broadly referred to as the “emerging theoretical perspectives” (Eisenhardt, 1989), contrast with the more traditional model. The traditional model of entrepreneurship draws largely on economic thinking to describe how individuals or firms take entrepreneurial actions by searching for areas where the demand for a product or service exceeds supply (Casson, 1982) to discover an entrepreneurial opportunity, and evaluate whether it is worth exploiting (Shane and Venkataraman, 2000). The entrepreneurs’ goals are to find the most productive use of resources. This view also suggests that opportunities arise out of the entrepreneur’s alertness to information asymmetries (Dutta and Crossan, 2005, Shane, 2003). Alertness refers to a motivated propensity of entrepreneurs to formulate an image of the future by seeking out opportunities that have been previously overlooked (Kirzner, 1985). The relationship between alertness and opportunity identification is considered a function of both the knowledge possessed by the entrepreneur and how this knowledge is processed (Gaglio and Katz, 2001). Subsequently, the process remains basically goal-oriented and largely determined by competencies related to alertness, recognition and exploitation of opportunities, followed by business growth (Venkataraman, 1997).

Alternative emerging theoretical perspectives have extended the debate from opportunity as an objective reality, existing before the entrepreneurial process starts and awaiting discovery by an alert individual, to a phenomenon of creation. This creationist view argues that what turns out to be the opportunity cannot be known in advance or anticipated. Rather, they are part of society and embodied in the creative view that emphasises processes of enactment, interpretation and creativity (Gartner and Carter, 2003). A range of perspectives on the creationist view can be distinguished; from those on complexity and chaos theory, to the interpretative and phenomenological, social constructivist. This view posits that opportunities do not exist independently but are formed through the interaction of an entrepreneur or entrepreneurial team with the context (Steyaert, 2007). According to the advocates of this perspective and with their interpretative (Lavoie, 2015, Bjerke, 2007), phenomenological perspective (Spinosa et al., 2008), social constructionist view (Fletcher, 2006), actor network theory (Latour, 2005), pragmatist approach (Sarasvathy, 2001) or bricolage view (Baker and Nelson, 2005), entrepreneurial opportunities are not fully developed at the beginning of the entrepreneurial process. Besides the fact that entrepreneurial opportunities are subjective, socially constructed, and created by an entrepreneur through a process of enactment, Sarasvathy (2001) assumes that the entrepreneurial process is initiated
with an examination of the means available to an entrepreneur. In resource penurious environments, Baker and Nelson (2005) posit that entrepreneurs avoid challenges by applying combinations of available resources and using physical, institutional, or human resources in novel ways.

One of the key contributions of this emerging perspective on the entrepreneurial process is the focus on entrepreneurship as a rooted phenomenon that can only be understood with reference to context and contengency (Mason and Harvey, 2012) and the meanings associated with the context (Anderson et al., 2012). Recent studies have contributed to emphasize this (Nayak and Maclean, 2012, Popp and Holt, 2012, Colli et al., 2012, McGaughey, 2012, Dimov, 2011). However, the above-mentioned discussion presents two problems for the study of entrepreneurship at the Base of the Pyramid. First, both mainstream entrepreneurship and emerging perspectives reflect an entrepreneurial actions arise independently of the socio-economic conditions in which they are formed. In contrast, entrepreneurs at the BoP often lack resources and capabilities in deploying cognitive skills to discern and evaluate tangible resources to exploit objective opportunities (Viswanathan and Rosa, 2007). Similarly, creating opportunities also needs resources and capabilities. Second, both discovery and creative perspectives have focused on entrepreneurial activities in formal and informal institutional environments in developed countries. In contrast, BoP settings exemplify an informal economy, and the meanings of this informality differ dramatically from the definition of the concept in developed countries (Webb et al., 2015).

Given such issues as discussed above, the entrepreneurial process could unfold differently in the BoP context and could lead to different outcomes. Thus, it is vital to push the frontiers of entrepreneurship research in the BoP context. Although interest in doing so is now growing (Webb et al., 2009), the study of entrepreneurial action has received very limited attention (Zoogah et al., 2015) and the question of how entrepreneurs emerge and grow is unexplored.

3. Research methods
We adopt an inductive case study design by asking, what is going on here? Many scholars in the field of management studies argue that when the current theory is lacking or suboptimal, a new theory must be generated (Alvesson and Willmott, 2012, Gioia and Chittipeddi, 1991, Ketokivi and Choi, 2014), and new organizational research topics often benefit from a qualitative foundation (Steyaert, 1997). Thus, we followed Eisenhardt (1989) and Yin (2003), who recommend a case approach because it offers the prospect of producing results that are less likely to be deemed idiosyncratic to one context and allows for richer theoretical inferences. Grounded theory (GT) method was used to collect and analyse the data. This
method was used because it allows one to focus on the context, intentions, actions and interpretations of key players of the phenomenon under investigation (O’Reilly and Marx, 2012), and to remain theoretically flexible which allows for the detection of novel ideas useful for building new theory. We relied on the original work of Glaser and Strauss (1967) as principal guide.

The selection of cases for research should be driven by the aim of better understanding the phenomena of interest (Buchanan, 2012). The economy of the majority of countries in SSA is based on agricultural sector that employ more than 60% of the workforce (Zoogah et al., 2015). This study focuses on vegetable producers in Benin (Figure 1). Benin is a West African country with a population of approximately 10 million people (World-Bank, 2014). Despite a relative increase in its economic growth rates over the last decade, from 2.7% in 2009 to 5.4% in 2012, poverty is still widespread. Approximately 75% of the Beninese population live on less than 2 dollars a day (World-Bank, 2010). Agriculture is the most important economic sector, with approximately 70% of the country’s workforce gaining their revenue from agriculture, and contributing up to 80% to export revenues (World-Bank, 2014, SCRP-Benin, 2011). With the current development of high value products such as fruits and vegetables that increase substantially the revenue level of producers, agriculture provides a particularly interesting context in which to study the development of entrepreneurship at the base of the pyramid in Sub-Saharan Africa.

As advocated by Glaser (2002) data collection starts most often in a concentration site where the area of interest increases in concentration. Considering that the purpose of the study is to understand the bottom up process of entrepreneurial action in informal poverty settings, we were interested in finding cases that could represent an initial concentration site where a large number of individuals are involved in vegetables production. The desire to find an initial concentration site using the proportion of vegetable farmers resulted in choosing the department of Mono where about 57% of production comes from (Figure 1). Later on, we extended the data collection to the three other departments of southern Benin.
To accommodate the exploratory nature of the study, we combined focus group discussions (N=5) and in-depth interviews (N=36) with vegetable producers. Three focus group discussions (FGDs) in groups of 5 to 8 included younger producers aged 15-35 and the two other FGDs included older producers aged 36-50+ years. Limiting the number to a maximum of eight participants per FGD, we ascertained the availability of time to express opinion and discuss relevant items per participant (Krueger and Casey, 2000).

First, through FGDs, we explored more general patterns and factors influenced by opinions (Morgan and Spanish, 1984, Krueger and Casey, 2000). We relied on the list of producers available at the level of the Ministry of Agriculture (CARDER) to select the participants. We invited a moderator from the local staff of CARDER. The moderator led the discussion, established an atmosphere of trust, and promoted free discussions. We witnessed how sensitivities to agreements versus disagreements as well as dominant views and differing opinions provided insights into the overall topics. The FGDs for theoretical collection of data were semi-structured and based only on a general subject or issue such as: What motivates individuals to engage in vegetable farm business (agropreneurship) and why do they do it? How do these agropreneurs operate in practice?
Focus group discussions (about one and a half hour each) were recorded and transcribed. We examined, coded, categorized, and synthesized the transcripts per focus group discussion.

Second, through in-depth interviews, we complemented and strengthened the data collected through FGDs for understanding discrepancies among informants and gaining additional perspectives and issues (Miles et al., 2013). We interviewed 36 vegetable producers: 15 during the first round of data collection in the concentration site (Mono) and 21 during the second, using a face-to-face semi-structured interview technique. Building on this initial data from FGDs and interviews in the concentration site, the research expanded to additional locations and communities during the second round, where additional respondents were identified. Accordingly, categories and concepts were continuously refined as a result of insights captured during a series of interviews. These techniques were used because they offer sufficient flexibility to approach different participants differently while still investigating the same topic (Noor, 2008).

Interviews were open-ended with four consistent interview questions asked of each participant to start the conversation:
1. How interested are you in becoming a vegetables producer?
2. What are the reasons for starting fresh vegetables production?
3. What are the difficulties you face and how do they affect your entrepreneurial activities?
4. Were there any personal characteristics or situations that facilitate your activities or make them more difficult?

These questions provided the core building blocks of the interview. Additional questions emerged from the specific participant conversations, as well as from insights captured in previous FGDs and interviews, using the constant comparison analysis technique. During the course of interviews, respondents often mentioned processes, regular actions or interactions as an example to illustrate a point. When available, these processes and actions data were collected throughout the observation. As this iterative process guided the sampling, the selection of respondents for in-depth interviews became focused on factors that enable entrepreneurial actions, the strategies developed to cope with challenges and the reasons behind such a behaviour. In general, we reached data saturation after 30 interviews.

The data analysis of interviews consisted of four phases. First, we began the analysis by transcribing interviews to capture their overall experiences and perspectives. Second, interview transcripts were analysed to develop first-order concepts. Third, we organized our first-order concepts into more abstract second-order themes, and identified connections amongst these themes to build aggregate theoretical dimensions. Finally, using the data structure and summaries, we identified connections between our concepts, themes, and categories to develop a conceptual model of the entrepreneurship process in the BoP context.
4. Results and discussion

In this section the results of the five focus group discussions are first presented. Next, we describe the evidence we derived from interviews and what can be inferred from the activities of entrepreneurs. Figure 2 depicts the aggregate dimensions, the second order themes and the first-order concepts that are found to be salient for entrepreneurial process at the BoP. These we will describe in more details in the sections 4.1 to 4.6. Finally, we summarised the process of entrepreneurship by examining the literature and the empirical findings.

Although the participants’ opinions of the focus group discussions largely overlap, the final summary distinguished two categories of producers. In the analysis we therefore combined the results of three FGDs on the one hand and the findings of two other FGDs on the other hand.

![Figure 2](image-url). Features of Agopreneurship: First-order codes, second order themes and aggregate dimensions based on FGDs and interviews

4.1. Overcoming Challenges

A wide range of participants are engaged in the vegetable production businesses, because something challenging was occurring to them which triggered the process, and so our first
category was “overcoming challenges”. The participants of the FGDs often referred to two types of challenges: (1) Challenging situations and (2) disruptive events. Regarding challenging situations, participants in three FGDs emphasized that the concrete situations and problems they were facing have pushed them to find interpretations and give meanings to such challenges. The willingness to cope with difficult situations was portrayed as leading to the decision to engage in action.

Many challenging situations they emphasized involved low-income, difficulty in getting wage employment or in fulfilling basic needs. Participants reported feeling being at risk in their livelihood. While our participants range from illiterate farmers to well-educated ones with little access to formal employment, the one thing that unites them is first the need to survive. They did feel that they had to look for income-generating opportunities (that can meet their immediate and long term needs) to escape from the current situation, since the poverty is generalized in the community and therefore close relatives are facing the same situations. In an attempt to find a solution to the difficult situation, the vegetable businesses were established. For example, here is a story that one of our participants told us about how he got involved in vegetable farming.

I started farming for myself on a small portion of land after working for six months as an employee of another farmer here in this village. Before starting to grow these vegetables, it was hard for me and my wife and a 3-year old boy to have a regular two hot meals per day with the revenue I got from fishing and farm land. Although it was very challenging at the beginning, after the first harvest, my economic situation changed. ( ... ), I thank God, because nowadays, I am extending my farm, I have a small car and my children are going to private school where the quality of education is high.

For this participant, the vegetable farm business (agropreneurship) is a path that can help him to escape grinding poverty and daily struggle to survive. Moreover, this business is seen as a means to improve food security for families, to be able to afford to send children to school and to be relatively stable in the income generation. In another account, one participant told us about how his experience challenges him in getting wage employment after graduation.

It was very difficult for my parents to maintain our [relatively] large family. We were in financial crisis and a very vulnerable situation, I had a degree but no job, no money and no position. The only thing I had is the burden and responsibility as the eldest son of my father. Since my parents have spent a lot of money on my education, I have now the responsibility for succession for taking care of my sibling and also my parents. Since two years (after being engaged in vegetable production), [...], the poverty situation for me and my family is changing. We are eating better foods. There are more chances for my children to go further in their education, because I hope to expand my farm and build some things bigger. This will also create jobs in our community.
In contrast the participants of the two other FGDs often referred to disruptive events as the starting point of their entrepreneurial journey. They reported being involved in situations where they became aware of negative changes in their traditional business activities. They have experienced an unpredictability in the generating of income from fishing that represent their traditional activity. As they mentioned, fishing was one of the most important income-generating activities of the community settled between the sea and the lake of Mono since the seventeenth century. The passing of knowledge and skills from one generation to another within the community had led to specialization in this specific economic activity of fishing. This system of exchange works until the activity was threatened by exhaustion of fish stocks due to overfishing and pollution, and natural phenomena such as erosion, siltation and floods with many consequences. First, the livelihoods and income generation of fishing community members have been impaired. Generating substantial revenue from this traditional activity becomes uncertain because the volume of fish caught becomes also uncertain. Second, anticipating, predicting or understanding the production system is more difficult since the ecosystem has been disrupted. These uncertainties in understanding the system and the volume of production contribute to pushing individuals to engage in vegetable production that they assume to be more under their control. The following quote captures the general idea of pressure under which actors are by relying on traditional economic activities that seem not to work anymore.

_We found that the fishing activity we get from our parents becomes more problematic and we don’t know what to do to solve the problem of productivity that becomes lower and lower every day. ( ...)_
_Sometimes, we can spend hours on the river without any success. On the other hand, the day you are a lucky man, you can get just a basket [equivalent to 5 to 6 Kg]. ( ...) Therefore, you must be on the river every day with the hope to get a minimum for the next day._

In general, the focus group participants perceived that challenging situations and disruptive events spurred the emergence of entrepreneurship in vegetables production. It is on this point that the entrepreneurial project of farmers finds its origin within the community: the belief that the difficult situation of a precarious livelihood and the disruptive events that occurred in the traditional activity can be overcome by setting up vegetable farm businesses. Without these situations or events, entrepreneurial action would not be manifested within a part of the community. Therefore, and as we show in Figure 2, we identify the challenging situations, and external disruptive events as initiating forces in the entrepreneurship process. This leads to our first proposition.
Proposition 1. Entrepreneurial process at the Base of the Pyramid emerges primarily from external factors such as challenging circumstances and disruptive events.

4.2. Entrepreneurial opportunity development

Without any prior motivation, the agropreneurial process is triggered as the result of external events or circumstances. The individual does not actively seek to become an agropreneur. The trigger therefore happens as a direct result of a change or disruption considered as significant by the individual. The individual jumps head first into action without being really prepared. The agropreneurship suddenly appears as the best solution.

Since the majority of farmers jump into the vegetable business, they were not prepared for such endeavours. The later interviews reveal that respondents tend to learn by doing, which creates a gradual change in their orientation and attitude. They have achieved this by relying on perceived successful agoprenuers because a formal system to provide such knowledge does not exist. For respondents, the learning phase is fundamental for their financial sustainability and business performance. Many agopreneurs appeared to believe that their know-how is an important step to avoid failure. They tended to see this practice of learning as critical for their own success. Hence we make the following proposition.

Proposition 2. The entrepreneurial opportunity exploitation results from opportunities developed by learning

In the concrete situation described above, entrepreneurial action emerged through the willingness of individuals to overcome the challenges. Our findings call into question the implicit assumption in intentions (Ajzen, 1991), human motivations, entrepreneurial opportunity, and cognition as the only factors that influence the entrepreneurial process (e.g., Shane et al., 2003) and the existence of a market, information about the market and information processing ability as boundary conditions of entrepreneurial action in opportunity discovery theory (Casson, 1982, Shane, 2000). Although vegetable producers are well positioned to engage in the process because motivated by livelihood, there are new factors that emerge. Specifically, challenging situations and disruptive events appear as a determinant exogenous dynamic trigger of the entrepreneurial process. Consequently, they shift without an intention to start a business or a particular information gathering process. In addition, our results also call into question the rationality of the entrepreneurial actor in the ways human behaviour is preceded by the individual’s thought, or goals. In the situation described above, entrepreneurial action emerged through the creation of vegetable farms as a new business: a process which is in contrast with the utilitarian ends–means schema of mainstream entrepreneurship models of a systematic implementation of a rationally thought-out plan where the outcome is given, the selection between means to achieve the outcome by starting with the ends, analysing expected return, doing competitive analysis and controlling
the future. The case of agropreneurs tells a different story, one where the resources are scarce, the poverty is chronic, the stream of ongoing action is interrupted or disrupted by new events that reoriented behaviours. The emergence of vegetable businesses in our study is more problem-focused coping. This fits in closely with the creative action implicit in the pragmatism perspective (Joas, 1996), and rejects the Cartesian distinction between thought and action that lies at the core of the means–ends schema still prevailing in mainstream entrepreneurship studies.

Finally, the opportunity identification or recognition reflects an entrepreneur’s ability to detect when the demand for a product or service exceeds supply (Casson, 1982) and evaluate whether it is worth to exploit it (Shane and Venkataraman, 2000). The agropreneurs seem not to exhibit this ability, instead, the commitment to the entrepreneurial action is driven by challenging situations and/or disruptive events, and the entrepreneurial opportunity development is orientation-based learning. This appears as a distinctive feature of how entrepreneurship emerges in poverty settings: a cognitive-based response behaviour that includes an effort to alleviate stressful circumstances by defining the problem, generating alternative solutions and determining the benefits of such solutions.

4.3. Personal motivations

An agropreneur who starts, organizes, manages, and assumes responsibility for a vegetable farm business, offers an additional personal challenge that many individuals within the community prefer to staying in fishing activities or being an employee working for someone else. Some people accept the risks that go with owning a vegetable farm business, but also benefit directly from the potential success of the business. They tend to increase the business over time. By investigating what it is about certain people that drives them to take on the risk, the uncertainty and the independent structure of vegetable business ownership, the characteristic that appeared recurrently in the respondents’ statements is the question of needs fulfilment, and an increase in generated income. In an attempt to guarantee or improve their livelihood and income, a vegetable farm business was established. This is often the top motivational factor mentioned for initiating a vegetable farm business. The interviews showed differences between individuals’ motivations, especially as regards the intensity of the expressed motivation. Some declared a strong motivation whereas others perceived it mainly as one self-employment opportunity among others. It becomes clear that while the commitment to entrepreneurial action is driven by challenging situations or disruptive events, the entrepreneur’s motivation strengthens the sub-process of opportunity creation.

In business entrepreneurship generally, the decision to identify and exploit an opportunity is tied mainly to the impulse of the individual’s motivations and the expected profit (Eckhardt and Shane, 2003, Shane and Venkataraman, 2000). In agropreneurship, on the
contrary, the decision to act precedes motivations and a rigorous cost-benefit analysis. Next, the personal motivations become salient by strengthening the opportunity development. Hence we introduce the following proposition.

**Proposition 3.** Opportunity development is fostered by agropreneurs’ motivations of self-fulfilment, income generation and wealth creation.

4.4. Economic value prioritised

When informants describe the reasons why they have engaged in the new business of vegetables, some had reported that the challenging events and chronic poverty situations push them to go beyond an immediate time frame toward a greater return through thriving business activities. This group of farmers seems to give priority to solutions which involved efforts to effect radical change from survival to sustainable business activities in response to important and chronic problems. These actions involved actors in a more difficult action and taking responsibility even when faced with limited information, resources and skills needed to achieve a business development. According to participants, moving away from old and traditional businesses and finding other activities that could generate income in a sustainable way appear as one of the best options and agropreneurship offers this opportunity. Many agropreneurs believe that it is crucial to reduce the reliance on meager and aleatory revenue derived from fishing activity by launching new business activities of which they may know to some extent the outcomes. They prefer to establish a more governable business activity with a more or less predictable outcome by growing vegetables.

We learn from our participants’ accounts that farmers acknowledge the problem of the exhaustion of fish stocks and the causes of this, but that the government is unwilling to solve the problem. The approach they found is to shift to something new in order to come to terms with challenges of income generation. The uncertainty of the old business to generate income was a strong enough motive to push them toward vegetables entrepreneurial activities. Moreover, there is also an emphasis on the need to reduce this uncertainty of income generated by engaging in agropreneurship in which they can control the input supply more easily. The following quote exemplifies this:

(...)It’s true that I perceived the necessity to shift to agriculture businesses, but what I do not want is to fall in the same tenuousness situation in the next. That’s why I prefer to grow vegetables instead of maize or cassava [extensive farming system]. So that, (...) I can control the water supply and grow a year round instead of waiting for the wet season before continuing my business activities.

Apparently, vegetable-farmers are able to acquire a level of self-perceived control of their life by structuring uncertainty through an entrepreneurial activity with growth potential since they are contrasting vegetable production as providing high value products and as being
more under their control compared to traditional extensive farming in which they rely more on the wet seasons. Another reported example of the structuring uncertainty of income included the following:

(...) From my experience in vegetable production, I do not envy any more those who are working in public administration (....), I can also save a lot of money after covering my actual needs and use them during my old age [when I will not be capable to farm](..... ). I can say that there is a future in this business.

In contrast, we also found evidence of low levels of willingness to structure uncertainty reportedly decreasing actors’ motivation to respond to challenging events and situations. In these instances, participants told us of individuals feeling a general sense that someone else (government authority, local authorities, or a family member) had the responsibility to help in reducing the challenges they are facing. They tend to be more emotional-focused in coping with challenging situations:

Although the government has the power and means to help us to solve the problems of low productivity we are facing in fishing activities, there are no “visible” actions for many years..... our local leaders pretending not to be concerned with the problem.

This finding struck us as a phenomenon similar to fatalism and resignation that are often the norm in an extremely poor context where responsibility to act is inhibited by repeated failures experienced by people, decreasing the likelihood of any particular member taking action. Our findings suggest that to the extent that smallholder entrepreneurs at the poverty settings can overcome the fatalism or resignation surrounding them, they will be motivated to respond effectively to challenging situations and events. This leads to our fourth proposition. In sum, we propose the following.

Proposition 4. Perceived economic value moderates the opportunity development. The better the entrepreneur is at articulating his perceived economic benefits, the easier will be the formulation of an entrepreneurial project or the development of entrepreneurial opportunities.

4.5. Personal attributes

The findings regarding the reported importance of benefit perceived by agropreneurs, particularly the need to structure uncertainty, made us curious about why actors specifically reported the need to structure uncertainty. As noted above, there were several other actors facing a challenging situation and also engaging in the new vegetable business but who did not respond to structuring uncertainty to a large extent. So, we asked a number of questions about what makes some actors feel more need to structure uncertainty in order to engage in entrepreneurial action, while others resign? We probed our participants for information about how they construed the situation. Several factors were reported as heightening actors’
perceptions in structuring uncertainty. A path emerged in this first stage of our model (figure 2) that was reported as bolstering the need to structure uncertainty: human agency. By agency we refer to the capacity of persons to transform existing states of affairs, the ability to respond to events outside of one’s immediate sphere of influence to produce a desired effect (Onyx and Bullen, 2000). A belief reported by informants that change is possible based on their own initiative, acquiring a semblance of control of their business activities, everyday circumstances and decisions in matters relating to the environment they live in, is a potential psychological marker.

Proposition 5. Human agency moderates the relationship between opportunity development and opportunity exploitation. The stronger the ability of an entrepreneur to respond to the challenging situations or events in developing entrepreneurial opportunities, the more likely and easier the exploitation of entrepreneurial opportunities.

4.6. Strategic Behaviour

If the commitment to entrepreneurial action and opportunity development drive the first steps of the entrepreneurial process, the shift to opportunity exploitation is also accomplished through the ability of the agropreneur to mobilise production and transaction resources. In order to realize their potential, agropreneurs rely on their capabilities to connect with the surrounding context. They created networks involving multiple actors such as family members, friends and local vegetable producers who play a role at the beginning of the entrepreneurship process. Engagement of friends and family members helped the potential agropreneur to get access to a minimum of support. This support includes financial resources and production inputs such as land, equipment and seeds. The workforce is mainly provided by family members as the agropreneurs at the beginning lack financial resources to rent labour.

The social embeddedness of vegetable farmers is also crucial for the agropreneurs at production and transaction levels. It could be noted that potential agropreneurs were not able to use their previous business models in vegetable production business. According to farmers, vegetables production is an intensive system due to the high use of external inputs (fertilizer, pesticide, improved varieties) and the production is labour-intensive. When an individual engages in vegetable production business, they had to learn and collaborate with other more experienced producers. The informants also indicate how collaboration facilitates transaction between agropreneurs and buyers by relying on a referral pattern. For instance, in order to reach important and trustworthy buyers, an agropreneur needs to refer to other producers within the community. Peers also provide referral opportunities because an agropreneur may be referred to potential buyers for the quality and the safety of his products. This referral pattern is also critical to accumulate and leverage financial and non-financial resources.
needed by an agropreneur within and outside the community. As a result, networking ability means the ability of identifying potential resources providers. Hence we introduce the following proposition.

**Proposition 6.** The ability of the entrepreneur to network moderates the move from opportunity development to opportunity exploitation. The stronger the ability to identify and create supportive networks, the more likely the exploitation of entrepreneurial opportunities.

Figure 3. Process model of entrepreneurial action

4.7. **Entrepreneurial process**

Based on our empirical findings, we propose a model (Figure 3), which frames the main stages of the entrepreneurial process at the base of the pyramid and individual variables at the intervening stages of the process. Table1 summarizes the process of entrepreneurship as identified in the entrepreneurship literature, the focus group discussions and interviews with agropreneurs.

Table 1. Integrated conceptual framework of entrepreneurship process based on the two main sources of entrepreneurship literature and the empirical results
<table>
<thead>
<tr>
<th>Process trigger</th>
<th>Individual’s motivations and the expected profit.</th>
<th>The willingness to accept an affordable loss during the experimental process of opportunity development.</th>
<th>The willingness to overcome challenges situations and disruptive events.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurial opportunity</strong></td>
<td>Identifying and exploiting opportunities in existing markets.</td>
<td>Identifying and exploiting opportunities in new markets with high levels of uncertainty.</td>
<td>Entrepreneurs in challenging situations, ignore the opportunity to engage in entrepreneurial learning process.</td>
</tr>
<tr>
<td><strong>Process sequences</strong></td>
<td>- Identification an opportunity before developing anything. - Evaluation of objective opportunities. - The establishment of goals to exploit identified opportunities.</td>
<td>- Develops multiple variations of a product or service to arrive at a commercial offering. - Experiments with different ways to sell and deliver a product or service. - Responds to unplanned opportunities as they arise.</td>
<td>- Overcoming challenges by defining the problem, generating alternative solutions. - Determining benefits of such solutions. - Involving in entrepreneurial learning process.</td>
</tr>
<tr>
<td><strong>Process enablers and catalysts</strong></td>
<td>Entrepreneur’s competencies related to alertness, to information asymmetries.</td>
<td>Community (customers, suppliers, and other organizations): engagement as a catalyst for emergence and growth: negotiates with other parties.</td>
<td>Personal attributes, benefits perceived and strategic behavior through networking as a process enablers.</td>
</tr>
<tr>
<td><strong>Reasons behind such sequences and relationships</strong></td>
<td>Entrepreneurs as decision makers dealing with measurable or predictable future will do systematic information gathering and analysis within certain bounds.</td>
<td>Entrepreneurs as decision makers dealing with unpredictable phenomena will gather information through experimental and iterative learning techniques aimed at discovering the future.</td>
<td>Entrepreneurs as decision makers dealing with challenging situations or events, will find key responses behavior to address challenges.</td>
</tr>
<tr>
<td><strong>Boundary conditions</strong></td>
<td>Entrepreneurial opportunities are objective and identifiable a priori. The environment is static and linear. The future is predictable.</td>
<td>Entrepreneurial opportunities are subjective, socially constructed, and created through a process of enactment. The environment is dynamic, nonlinear, and the future is unpredictable.</td>
<td>Entrepreneurs confront situations of significant resource scarcity. Necessary Resources are gathered and strengthened, and next, opportunities are developed. Entrepreneurs actions are socially embedded and governed by informal rules.</td>
</tr>
</tbody>
</table>

In general, Table 1 shows that the results of the empirical study brought new insights into how entrepreneurs and their firms emerge and grow at the BoP in developing countries. For instance, while the literature highlights individuals’ motivations and the expected profit or the willingness to accept an affordable loss as process trigger, the empirical results of this study highlight the willingness of potential entrepreneurs to overcome challenging situations and...
disruptive events. Regarding the factors that facilitate the process, in contrast to the literature, the study shows that personal attributes, perceived benefits and networking function as process enablers.

5. Conclusion and implications
This study offers an exploration of the complexity of an entrepreneurial process in poverty settings at the base of the pyramid. Based on our empirical findings and on a comparison and contrast with the existing theories, we provided the trigger path and a three-stage model of the entrepreneurship process at the BoP. Beyond the description of the specific characteristics of each stage, the roles of the process enablers are depicted as affecting the way the process unfolds. Moreover, a set of propositions has been developed positing the basis for future empirical investigations. The contributions of our article to the ongoing debate on entrepreneurship in developing and emerging economies are fourfold.

First, in answering the call for a deeper look into the dynamics by which people in poverty settings develop their business model, we provided a comprehensive framework, as a further step in the process of boundary-setting and awareness-raising meant to stimulate future research.

Second, our study opens up the realm and reach of the entrepreneurship process at the BoP and unpacks each phase of the process and intervening dimensions, highlighting which characteristics are most relevant in determining the shift from one phase to the other. The six categories discovered by us were overcoming challenges, personal motivations, economic value prioritised, personal attributes, strategic behaviour and entrepreneurial opportunity development. Although we certainly do not claim these are the only six dimensions of the process, they provide a reasonable starting point for future work on the topic. Our empirical findings help break new theoretical ground for the emergence of entrepreneurial action. One interesting theoretical puzzle that emerges is that motivations and the opportunity identification ability are not sufficient to explain entrepreneurship at the base of the pyramid. Challenging situations and disruptive events are the principal triggers of entrepreneurial action. Another interesting theoretical puzzle that emerges from the dynamics of the process concerns personal attributes; human agency is viewed as a potential psychological response for structuring uncertainty. This point may also help explain why entrepreneurship with growth potential or the so-called “transformative entrepreneurs” (Bruton et al., 2015) are so rare at the BoP level. Indeed, human agency appears to be rare in poverty settings as evidenced by the growing literature on economic development, highlighting how fatalism and resignation are often the norm (Wood et al., 2015).
Finally, our research contributes to the conversation about the role of strategic behaviour in the process of entrepreneurship. The role of resources and capabilities as drivers of entrepreneurship effectiveness is a keystone in resource-based theories (Barney, 2001). Indeed, the extent to which entrepreneurs mobilize and combine resources can influence the effectiveness of businesses. Sadly, there is a shortfall of not only management capabilities but also human, financial, and technological resources at the BoP (Zoogah et al., 2015). Our findings show that agropreneurs develop social embeddedness to cope with this shortfall by identifying and developing their networks.

From a practical point of view, our study provides insights into the determining factors that influence the choice of agropreneurship, which can help the majority of people in developing countries how to encourage farmers to move from production oriented agriculture to entrepreneurial agriculture. Moreover, explanations as to the sequence of factors that may influence their entrepreneurial action can help individuals better apprehend the situations they will be faced with, and thus be better prepared.

6. The limitation of the study and perspectives for future research

As with other qualitative research our study has nonetheless suffered from the usual limitations associated with case study research, which trades statistical significance for richness, accuracy and insight into observed processes (Langley, 1999). Our insights into the dynamics of entrepreneurship at the BoP raise the question of generalizability, of the extent to which our findings apply to other industries or sectors. It is hard to exclude the possibility that specific characteristics of our research setting might have affected the evolution of the observed process. Since our goal was to elaborate a theory on the entrepreneurship process in poverty settings, more research is needed in order to confirm whether the ideas we have introduced hold when subjected to quantitative inquiry, and whether they are generalizable to other sectors and settings. We cannot infer from our reports the actual causal process unfolding without a variance in our dependent variables. Therefore, building on the theoretical model we developed in this article, future research might test empirically each one of the relationships highlighted in the study, with the aim of generalizing our results.

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