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## **Practical idealists**

**The stories of entrepreneurs running green business in China**

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## ABSTRACT

Small and medium enterprises account for more than 90% of all enterprises operating in China, contribute to more than 60% of GDP and create about 80% of country's jobs (Xinhua 2012). Large scale of the SME industry impacts significantly both on environment and social structures (Randriamalala et al. 2013:88). In the context of such importance of SME industry for economy and society it is logical to assume that sustainable development will not be possible without SMEs going 'green'.

This thesis seeks to point to the potential contribution of SME industry to sustainable development of Chinese economy and society by trying to understand the motivation and choices that led companies' founders to initiate green business.

Case study method is used in the study in order to explore in-depth the lives of four entrepreneurs that chose to run a green company. The material is presented in following order: organizational profile is followed by the interpretations of factors affecting individuals' life choices based on Moore's model of entrepreneurial process.

My findings indicate that all of them had the intention to create something meaningful for personal satisfaction and people's and environment's benefit.

As it is seen from the discussion the capabilities of the entrepreneurs to make use of existing opportunities, create new opportunities and thus affect social norms and establish new habits among population, are very important for development, because nowadays the world is in need of providing innovative solutions to environmental and social challenges.

**Key words:** entrepreneurial process, green SMEs, motivation, environmental values.

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## INTRODUCTION

The topic of current study emerged during my internship for Institute for Environment (IED) and Development in Beijing in autumn 2013. One of the areas of work of my hosting organization is to support green SMEs (small and medium enterprises) in China, in particular improve business model and increase their positive environmental and social impact. As part of internship duties I had to prepare articles about some of the companies in English. This task made me look from a different angle on evolvement of green industries and green services in a developing country on the example of China.

The need for reducing environmental damage and shifting towards green technologies in production and waste utilization in China is very urgent (Goelz 2009:159). Rapid economic development during past decades resulted into massive environmental damage and extensive growth model pushed natural resources to the limits (Goelz 2009:155, Hilton 2011:7, Lu and Cai 1997:120, Zhang 2012:2). The implementation of legislation passed between 1989 and 2008, that is supposed to provide basis for green economy, remains poor (Goelz 2009:156; Zhang J. 2009:21) due to weak legal institutions and vague language of the laws themselves (Goelz 2009:166).

Small and medium enterprises account for more than 90% of all enterprises operating in China, contribute to more than 60% of GDP and create about 80% of country's jobs (Xinhua 2012). Large scale of the SME industry impacts significantly both on environment and social structures (Randriamalala et al. 2013:88). In the context of such importance of SME industry for economy and society it is logical to assume that sustainable development will not be possible without SMEs going 'green'.

There is evidence, that the entrepreneurs have potential to resolve environmental issues by creating opportunities (Dean and McMullen 2007:53) and thus may contribute to sustainable development by creating new social norms. In addition, there is plenty of academic literature available on the topic what drives and hinders adoption of environmentally friendly processes in SMEs in China (Randriamalala et al. 2013) and all over the world (Agan et al. 2013, Heras and Arana 2010). Despite this abundance, in China the focus is on external, structural conditions, like

legislation, customers pressure, and expected benefits (Zhang et al. 2013:62). The facts mentioned above refer to already existing companies that adopt green technologies and processes.

During my internship I obtained access to empirical material collected by IED about green SMEs, got a chance to learn about real life stories and found out that some companies originally emerge as green ones, not because of external conditions, but due to intentions of the founders who were aware of environmental problems and wanted to make the change and bring positive impact to the environment and peoples' lives. This fact that challenges common assumption that small business to be started for rational decision of making profit, and gaps in literature explaining entrepreneurs' motivation and success factors encouraged this study, the aim of which is stated in the following section.

#### RESEARCH AIM AND RESEARCH QUESTION

Sustainable practices and sustainable behavior that arises from bottom up in developing country, suffering from various environmental problems, constitute very significant social phenomenon to be studied on the example of individuals running green SMEs<sup>1</sup>. Due to deficiencies in literature the role of entrepreneur, his/her personal attributes and factors that influenced those during the whole process of starting and succeeding in running green company is not well-explored.

This thesis aims to point to the potential contribution of SME industry to sustainable development of Chinese economy and society by trying to understand the motivation and choices that led companies' founders to initiate green business.

Thus the question that guides my research is:

- *What drives behavior of entrepreneurs running green SMEs according to their own view?*

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<sup>1</sup> Term 'green SMEs' is explained in theory section of this study

The majority of the studies published on entrepreneurship are of quantitative nature (Neergaard and Ulhoi 2007:2). In order to answer research question and conduct in-depth research of the issue, on contrast, this study is built on qualitative approach, that provides with tools to collect extensive background information, allows to collect non-standardized data, focuses on participants' meanings and analyzes social actions within specific context. Four stories of four individuals that succeeded in running green SME constitute four cases that are analyzed separately, but with the use of the same framework that connects them together. Moore's model of entrepreneurial process was chosen as analytical framework because, unlike other theories, it captures the entrepreneurial activity as a process developing through certain stages and allows to integrate factors of different nature that influenced that process. Separate analysis of each case is followed by the summary of obtained results.

## THEORETICAL FRAME OF THE STUDY

The theoretical section of the study includes discussion on how terms 'sustainable entrepreneur' and 'green SMEs' are understood in current study and the presentation of theory that underpins the analytical model used to analyze the material collected during fieldwork process.

### SUSTAINABLE ENTREPRENEUR

There are plenty of definitions on entrepreneurship and sustainable entrepreneurs available in the literature (Heinonen and Poikkijoki 2006:82). Entrepreneurship itself is an interdisciplinary concept, that integrates roots from economy, psychology, sociology and management (Neergaard and Ulhoi 2007:30; Nga and Shamuganathan 2010:261). For example, economic theory strengthens the rational way of doing things (like importance of financial return above social) and ignoring variety of personal values and capabilities, while personality approach makes emphasis on physiological traits of individual (like acting creatively, using opportunities, managing risks) (Nga and Shamuganathan 2010:259-261). Among the characteristics that are used to describe entrepreneur I consider following to be crucial in the context of current study: the ability to obtaining innovative business ideas (Moore 1986:66) and transform them into action together with making use of opportunities to start for-profit business (Heinonen and

Poikkijoki 206:82). The link between ideas and action is crucial (Carsrud and Brannback 2011:10), because otherwise the existence of for-profit company is not possible.

Nowadays there are many different types of small enterprises, that try to tackle environmental, social and other problems in one way or another. Accordingly there are quite some terms that are used to describe these types of companies and their founders. The mostly frequently used terms are social entrepreneurship, eco-entrepreneurship, green and sustainable entrepreneurship. In this study I refer to the sustainable entrepreneurs when talking about individuals and green SMEs when talking about enterprises. Sustainable entrepreneur differs from the rest by having a desire to improve the quality of life and environment (Rogers 2010:126).

Briefly summarizing the concepts of entrepreneur and sustainability, sustainable entrepreneur can be defined as an individual who resolves environmental and social issues through creating and implementing successful business opportunities. In the literature it is described as a combination of economic, social and environmental value creation (Hockerts and Wüstenhagen 2010:485, Kuckertz and Wagner 2010:525). For the reason that sustainable entrepreneurs combine practical and altruistic traits, I called them practical idealists.

## GREEN SME

Though the individuals (sustainable entrepreneurs) are the focus of the study, the selection of the respondents (the process of which is described in methodology section) was made depending on the profile of the companies they manage. As it was mentioned above, different terms may be used to name small for-profit companies that provide solutions for challenges of sustainable development, the term 'green SME' is used in current study. It is adopted from the research conducted by IED, that was performed with the aim of developing methodology for evaluation of performance of green SMEs (Ge et al. 2012:4).

The definition of SME is based on Chinese Classification Standards on Small and Medium enterprises and refers to the companies having less than 2000 employees with annual turnover less than 300 million CNY (Chinese Yuan) (Randriamalala et al. 2013:86).

Term 'green' refers to SME delivering positive environmental and social impact in addition to economic return. According to framework developed by IED, green SME operate within following sectors:

- Renewable energy
- Energy efficiency and conservation
- Water resources management
- Pollution prevention and waste management
- Environmentally friendly new materials and processes
- Sustainable land use
- Biodiversity protection
- Other related green fields

(Ge et al 2012:7).

The positive environmental and social impact evaluated by IED is based on empirical data provided by participants of the project by filling in the questionnaire (that incorporates questions on financial, environmental and social performance of the company). Environmental performance includes the research and development of environmentally sustainable technologies and products, efficient use of resources (including electricity and water consumption), focus on recycling, energy and carbon emissions monitoring. Social performance includes provision of the workers with good working conditions and competitive salary, focus on staff trainings related to sustainable development, promotion of eco-friendly behavior among local population.

#### THE TRIPLE BOTTOM LINE FRAMEWORK

Incorporation of economic, social and environmental aspects in the concept of green SME is determined by theoretical framework of triple bottom line. The emergence of sustainable development framework also instigated the attempts to develop a suitable measurement to evaluate sustainability, in particular sustainability of organizations. Triple bottom line (also known as 3p: people, planet, profit) appeared as a response to show the actual costs of the business, not only monetary profit as the only measurement tool of its success, but also its environmental and social impact (Goel, 2010:31).

John Elkington was first to use this term in publications in the 80-s as a framework for corporate performance reporting (Goel 2010:31). Now it is largely adopted by the non-profit sector when it comes to evaluation of the company's environmental footprint and social performance (Norman and MacDonald 2004:243; Slapper and Hall 2011:5). The index consists of economic, social and environmental variables, which however do not have universal standard of calculating so gives space for variations (ibid). This method is advocated due to its transparency and accountability (Goel 2010:32-33), but is criticized for absence of measurement standard (Slapper and Hall 2011:5). It is argued that, firstly, additional bottom lines may exist, and, secondly, it might not be possible to make objective measurements of social and environmental impact (Norman and MacDonald 2004:246).

#### ANALYTICAL FRAMEWORK: MOORE'S MODEL OF ENTREPRENEURIAL PROCESS

Analytical frames constitute ways of seeing the problem by the researcher (Ragin and Amaroso, 2011:64). The specific character of the research aim and research question imply this study to be of inductive nature, that requires analytical framework for systematic analysis and that will shape the interpretations of all four cases in accordance with the same logic. The choice of relevant framework was based on following criteria:

- be broad enough to capture historical/ background context (George and Bennet 2005:92);
- be able to break the data (empirical material) into parts that at the same time are viewed in relation to the whole (Ragin and Amaroso 2011:57);
- provide the possibility to present data in chronological order (for better understanding of the case material) (George and Bennet 2005: 94);
- serve as structure to provide cross-case comparability (Bryman 2012:472).

The process of choosing relevant analytical framework for this study was challenging, because theories discussing entrepreneurial motivation and behavior from social science perspective are limiting in one or another way. For example, capability approach (Gries and Naude, 2011), theory of planned behavior (Zhang et al. 2013; Lee et al 2011), emphasize important factors influencing entrepreneurial activity like agency and personality traits, however, do not explain all aspects of behavior and do not capture the entrepreneurial activity as a process developing in chronological order.

The Moore's model of entrepreneurial process was selected as one satisfying stated criteria. As the concept of entrepreneurship roots in different sciences, Moore's framework integrates ideas from business, psychology, sociology and others (Neergaard and Ulhoi 2007:29). Thus it reflects the complexity of the phenomenon better than other theoretical approaches. This framework provides with opportunity to look at an entrepreneur from a dynamic perspective, approach illustrates a process behind the result and serves as explanatory model with opportunity to see how it developed due to certain matches between personal traits, values, and events that took place in the life of the respondents.

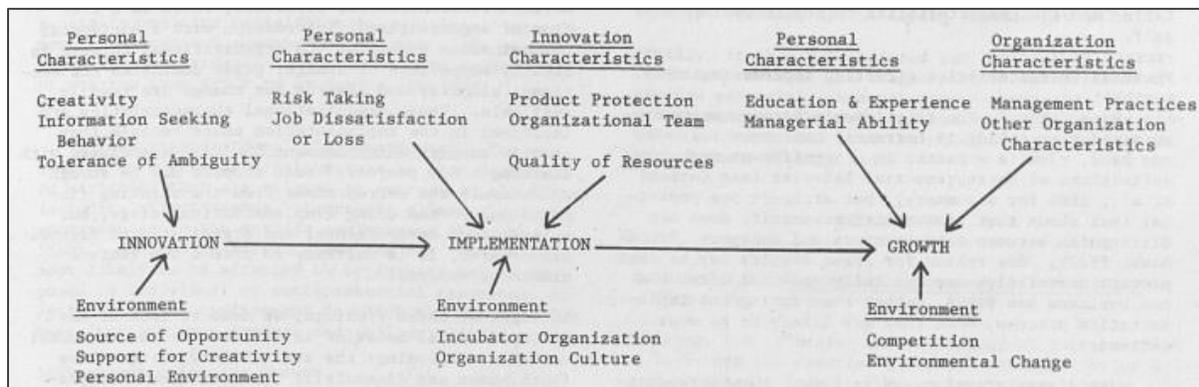


Fig.1 Moore's model of entrepreneurial process

Source: Moore 1986:67

Figure 1 shows Moore's model as it was developed and published in 1986. The author recognizes entrepreneurship as a process with stages (which are innovation, implementation and growth) that sequentially follow one another (Moore 1986:67). The phases of the entrepreneurial process reflect crucial characteristics of an entrepreneur, where innovation is associated with creating ideas, implementation refers to risk-taking and growth signifies success (ibid.). It is seen from the scheme that personal, venture and environmental characteristics are integrated into the model and affect the process, meanwhile different factors may be more and less important on different stages (Moore 1986:66).

This framework is applied for analysis in following way: the stages of entrepreneurial process remain the same as Moore proposed, while the influencing factors are identified me during

analysis of the data collected during semi-structured interviews. Due to the logic, that factors arise from empirical material, while the chain of stages remains the same, brief explanation of stages (as discussed by Moore, 1986) is provided below.

*Innovation phase:*

The innovation phase is the stage when the idea for a product or service is generated. Sometimes the entrepreneur generates a quantity of ideas to maximize towards the aim in order to select and optimize a fewer ideas for further development.

*Implementation:*

The implementation phase could be described as the entrepreneurial event. This is when the idea is actually implemented to become something real and comprise events from introduction of the goods and services to various actions that require new production methods, expanding to new markets and etc.

*Growth:*

The last stage is when the idea is implemented and consolidated on the market. Growth is one way to measure the success of the idea and implementation. This phase can be challenging to go through.

LIMITATIONS OF THE ANALYTICAL MODEL

Though this model reflects the complexity of the entrepreneurial process, it has some limitations.

Firstly, this analytical model is presented as linear process, which may not be the case in real life.

Secondly, the concept of innovation, in my opinion, is not well elaborated and might be misleading without more detailed explanation. ‘Innovation, in general, is the implementation of a new or significantly improved product (e.g. change in product properties), process (e.g. changed delivery methods), marketing method (e.g. new product packaging) or organizational method (e.g. changes in workplace organization) in business practices, workplace organization, or external relations (OECD, 2005: 17, 46 cited in Klewitz and Hansen 2014:58).

Thirdly, in my opinion, this model is more suitable for analyzing start-ups that have already reach growth stage, while it might not fit all kinds of enterprises, especially the ones existing on the market for quite a long time.

## METHODOLOGY

### PHILOSOPHICAL WORLDVIEW

This section is included into the study because it is proved that philosophical assumptions influence the chosen methodology, the way research question is formulated and the choices of theoretical frameworks (Creswell 2013:15,18).

This is my first experience of doing social research. Previously I didn't have to identify my assumptions about reality and science and reflect on the possible biases, of which, as I now understand, I had little awareness. Crystallization of my philosophical worldviews turned out to be one of my personal learning outcomes of the fieldwork and data collection process.

The understanding that methods are not neutral tools (Bryman 2012:5) occurred during reasoning about research question, searching for the theory and relevant research strategy. When I arrived to the field I quite easily determined the phenomena that I am interested in studying, which is: what makes a person to start a green company in China. It implies the understanding of people life choices and the context in which they live in order to be able to grasp the meanings of the events that my respondents assign to them. These assumptions helped me to identify my ontological position as social constructivist according to Creswell (2009:8).

However, my epistemological considerations, that refer to how the knowledge is produced, (Bryman 2012:6) were leading me away from formulating the research question. My previous educational background<sup>1</sup> together with feeling uncomfortable in the role of the researcher made me favor quantitative approaches. Being not confident that the reality that I discover will be credible and trustworthy influenced my high trust in numerical data. In other words, qualitative approach seemed not as scientific. The way I formulated the research question made me reconsider the research design. Decision to go for qualitative approach was one of the most crucial during the whole research process, because it let me to find the right angle to the research

problem and how to answer the research question. Now it made perfect sense, because social constructivism is a philosophical world view seeks for making valid interpretations of social processes by conducting a qualitative research (Creswell 2009:8). Understanding the social world through interpretations of the participants defines my epistemology as interpretivism (Bryman 2012: 380).

#### RESEARCH STRATEGY: CASE STUDY

In my research I focus on choices that people made, and I tried to understand their life context and collect as much information as possible about their life stories through semi-structured interviews. While life context and working environment help to understand historical and cultural settings, broad questions give participants opportunity to construct meaning of the situation. Drawing on the academic literature, the emphasis on qualitative inquiry is the most appropriate for answering my research question. Qualitative approach is useful when interpreting culturally significant phenomenon (Ragin and Amoroso 2011:114) and when the researcher is aiming to grasp the meanings that participants express (Creswell 2009:135). Moreover, the choice of analytical framework emphasizing the process matches qualitative research approach that tends to view social life in terms of processes (Bryman 2012:402).

Case study was chosen as a method because this method of inquiry allows to explore real-life phenomenon in depth, especially when contextual conditions are highly important for the understanding of that phenomenon (Yin 2009:18). Though case study is a method that is not often used in research on entrepreneurship because it is less respected and more difficult to publish, this method is good specifically for researching entrepreneurship the understanding of which lies in descriptive background (Neergaard and Ulhoi 2007:43).

The study consists of four cases, where analysis of each cases contributes to the understating of the potential of small companies contribute to change of social norms towards more sustainable, and what factors influence the individual who possesses decision making power in the company. The case constitutes of presentation of organizational profile that sets the context for the analysis of the data collected from sustainable entrepreneur.

#### DATA COLLECTION

According to Creswell (2013:147) data collection process includes finding people to study and finding ways to gain access to them, establishing sampling strategy, collecting data from more than one source (interviews, on-line data gathering, documents).

My choices were limited to the nature of the phenomenon: the number of such companies is limited, they are spread all over the country and it is not easy to find out about them due to small scale and mostly Chinese language content of the websites. Thus I selected the companies from the data base of my hosting organization. I used EID data base because companies were selected in accordance with triple bottom line criteria and information on performance of the company including social, financial and environmental was available for me to study. Due to the scope of my study (limited time and financing) I had no resources to conduct a pre-selection process by myself which would involve making connections to the company founders, requesting their financial documents and going on site visits.

I chose purposive sampling strategy. Though the research is focused on sustainable entrepreneurs, the selection process targeted the companies, that passed triple bottom line criteria and provided real interest in terms of the operation in relation to sustainable outcomes of their operation. Companies were selected from different industries to ensure certain variation between cases and show diversity of the tackled problems and diversity of sustainable solutions across sectors. The fact that I did background research allowed me to use purposeful sampling strategy when selecting participants, because I knew about the ones that have a story to tell. Creswell (2013:156) states that researcher reflects more on whom to study and who will contribute to better understanding of research problem. Therefore I have identified four respondents who happened to be different age, live in different parts of China and run companies within different industrial sectors.

Speaking of data sources, in my case secondary sources included information that I got access to as an intern of my host organization (filled in questionnaires and articles) together with web-site content. Preparing articles about the companies turned into extensive preliminary research prior entering the field. This kind of background analysis gave me good notion on what my potential respondents are doing (and later constructed the sections presenting the organizational profile of the companies). This was very useful, because all of them operate in different industries, and it took time to investigate companies' business segment.

Semi-structured interviews became main source of primary data, that were supplemented by the notes and observations I made during the research process. Interviews were recorded and then transcribed. I was lucky to talk to people in person (not on the phone), however in most cases they had limited time. Face to face communication was a big advantage and helped to build up trust during the conversation, and some of the respondents were willing to tell more. Another advantage was the fact the all the respondents spoke good enough English to express themselves. I didn't have to worry that data is lost in translation, or they do not understand me.

#### CRITICISM OF DATA SOURCES

Data collection process was limited due to the reasons described below.

Though I conducted face to face interviews and was introduced to the participants by gatekeeper who is a very valuable person for them, which helped to build trust, not all interviews resulted into obtaining enough data for analysis. I had lack of interviewing experience, while people also varied in their ability and will to communicate information and personal experiences. One participant was very open and shared a lot of information, while another one who was a fresh university graduate wasn't so open. This resulted into not having equal amount of material available for each case.

Another problem is the variety of data sources. Focus on the founders of green SMEs that are located in different parts of China made it difficult to apply other methods of data collection than interviews, and studying secondary materials provided by EID. Due to the fact I couldn't spend prolonged time in the field, I wasn't able to do enough of participants' observation (because I didn't have possibility to go on site visits and attend the activities of the companies).

#### DATA ANALYSIS

The aim of the data analysis is to provide answers to the research question (present holistic picture of the case) in the way providing deeper understanding of the problem together with giving the opportunity for the reader of this study to make up his/her own opinion about the phenomenon researched.

The strategy for data analysis consisted of summarizing field notes, establishing links between data and analytical framework of the study and then presenting the results. The fact that the

interviews were recorded helped a lot during the transcription process. The information collected from interviews was restored in chronological order using narrative form of data presentation.

The description of case focuses organizational profile, while the analysis itself focuses on the story of the particular individual. The information about the company sets the context and shows what which sustainable solutions are offered to the environmental and social problems by Chinese entrepreneurs. The presence of extensive pieces of descriptive material is justified by the importance of context for understanding the behavior (Bryman 2012:401).

## TRUSTWORTHINESS

Trustworthiness is a criterion for evaluating the qualitative study (Bryman 2012:390).

In order to strengthen the trustworthiness of the study, I replicated the procedures of inquiry for every case, used various forms of data to collect information, checked transcripts and provided descriptive context along with quotes from the interviews with the aim for the reader to make his own conclusions.

Acknowledgement of subjectivity is another important procedure to insure the quality of qualitative research for researchers who hold constructivist worldview, which includes discussing biases and reflexivity (Neergaard and Ulhoi 2007:386). This can be found in following section.

## POSITIONALITY

This section introduces my background and what might have had impact on the research including my position, reflection on my biases, values and experiences.

The researcher is never a neutral person, who just collects facts (England,1994:84). Researcher needs to document his/her position (Creswell 2013:216; Rose 1997:305) (cultural, gender and social, political worldview background). Prior entering the field I was very worried about what relationships I would establish with other people and what my position would be. These worries were drawn on previous experience of interaction with Chinese people, who would make comments like how white my skin is, how big my eyes are, I am rich and etc.

This time I didn't notice that my respondents gave me any labels like white/female and so on. I think there are two explanations behind that. Firstly, my gatekeeper (the person who introduced me to the respondents as a researcher) is the head of the organization I was working for and is very respected by everyone. Secondly, this time all communication was conducted with well-educated people sharing common environmental values, who possess university degree and good English skill.

Another challenge was my own background. I have identified following biases that might have affected my research. Firstly, my attitude towards Chinese people changed drastically during last 3 month. My previous trips to China and interaction with local people together with the materials I have read never made me realize, that there could be ordinary people (out of academia) making conscious decisions to establish a company serving to benefit people and protect the environment instead of just pursuing financial profit. I am afraid that this feeling of admire towards the participants of my research could influence the analysis.

I strongly felt that previous experience of doing research affected me during interviewing process. Conducting research in Russia during times when I was a student was challenging because sometimes people would not want to talk, turn around and go away. So it was difficult to fight with fear that potential respondent won't talk to me, and always surprise when people were ready to share and went on talking.

Secondly, my educational background (I studied geography in Moscow State University for the bachelor) used to make me favor quantitative approach and unconsciously search for theoretical frameworks that will put all the data in the 'boxes'. It was a challenge to reconsider the research strategy.

In my opinion, my personal experiences influenced the choice of the topic for the research. For example, the fact that I was raised in country with a regime similar China where the phenomenon of green business hasn't become popular yet, made me realize that maybe this phenomenon interests me and seems to me extraordinary, while it might seem natural to my colleagues from Europe, raised in different settings, economical and social environment.

After all, the choice of the topic was driven by traits be more interested in positive phenomenon, than dealing with problems.

## ETHICAL CONSIDERATIONS

Ethical practices include a set of guidelines related to research problem and purpose, data collection, analysis and interpretation (Creswell 2009: 88-91). My ethical considerations included mentioned below.

During the fieldwork I didn't confront dilemmas common in social research (because my topic was not sensitive): paying for the interviews, asking very sensitive questions (except when it comes to government support), or putting myself and respondents under danger by doing research.

I am not doing research on a sensitive topic and my respondents are public people who made their stories known to other people (including on the TV channels like CNN). However, I followed ethical principles of social research and kept my respondent's names and organization's names confidential. All the interviews were made after obtaining informed consent (communicating research purpose and procedures, expressing that participation is voluntary) and informing that this is a material for my Master thesis. One respondent got very excited about it. They were informed that they can stop the interview at any point and answer the questions they were not comfortable with. The interviewed were taped with the permission of the respondents.

## DATA PRESENTATION AND RESULTS

### CASE 1. ORGANIZATIONAL PROFILE



Pic.1 Outdoor farming activities for children

*Source: Provided by the respondent*

*Name:* Apple Tree

*Area of business activity:* sustainable agriculture

*General information.* The farm was founded in 2012 by Elise Wang, female in her thirties, when she just had a child and wanted to move out of big city. She rented out abandoned greenhouses to grow vegetables. By 2014 farm uses 500 acres of land, 207 greenhouses in total. The farm provides jobs for up to 30 workers living in villages nearby, among which 85% are women.

The company is located just outside of one the biggest Chinese cities and supplies citizens with fresh and healthy vegetables and arranges outdoors activities for children and their parents.

The innovation idea consists in not delivering its production to the shops because the business model is based on membership. Depending on the membership type, the customer gets the delivery of all vegetables grown on the rented out piece of land. Such model allows the company to focus more on the quality of the products and be sure that they won't go bad somewhere in the storages or in the shops before reaching the end-user. Short distance from field to the kitchen enhances effective use of transport services and energy conservation. Everyone can rent out a piece of land and start a garden or grow some vegetables.

Agricultural technicians have special trainings at all stages of agricultural process from plowing to harvesting. Organic planting eliminates the use of chemical fertilizers, chemical ripening agents to ensure the long-term virtuous cycle of soil and sustainable land use.

During the growing period, the farm welcomes members, their families and friends to come together to participate in farm labor, to help with planting and harvesting under the guidance of the technician. The Farm launches a wide range of free activities on quarterly basis which include art venues, lectures, fishing, climbing and other. Newly established "China International Children's Nature Education Promotion Center" arranges activities on camping and basic understanding of nature (see Pic.1.).

Reached 1200 families, the company is expanding with the aim to promote in 8 areas: organic products, services for companies, real farming, education about nature, health consciousness, outdoor activities, vacations and relax, natural home living.

*Impact:* Mission of Apple Tree is to live in harmony with the nature, respect nature and land resources, establish healthy and sustainable production and consumption of agricultural products. The farm is changing the patterns of city residents in obtaining agricultural products and helps to fight with so called nature deficit disorder that happens to be a widespread problem among Chinese children living in the big cities and having limited opportunities to contact with nature.

#### INTERPRETATION OF ELISE'S PATH

This is the most detailed life-story that I was lucky to be told. Elise showed readiness to share her experiences and it was clear she is very determinant about what kind of life she wants for her family and herself.

Elise memories start when she being little enjoyed living in the countryside with her grandma.

*I was born in Shanghai and I grew up in the city, but I didn't like the life there. I had 4 years life in country side, when I was a child. Very little girl I lived with my grandma in countryside not far from Shanghai (before I went to school). However, I liked living in the countryside, so I always wanted to come back.*

Next important piece of information refers to a number of University degrees that she obtained at home and abroad, which later determined the job choice.

*I obtained Bachelor degree in Beijing, MS in Marketing, MBA and PhD in Marketing in England.*

*I always had a job that I didn't like (IT). I studied business and economics and worked in IT sector, but these are not my favorite subjects, just my hobby and for surviving. When I finished University I joined one these multinational IT companies in Shanghai to do management job. But I still hoped that one day I could find myself. The job was very boring. I always asked my colleagues to help me out because I wasn't interested in learning more about computers. My interest was antique.*

*Even today I still run IT company, but I don't like it. I am not coding engineer. I always want to find work-life balance. That is why art collecting is so important for me, and another is farming. We are vigor to come back to country side to enjoy life without pollution, without noise, cars and people, we look for some true things. You can find only 2 ways: one is from nature, another is*

*from your heart (inside). Countryside life can help us to balance and get it. That is why my family escaped from city center.*

The opportunity to change routine appeared when she got pregnant.

*2009 we decided to move out of city center, this is when I got pregnant. My baby should have very happy childhood. I didn't want him to stay in the city. I hope he have a different life. I also wanted to escape for the life from 9 to 6. But in fact today I work from 7 to 9.*

Further she tells how a hobby turned into a for-profit business.

*I never thought if my parents or friends influenced me to start a farm. I like do something valuable for life. Valuable things for your friends. So today food safety is very serious issue not only for me, but for many Chinese children. My mom is Chinese traditional doctor, so when I was a child my mother provided me with knowledge about food and nutrition and what to eat to be healthy.*

*I like work. I like to create things. I never thought of being a housewife.*

*My husband and I set a house in the farm, we invited friends to help us to plant apple trees and raise chickens in the backyard. In the beginning we did it just for ourselves, giving out the excesses of products to our friends. This is very happy lifestyle, 2 years later we set our farm. We created a farm 50 times bigger for business. IT business is stressful, but when you come back, nature helps you to recover and this is good benefit. I have no friends, who run green business, all my friends have IT. We never had any support from the government, but we had interest from officials in our business model because it was surprising for them the agricultural company survives.*

Using Moore's model described in analytical framework section, I recognized the factors that influenced entrepreneurial process that are discussed below in relation to each stage of the process.

### *Innovation*

The stage of innovation refers to the period of time when business was conceived. There is no doubt, that the business model used by the company is innovative, but unfortunately it is not

evident from the data, whom belongs this idea to. However, it is likely that the idea belongs to the founder, because she started with giving excesses of products to friends. This fact points to creativity as one of personal characteristics, that made effect at this stage.

The background of this entrepreneur reveals a childhood divided between the metropolitan area of Shanghai and the countryside area outside the city. She liked the life in the countryside and this is an important factor for the ideas to come. Another important part of the background is the mother's knowledge on nutrition that she transferred to Elise when she was little. These two facts can be considered as personal environment factors that fed respondent's vision of going back to countryside life at some point.

Tolerance of ambiguity didn't allow the respondent to doubt that something with this for-profit business idea may go wrong.

### *Implementation*

In my opinion, the factors that played role during implementation phase play crucial role in understanding of participant's behavior as sustainable entrepreneur or practical idealist. A number of personal characteristics strongly influenced the process, when the business opportunity appeared (I consider the business opportunity in this case was also created by Elise, not provided by environment).

First of all, the fact that the respondent founded and is running now 2 companies at the same time points out that she has very strong agency (ability to implement own ideas).

Secondly, she had very crystallized vision of what she was aiming for (sustainable organic agriculture) and strong will to implement it. The role of vision is counted as one of most important as driving forces of entrepreneurial experience.

The willingness of work and create together with dissatisfaction from another job made her the one providing better quality of life for her family and other people.

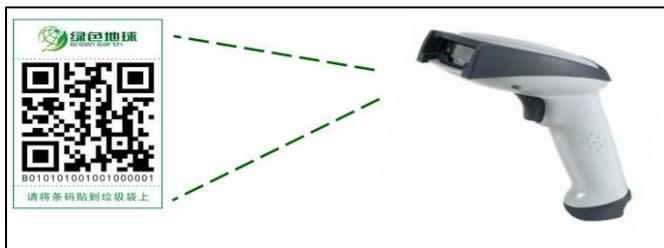
It is important to mention that there was no real help from environment, for example, government support of any kind.

## *Growth*

The company started as a small business with friends planting apple trees on the backyard and raising chickens. It grew into rather big company, which not only produces vegetables for sale, but also promotes healthy and sustainable lifestyle and environmental values through various public activities.

Personal characteristics such as knowledge how to run the business and management practices, vision of what needs to be done and achieved are pushing the business forward, exploring new directions (like environmental education, vacation and camping).

## CASE 2. ORGANIZATIONAL PROFILE



Pic.2. Picture of 2D barcode that used to track waste of each household.

*Source: Provided by respondent.*

*Name:* Clean neighborhood

*Area of business activity:* waste recycling

*General information:* Inspired by the success of American recycling company which encouraged the citizens to participate in recycling by using a reward system, Hong Jun applied this idea in big Chinese city and introduced two-dimensional barcode scanning system in 2010 to waste recycling enterprise founded by his relative in 2008 .

IT background of Hong Jun, who previously worked as a product manager for Microsoft, helped him to find innovative approach in collecting waste by using special plastic bags marked with

two-dimensional code (see Pic.2.) in order to identify each household and calculate its 'points'. Being aware the majority of the residents haven't recycled trash before, Clean Neighborhood developed its own waste classification brochures to hand out in the city. Starting with simple, they taught the residents to distinguish between recyclable and non-recycle waste and store the first one in the plastic bag. Remembering about participants' encouragement, the company gives points for certain type of waste: 1 point for 100 g of plastic waste, 1 point for 500g of glass waste and etc. Active participants are able to obtain a prize / product listed on the website when they collect enough points. Meanwhile 0 points is given in case of putting non-recyclable items in the bag.

Now the company recycling system runs very smoothly in 8 streets covering 96 residential communities with the population over 200,000 people expanding geographically and exploring new areas for operation. Streets are equipped with terminals that are filled with bags full of trash which are later emptied by a coming truck. Company provides on-site registration, hotline for customers, membership card, plastic bags with unique barcode for each user and supporting materials on waste classification. Participants receive update on number of points every month via SMS and WeChat notification system. Points can be exchanged on products available at company's website. Staff counts on participation increase through using of advanced information technology which also ensures data transparency. In addition to working with city neighborhoods, Clean neighborhood sets up cooperation with companies, including Taobao that have a lot of packaging waste as a side effect of goods net purchasing.

Clean neighborhood is now developing a closed circle of waste collection and recycling with community based management and changing the recycling industry by innovative technology and business model.

Moreover the company doesn't pursue profit as its main goal and promotes environment protection not only through collecting domestic waste in city neighborhoods. Company also brings green lifestyle to users by working with kids, organizing paper collection activities in schools (Recycle paper – save the forest) and participating in public activities, like the World Earth Day Green Carnival (April 22, 2012).

*Impact:* Clean neighborhood is doing important job of bringing green services to communities of

one of Chinese cities and rising environmental awareness of people for social benefit. As many city residents are not familiar with recycling routine, the company takes responsibilities to educate adults and children in order to foster environmental values. The development of waste recycling business is important for long-term sustainable development and maintaining environment resilience at the same time makes full use of the resources. The company incorporates new technology in its environmentally friendly practices showing how innovative environmentally sound industries can be.

#### INTERPRETATION OF HONG JUN'S PATH

In context of densely populated urban areas with huge amount of domestic trash generated every day recycling is essential and logic and decreases burden on environment. However, it only may seem easy to start a business like this without having people used to sorting and recycling garbage, being a pioneer in the industry without start-up capital and relevant work experience.

The story of Hong Jun is a story of a man on his thirties who left well-paid job and joined less secure organization in terms of financial return for the sake of satisfying a need of doing something useful for the society.

Our conversation started right from recalling memories when Hong Jun already had a job at Microsoft.

*It's been a long time I thought about doing something which has real and measurable impact to my society, even when I was in IT industry.*

*Clean Neighborhood was founded in 2008 and because the founder is very close to me (brother of my wife), I know what they have been doing since then. However, I didn't join in the beginning because I didn't feel myself ready for it. After gaining sufficient knowledge and experience of running a company, I decided to join the company in 2010 and took the major management responsibilities.*

In this case though Hong Jun originally had a desire to join a green company, it took him a while to make an actual step.

*Before I really started working at Clean Neighborhood, I read news about garbage situation in modern Chinese cities and watched several places around my home. It wasn't a pleasant experience and it made me think of doing something. That was when I worked in Microsoft.*

*Another experience was when I first took business trip to Microsoft in Seattle, I was very embarrassed when I finished my lunch in the cafeteria and I didn't know how to separate my waste into all different categories.*

*I remembered once in 2010, when I was still in Microsoft, once we travelled in suburb of Beijing and we passed an outside garbage ground, they were burning some of the waste directly. The smoke and the smell made a very deep impression, which made me think 'Oh, I need to do something about it'. This was one of the important moments that pushed me into this area finally.*

Changing working area from pure IT to waste recycling sector brought new experiences into Hong Jun life and he developed new skills without completely giving up on this IT background.

*Then I got a chance from Clean Neighborhood to combine both my IT experience and impulse to build a start-up green enterprise. It is a perfect chance.*

*The idea of using barcode to scan the bags in order to award points existed in the very beginning but didn't get enough support from IT system. When I joined in 2010, I helped to build the IT system to launch it and make it more efficient. The idea belonged to the original founder of the company, but couldn't properly implement it because he doesn't have IT background. He majored in Business and Management.*

*Now we have several downstream partners who process waste to make recycled products. And Local government is now purchasing our service in this pilot stage, however the situation with getting financial return from the business still remains very challenging.*

*Apart from for-profit recycling business our company also participates in various public activities that focus on introducing to adults and children of local neighborhoods the importance of recycling process for the environment.*

*Before I started working for Clean Heighborhood, I really was just part of the ordinary public who just had little knowledge about environment protection. My friends and colleagues don't know much about it either. But after joining this company I get to know more and more such people, who have a lot of passion to influence people around them. With their support and help I am getting more confident in Clean Neighborhood future and the society.*

*I also have to expand my knowledge on management techniques because I am the one managing the company now. Our aim is to expand to other districts of our city and maybe cooperate with similar companies in other cities. At the moment our company is already largest private service provider certified by the government.*

In the end of the conversation I asked Hong Jun if he knows any other green start-ups in the province, where he lives.

*Not a lot. Nowadays people think more about making money first. So most start-ups here experience highly growth mobile and internet industry. But I would eventually join a green start-up, maybe not in this area. I found myself a flexible person.*

Hong Jun wasn't officially the part of Clean Neighborhood team, when the company was founded, nevertheless, though slightly later he was the person who made crucial contribution to the innovation process that once implemented, pushed the company's development. That is why the innovation stage of the entrepreneurial process also included in the analysis of this case.

### *Innovation*

The innovation stage of the entrepreneurial process in this case was slightly procrastinated due to the fact that the original founder though had an idea, but wasn't able to implement it. This example points out how important for entrepreneurial process are personal characteristics, namely creativity, education and experience in relevant field (IT) demonstrated by Hong Jun when he joined the company. At the same risk taking personal characteristic of the founder of the company saved the business initiative on the early stage, when business model wasn't working

well yet. It has to be noted that at innovation stage slight impact of environment factor took place, as the founder didn't come with the idea by himself, but got inspired by experience from abroad.

### *Implementation*

Implementation phase was marked by passing on the chair of the company director to Hong Jun. It is clear from the interview that the decision to join the company was well considered. Hong Jun was attracted by the fact that he can apply IT skills and at the same time contribute to the quality of life of society. Even though at that point he didn't have much environmental awareness, but he already had a vision of changing the job to the one that will satisfy his needs to make the world around him better. Thus personal characteristics like job dissatisfaction, strong ideals about how the city should look like and personal commitment that arose from understanding that he is finally ready to get engaged in green start up, rescued the company from potential crisis or bankruptcy.

### *Growth*

Though strictly speaking the company can't be considered as fully enjoying the growth stage due to financial challenges, it has successfully expanded within the city despite lack of knowledge of locals about how recycling should be done. On the example of this case it is seen not only which factors influence entrepreneurial process, but also how engagement into enterprising activity affects the entrepreneur himself. The process at this stage is affected by the environment which exists in the form of continuous government support. Contact with government can be seen as an external opportunity of sustaining the business. It is important to mention, the environments (local people) are influenced by entrepreneurial process through engagement in waste recycling and public activities, arranged by committed entrepreneur. At the same time, Hong Jun while being manager of the company acquires useful characteristics such as deeper knowledge about environmental protection and that will later serve him well.

### CASE 3. ORGANIZATIONAL PROFILE



Pic.3 Greening city balconies

*Source: Provided by respondent.*

*Name of organization: Green Garden*

*Area of business activity: selling plants for indoor and balcony gardening*

*General information:* Green Garden specializes on providing opportunities to plant greens and vegetables in urban areas in environmentally friendly way. The company founder carefully studied all the factors important for launching planting activities in the cities where minimum space and facilities are available and prepared the product line that already includes everything necessary: container filled with soil, fertilizers, and seeds (See Pic.3.). All products are certified and consist of environmentally friendly materials: natural raw materials like coconut silt, earthworm fertilizer, natural sunlight as a primary energy source, and customers are encouraged to collect rain water for irrigation purposes and use household waste for composting to produce organic fertilizer.

Planting containers can be purchased from distributors, in stores and via the internet. Internet trade gives the possibility to serve customers all over the country. More than 20 types of different vegetables together with a variety of containers are available for customers. Moreover, company provides onsite construction services to make maximum use of available space on

balconies, terraces and rooftops. Purchases have reached more than 20,000 households, covering 31 provinces, including Tibet, Xinjiang , Hainan, Heilongjiang, Hong Kong, Macao, and Taiwan.

The main strength of the company is providing a service that is easy to use. The company started running in February 2010 through the network sales, offline and public organizations with the help of media and community partnerships promoting urban vegetables philosophy, became very popular.

The containers are ready to use, no special knowledge required to start planting your own greens. Moreover, the company, committed to promotion of green lifestyle, is ready to help schools and families to build a vegetable garden and assist in learning how to plant and use food waste as a compost.

*Impact:* By providing simple and practical solutions for planting vegetables in the urban conditions of limited space and access to nature, the company is trying to create a new urban lifestyle, that encourages environmental friendly behavior and brings benefits in the form of agricultural products for personal consumption. It provides partial solution for demand in good quality vegetables. Such planting makes full use of urban space, makes the city greener, and reduces waste disposal.

Indoor planting becomes an interesting activity for children and adults, including pensioners. It gives opportunities for children to connect more with nature and participate in planting activities which was difficult to arrange before. Many people buy the containers for their parents, who live far away in other cities and are distant from their families and don't have much to do. This is example of care shown by the children and providing elderly population with joyful activity.

The company cooperates with other organizations to promote green lifestyle among citizens: introduces community gardens, promotes composting of the food leftovers, arranges planting lectures related to idea of urban agriculture, encourage eco-education among employees by having own library.

#### INTERPRETATION OF LI SHANG'S PATH

The founder of Green Garden believes that massive buildings made of glass and concrete and heavy traffic are the common settings of modern cities where no time and space is available for

pleasures that are accessible for countryside residents like gardening and growing your own vegetables. Thus he in his forties managed to create new sustainable business opportunity that provides city residents with plants and vegetables cultivated in a sustainable manner. Interview with Li Shang was my first interview during fieldwork process at that moment unfortunately I wasn't able fully control the conversation, which didn't result into obtaining satisfactory amount of material.

The memory that Li Shang was returning in our conversation over and over again was related to his childhood spent in the village.

*I was born and raised in the farm. My parents were farmers, so I spent my childhood living in the countryside, farming and helping my parents. I enjoyed that life very much, because I could walk bare feet in the summer and play outside all day with my friends.*

Moving to the city which was necessary for obtaining university degree and later finding a decent job was mentioned in relation to the fact, that Li Shang couldn't live in the countryside any more.

*When I grew up, I went to the city, Xi'an, because I had to go to University. I stayed there after graduation, because only in big city it was possible to find a good job. There I met my wife and eventually settled down, though I missed the life in the countryside very much. In a while we moved to Shanghai, where I worked for IT sector for over ten years.*

With time the urgency to somehow connect to childhood roots grew.

*I wanted to change my job. I wasn't satisfied with the one I had and I wanted to contribute to the society and create a change.*

*I have many friends from IT who are interested in agriculture. I really wanted to do something in this field. I always wanted to get back to farming. It was my personal dream to start a company operating in agriculture related sector, but I had many personal problems.*

The will to change occupation was extremely strong, however, in the beginning the things didn't go very smoothly.

*Looking for the ways to connect city livers with nature, I decided to cultivate a plot of land in the outskirts of Hangzhou together with other people who have no house in the countryside but would like to grow their own vegetables. The idea was great, but practically it was very time consuming to overcome heavy traffic and travel long distances to the place every weekend.*

*This challenge pushed me thinking in another direction of delivering agriculture to the urban citizens – bring the vegetable patches right into their homes – on the balconies, terraces and roofs.*

Business idea of delivering plants to people's homes turned out to be successful.

*We are getting no help from the government, because Green Garden is considered a small company. However, now we mainly promote two ideas: balcony gardening and planting inside houses and apartments. It would be amazing to have all rooftops in Shanghai covered with plants!*

This is an interesting example when difficulties in practicing gardening as a hobby led to sustainable and for-profit business initiative. The analysis according to Moore's model is provided below.

### *Innovation*

The innovative feature of the business model consists of the approach of promoting the possibility to plant even vegetables at home with emphasis on easy use. This business idea aims to target population who have little access to the nature (the problem every now and then highlighted by my participants) including elderly population and children. In China, where aging parents are often disconnected from their grown up children, such presents to parents may serve as extra connection between family members. To sum up, this model is tackling issues relevant specifically for Chinese society and may be unknown for an outsider. At this stage negative impact of environment factor (inability to maintain a garden outside of the city), pushed the founder for seeking other opportunity that he successfully explored. Due to personal (strong need of Li Shang in reconnecting with nature and job dissatisfaction) and social factor (influences of friends who were involved in some kind of similar activities), the business was started.

### *Implementation*

Implementation phase in this case is characterized by exploring different sale opportunities (shops and via internet) and expanding to new market segments, for example, balcony gardening. This requires strong commitment from the founder. Commitment of Shang Li stretches as far as promotion of green lifestyle and urban agriculture among public and his own employees. From this data it is not possible to say if there are any environment factors affecting the process, for example, the competition with other companies for the same market niche.

### *Growth*

In my opinion, the company hasn't yet reached the scale that requires additional capabilities from the founder like managerial abilities. At least any hint that the company expanded to new scale is not present in the data.

## CASE 4. ORGANIZATIONAL PROFILE



Pic. 4. Plant used for water purification

*Source: Provided by respondent*

*Company name: Water Protection*

*Area of business activity: purification of various water bodies (rivers, lakes, channels)*

*General information: Contamination of soil and water is alarming environmental problem in China. Purification of polluted water bodies is challenging, and sometimes due to the use of*

chemicals leads to secondary contamination. The process of water purification that doesn't include the use of chemicals in order to avoid secondary pollution was implemented by a University student Chen Manyi and her university mates. Applied eco-technology enhances indigenous microbial ecology purifying effect and improves self-purification capacity of the water systems. This is achieved by using environmentally friendly materials like aquatic plants (see Pic.4.), indigenous microorganisms and solar aeration system. The company has wide range of products and cultivation techniques that are used for fighting with eutrophication, absorb ammonia and nitrates and other toxic components from water.

The company established in 2011 has basic water quality testing equipment and R & D experimental platform. It successfully applied 10 patents (including 2 invention patents, five utility model patents, three design patents), a new multi-functional ecological filler pipe, an efficient water ecological floating bed, a new block shaped fillers, one for fitness paddlewheel flow machine push A two-stage anaerobic sludge reactor, and some other. In order to reduce energy consumption the company is currently using solar energy and the use of green technologies prevents from producing solid waste.

During 2011-2012 the company implemented projects in Guangdong, Hunan, Guangxi, Guizhou , Shandong, Shanghai , Jiangsu and other provinces. Projects include the Suzhou New District, River Horse Creek Garden Center renovation project, Kunshan Yan Kok River Ecological Engineering, Shanghai Sheshan Town Ecological Floating Bed.

*Impact:* This is an example of young generation taking in their hands environmental problems and providing solutions for environmental protection and sustainable development. Company's services improve China's urban and rural water environment, refactor water ecological balance and maintain plant and animal diversity.

#### INTERPRETATION OF CHEN MANYI'S PATH

The company was started by a young student from one of Chinese cities who together with her university fellows is making first steps in career and business. This girl was very excited about the fact that I was doing a research on sustainable entrepreneurs in China. However, due to the fact that the company is very new and the girl is very young, this case turned out to be the shortest.

During the interview we mainly discussed her school and university experiences.

*My friends and I are very concerned about environmental protection. Environmental education is very popular in Chinese schools. Students starting from early childhood realize that environment in China is in serious danger. And clean rivers and lakes disappear.*

The context of starting the company is following:

*I was born and raised in Guangzhou, where I went to university. While being a student I together with my friends, also students, won a grant. This money was used to start the small company on water treatment in 2011.*

*Our company deals with water treatment of rivers and lakes. We use plants and microorganisms to make water clean. We choose plants for every individual project. And buy at the plants market. Our clients are government, public parks.*

*I majored in business and management. But my teammates majored in environmental science. I met my teammates in 2008 at school, they were my college mates. We have support from professors at school, but it is very challenging now because we don't have enough money. In order to survive and develop the enterprise, young company needs strong marketing plan to create right brand image, attract more customers and find initiative and responsible people ready to join them.*

Though small, this case is very valuable for pointing out that young generation, fresh university graduates, who don't yet have enough practical knowledge and skills, are also making relatively successful attempts to start a green company.

Talking of entrepreneurship process, similar to previous case, stages of innovation and implementation, but not yet growth can be detected.

### *Innovation*

Environment factor represented by state (because the state determines school educational program), plays crucial role in forming environmental values already at young age. The personal

characteristics of Manyi's friends, namely knowledge of environmental science matched obtained financial opportunity and resulted into development of environmentally friendly technology of water treatment.

### *Implementation*

During implementation phase Manyi's knowledge of business and management is crucial for a successful start-up operation. It is unclear to what extent external factor such as presence of state as main client serves the company as safety bag. As there is no information provided how the connection with the clients was established.

## RESULTS

Current section makes an attempt to discuss and bring together the findings that arose from the analysis of four case studies conducted above.

The case studies, presented in the research, tell about individuals who are engaged in running green companies. At first glance, these entrepreneurs got driven to this outcome by different reasons. One used provided opportunities to engage in green company (like Hong Jun), others created business opportunity themselves (like Elise and Li Shang). In some cases entrepreneur brings with him/her into business values and knowledge that is necessary for running the business (like Elise) and in some the entrepreneurs gain and strengthen their capabilities that will make them knowledgeable and aware (like Hong Jun).

However, there are features that connect all four different stories together. The strong will and need from inside in self-realization though doing something valuable, meaningful for society and environment. What is very important, that all of them do it by their free choice.

The sustainable entrepreneurs, or better practical idealists do not bounder their motivation simply within green business initiatives. They spread environmental values, by organization and participation in public activities in with aim to increase environmental awareness and promote sustainable lifestyle. Moreover, sometimes it is not easy to identify borders between 'green' and commercial motivations. What they are doing for profit they also do for themselves (because they are part of the environment).

Though there is no direct link between innovation and sustainability, innovation that is created by entrepreneur serves as a response to sustainability challenge and provides deeper insight on the entrepreneur's capabilities (thinking 'outside of the box' and ability to act).

The section is closed with the statement that the research demonstrates more than enough evidence that green SMEs have potential to contribute with innovative solutions against challenges of sustainable development. Thus even though the performance of SMEs is crucial for sustainable development, the entrepreneurs themselves are the drivers of structural transformation in SME industry that spread new sustainable norms of behavior.

## CONCLUSIONS

Firstly, this study points out green SMEs in China that despite its small scale successfully tackle by its services and productions various environmental and social problems relevant for Chinese society, like water pollution, food security in terms of food quality, waste recycling and lack of contact with nature.

Secondly, this study contributes to the discussion about understanding of what factors motivate an individual to start and run a green company. The selection was based on the original interest to the company and kind of services and products it offers. It is clear that green SMEs can be started by a person from different age group, education, and gender. The factors that influenced or led to the creation of the enterprise sometimes are similar and sometimes different, but all of them had the intention to create something meaningful for personal satisfaction and people's and environment's benefit.

As it is seen from the discussion the capabilities of the entrepreneurs to make use of existing opportunities, create new opportunities and thus affect social norms and establishing new habits among population are very important for development, because nowadays the world is in need of providing innovative solutions to environmental and social challenges.

## LITERATURE LIST

Agan Y. (2013) Drivers of environmental processes and their impact on performance: a study of Turkish SMEs, *Journal of Cleaner Production*, 51:23-33

Bryman A. (2012) *Social Research Methods*, Oxford, Oxford University Press, (Fourth edition)

Carsrud A. and Brannback M. (2011) Entrepreneurial Motivations: What do we still need to know? *Journal of Small Business Management* , 49 (1): 9-26

Creswell J. W. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Third Edition). Thousand Oaks, Calif.: Sage

Creswell J. W. (2013) *Qualitative Inquiry and Research Design, Choosing Among Five Approaches*. (Third edition) Thousand Oaks: Sage.

Dean T.J. and McMullen J.S. (2007) Toward a Theory of Sustainable Entrepreneurship: Reducing Environmental Degradation Through Entrepreneurial Action, *Journal of Business Venturing*, 22 (1): 50-76

England K.V.L. (1994) Getting Personal: Reflexivity, Positionality and Feminist Research, *The Professional Geographer*, 46 (1):80 - 89

Heinonen J. and Poikkijoki S. (2006) An Entrepreneurial-directed Approach to Entrepreneurship Education: Mission Impossible? *Journal of Management Development*, 25, 1, 80 - 94

Hockerts K. and Wüstenhagen R. (2010) Greening Goliaths Versus Emerging Davids — Theorizing about the role of Incumbents and New Entrants in Sustainable Entrepreneurship *Journal of Business Venturing*, 25 481–492

Ge W., Zhang C., Yang D., and Ye W. (2012) *Impact Report on Green SMEs in China*. Issued by Institute for Environment and Development, Information Center of the Ministry of Industry and Information Technology, New Ventures Program of the World Resources Institute  
<http://www.ied.cn/en/impactreport>

George A. L. and Bennet A. (2005) *Case Studies and Theory Development in the Social Sciences*

Goel P. (2010) Triple Bottom Line Reporting: An Analytical Approach for Corporate Sustainability, *Journal of Finance, Accounting and Management*, 1(1), pp. 27-42

Goelz D.J. (2009) China's Environmental Problems: Is a Specialized Court the Solution? *Pacific Rim Law & Policy Journal*, 18 (1):155-187, LexisNexis Academic: Law Reviews, EBSCOhost

Gries T. and Naude W. (2011) Entrepreneurship and Human Development: a Capability Approach, *Journal of Public Economics*, 95: 216–224

- Heras I. and Arana G. (2010) Alternative models for environmental management in SMEs: the case of Ekoscan vs. ISO 14001, *Journal of Cleaner Production*, 18:726-735
- Hilton I. (2011) China's Green Revolution: Energy, Environment and 12th five year plan, China Dialogue  
[https://s3.amazonaws.com/cd.live/uploads/content/file\\_en/4255/china\\_s\\_green\\_revolution\\_ebook\\_2001en.pdf](https://s3.amazonaws.com/cd.live/uploads/content/file_en/4255/china_s_green_revolution_ebook_2001en.pdf)
- Klewitz J. and Hansen E.G.(2014) Sustainability-oriented Innovation of SMEs: a Systematic Review, *Journal of Cleaner Production*, 65:57-75,  
 ISSN 0959-6526, <http://dx.doi.org/10.1016/j.jclepro.2013.07.017>.
- Kuckertz A. and Wagner M. (2010) The Influence of Sustainability Orientation on Entrepreneurial Intentions — Investigating the Role of Business Experience, *Journal of Business Venturing*, 25:524-539
- Lee L., Wong P.K., Foo M.R., and Leung A. (2011) Entrepreneurial Intentions: The Influence of Organizational and Individual Factors, *Journal of Business Venturing*, 26:124-136
- Lu Y., and Cai N. (1997) Technological Paradigm and Innovation of EST of SME in China, *Journal of Environmental Sciences*, 9 (1):120-126
- Moore C. F. (1986) Understanding Entrepreneurial Behavior: A Definition and Model. Academy Of Management Best Papers Proceedings, 66-70. doi:10.5465/AMBPP.1986.4978712
- Neergaard H. and Ulhoi J.P. (2007) *Handbook of Qualitative Research Methods in Entrepreneurship*
- Norman W. and MacDonald C. (2004) Getting to the Bottom of the Bottom Triple Line, *Business Ethics Quarterly* 14(2) (April): 243-62
- Nga J.K.H. and Shamuganathan G. (2010) The Influence of Personality Traits and Demographic Factors on Social Entrepreneurship Start Up Intentions, *Journal of Business Ethics* 95 (2):259-282
- Rogers C. (2010) Sustainable Entrepreneurship in SMEs: A Case Study Analysis, *Corporate Social Responsibility and Environmental Management*, 17:125-132
- Ragin C. C. and Amoroso L.M. (2011) *Constructing Social Research, The Unity and Diversity of Method*. Thousand Oaks: Pine Forge Press.
- Randriamalala J. L. S., Mijitaba M. M., Pertiwi E., and Randriamalala J. S. (2013): Analysis of the Emerging China Green Era and Its Influence on Small and Medium-Sized Enterprises

Development: Review and Perspectives, *Journal of Sustainable Development*, 6 (4), Published by Canadian Center of Science and Education

Rose G.(1997) Situating Knowledges: Positionality, Reflexivity and Other Tactics, *Progress in Human Geography*, 21 (3):305-320.

Slaper T., and Hall T. (2011). The Triple Bottom Line: What is it and how does it work? *Indiana Business Review*, 86 (1) 4-8

Xinhua. (2012) Chinese Ministries Give SMEs Preferential Policies. China.org.cn Advance Online Publication. Retrieved January 7th, 2013, from [http://news.xinhuanet.com/english/china/2012-01/06/c\\_122548702.htm](http://news.xinhuanet.com/english/china/2012-01/06/c_122548702.htm)

Yin R.K. (2009) *Case Study Research: Design and Methods*, 4<sup>th</sup> edition, SAGE publications

Zhang B., Yang S., and Bi Y. (2013) Enterprises' Willingness to Adopt/Develop Cleaner Production Technologies: an Empirical Study in Changshu, China, *Journal of Cleaner Production*, 40:62-70

Zhang J. (2012) Delivering Environmentally Sustainable Economic Growth: The Case of China, Asia Society  
[http://asiasociety.org/files/pdf/Delivering\\_Environmentally\\_Sustainable\\_Economic\\_Growth\\_Case\\_China.pdf](http://asiasociety.org/files/pdf/Delivering_Environmentally_Sustainable_Economic_Growth_Case_China.pdf)

## APPENDIX 1 – INTERVIEW GUIDE FOR SEMI-STRUCTURED INTERVIEWS

1. Company name
2. Name of the respondent & occupation
3. How old are you?
4. What is your education?
5. What languages do you speak?
6. What is your previous work experience?
7. How did you come up with the idea to start a green company?
8. What influenced your decision to join green company?
9. When and why did you start thinking of green business?
10. What do you know about policies? Did it have influence on you? If there were no policies, would you act the same?
11. Do you feel isolated / lonely? Are your friends and family aware of most common environmental problems?
12. What environmental problems does your company solve?
13. Is your company involved in any kind of public activities or environmental education?
13. According to your thoughts; what is the environmental and social impact of your company?
14. Do you have friends with similar views?
15. Social structure: what are patterns of environmental behavior in china?