

Green Entrepreneurship: Exploring its Attitude and Working Mechanism

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Abstract: This paper presents a case study of green small and medium enterprises in the area of Lahore. These firms are related to different sectors of economy owned by male or female. In this study, the attitude of green entrepreneurs and their pattern of working and running businesses are analyzed. This study identifies owner-manager attitudes and working mechanism in SMEs to the environment. The research is based on primary data done through interview presented in the form of case studies of randomly selected seven green firms. . The results have shown that these companies are achieving financial and non-financial objectives at the same time by using their differentiated inputs, outputs, qualities and decisions from conventional companies. They are also creating awareness about this field through their work, and suggested to promote it through public and private sectors among masses.

Keywords: Environment, Forestry, Public Health, Quality of life

JEL Classification: K23, Q23, I18, I31

1. Introduction

Globally, the world is in a transitional phase of moving towards green economy. A key theme of priority for the United Nations Conference on Sustainable Development (Rio+20) is “green economy in the context of sustainable development and poverty reduction.” The green economy is concept that has emerged prominently in various national and international forums. The green economy is defined as “An economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development, simultaneously improving human well-being and social equity, and significantly reducing environmental risks and ecological scarcities. (Creech et al., 2012)”

The main goal for transition to a green economy is to ensure economic growth and investment as well as to increase environmental quality and social inclusiveness. To achieve such objective United Nations Environmental Programme (UNEP) suggests incorporating both public and private sector for investing at least 1.5 to 2 percent of global Gross Domestic Product (GDP) per annum in greening various sectors (Creech *et al.*, 2012). Moreover, the main indicator for economic growth that is GDP needs to be adjusted to account for pollution, resource depletion,

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declining eco-system services and the distribution of natural capital and its consequences. This transition clearly represents great opportunity for business and those companies that understand and act on that opportunity (UNEP, 2012).

As the population of the entire world increases everyday with the addition of billions of individuals and for every newcomer, basic necessities of life are required. These necessities lead us towards more consumption and more usage of resources through which more production occurs and more degradation of natural resources is created. This circle moves on and on and never ends but natural resources are affected severely in the form of depletion and degradation. Moreover, high consumption and production decreases the quality of life by making everything artificial and contaminated that producing bad results not only on human being but also on every creature and on nature itself. These consumption and production activities are related to economy and to fulfill the increasing demand of society many small and medium sized firms come into market daily and provide goods & services. These SMEs play a vital role in enhancing economy not only from investment and profit perspective but also create job opportunities, income and reducing poverty around the world.

The central role of entrepreneurship in boosting economies has been emphasizing by all stake holders in all countries especially after the financial crisis of 2008. Governmental and non-governmental organizations have allocated considerable funds to promote businesses and help entrepreneurs. Priority has been given to environment friendly business plans and investments to support sustainable growth, environment protection, small and medium businesses and innovation. In both developed and developing countries, small and medium enterprises (SMEs) constituent vast majority of enterprises. Almost 95% of enterprises of the world are SMEs as Japan has highest number of SMEs around 99%, India has more than 80%, South Africa has 91%, EU-27 has 99.8% and Pakistan has nearly 90% SMEs in their respective countries that produce considerable contribution to their GDPs. According to International Labor Organization (ILO), it is believed that these small enterprises contribute in poverty reduction, job employment and creating incomes in the form of developing new start-ups or expanding the existing one (Creech *et al.*, 2012).

Although these activities are beneficial for economy from one point of view as it boost it up but there is a problem to consider that such high

entrepreneurial/business activities create negative impact on environmental conditions. Thus, we have to look for such entrepreneurial activities that solve the problem of environmental degradation and also boost the economy. *Green entrepreneurship* is the solution to this problem.

Green entrepreneurship is an emerging field that generally relate to nature and entrepreneurship. It focuses on long term phenomenon and sustainable growth that combines three sectors that are environment, society and economy (Giddings *et al.*, 2002). Defining green entrepreneurship is hard because it a new concept and attracted researchers since 90s. Every researcher defines it in his own way and terminology but most common terms used for green entrepreneurship are: *eco-entrepreneurship*, *ecoprenernurship*, *ecological entrepreneurship*, *environmental entrepreneurship*, *enviro-preneurship*, *sustainable entrepreneurship or sustainopreneurship*. Broadly, green entrepreneurship defines in either a process approach means method or technology related to green and output approach meaning producing specific types of output/products that are green/sustainable (Measuring Green Entrepreneurship, OECD, 2011).

SMEs all over the world have very little understanding of environmental management and going green. The concept of green process or products is still at the infancy stage and demands attention of the experts. Managing a green business is considered sometime as expensive or sometimes as money saving opportunity. It is the environmental consciousness that can operate in every function of daily life. The dilemma of greening the business is not a choice between profit and planet but a win-win situation (Karagulle, 2012). These SMEs create substantial employment and economic output in the form of translating innovative ideas into economic opportunities, revitalizing social and productive networks and raising productivity. Various researches in the world has shown that countries with hi start-up rates benefit from higher economic growth.

In Pakistan, despite the mainstream of industrialization and large scale sector, the role of SMEs is also encouraging and important as it comprises of 90 percent of all enterprises in the country, provides jobs to 80 percent of non-agricultural workers, and their share in GDP is 40 percent (SMEDA, 2016). Small and medium enterprises face financial and other resource challenges as compared to large sale firms but still its growth rate is worth noticing. These SMEs require positive and favorable policies for its up-gradation. There is no single hard and fast definition

of SMEs in Pakistan which can be implied by different firms. According to SME policy 2005, small and medium enterprises can be defined either in the form of “employment size” or “asset” (excluding land and building). Different sets of standards for separate SMEs are defined by government authority (SMEDA, 2005). Small and medium enterprises are diverse in nature in terms of production, size, employment, resource availability, management structure, growth and so on. SMEs operate in different sectors at different levels and both in urban and rural areas. Small firms are more diverse and operate in more heterogeneous sectors of economy of Pakistan, they are found in every industry whether they are registered or not. On the whole, small enterprises play a key role in development of society as these provides jobs, and improve indicators of economic growth (Saleem, 2012)

As Pakistan faces many challenges including unemployment, poverty, energy crises, financial crises, there are also increasing threats of water pollution, air pollution, resource depletion, increasing solid waste, and contaminated & artificial food. Most of the environmental pollutants and depletion are because of conventional production processes and traditional output that produce negative effects not only on environment but humans are also affected by emitting carbon emissions, fumes, harmful non-degradable wastes, contaminated water and artificial food. Thus, there is a dire need to cope these challenges by introducing green businesses because it provides such products, processes, and services that reduce environmental impact or improve natural resources as well as create livelihoods (Karagülle, 2012). Green business can be large or small, owned by male or female of any age. Green businesses are often local businesses, meaning it either source or supply goods or services within local community (Chapple, 2008).

This paper presents a case study of green small and medium enterprises in the area of Lahore. These firms are related to different sectors of economy owned by male or female. In this study, the attitude of green entrepreneurs and their pattern of working and running businesses are analyzed.

2. Literature Review

Petts (1998) investigated the link between personal attitudes of individuals (management and non-management) with the actual potential and requirements among the SMEs that translate their behavior in response to

corporate environment. The aim of the research is to understand employees' attitudes and environmental compliance in adopting environmental concerns. The researcher depicted that individuals are concerned about the environment by showing their willingness and understanding to enhance the quality of life. Age factor is also important as younger people showed less concern regarding environment while older showed high concerns. Findings also show that small companies are taking proactive steps regarding environment concerns and revealed characteristics as training, empowerment, positive attitudes & beliefs, and organizational structures that boost the organizational learning.

Noci and Verganti (1999) examined that eco-efficiency and green issues are the drivers to change the structure and culture of business sector as consumption increases and natural resources are scarce so there is a need to move towards green businesses. Green business requires strategic change and innovation in product line as well as it is a challenge for R&D practices. Moving towards green business is easy for larger corporations because they have financial, technological and human resources but for small firms this process is complex. The authors focused on the product innovation in SMEs and analyzed its performance by reviewing four case studies and showed that SMEs require a new perception of a product life-cycle and all its related processes.

Hillary (2003) has explored the environmental impact and performance of SMEs in Europe by studying two types of data that are pan-EU EMAS survey and review study. The aim of this study was to investigate the implementation of environmental management system EMS standards like ISO 14001 and voluntary self-regulation i.e. eco-management and audit scheme EMAS among SMEs of EU member countries. These EMAS & ISO are the means that provide enterprises a facility for adopting environmental practices and enhance their performance. Both are applicable to small as well as medium-sized enterprises and contribute to sustainable development.

Paredo and Chrisman (2006) warned the society that scarcity of natural resources, overpopulation and over utilization leads to environmental degradation and chronic poverty and in this scenario community needs to understand its local culture and issues. To do something for the common good community based enterprise (CBE) evolved as an entrepreneurial

activity to reduce the effects of poverty and increase sustainability. CBE arises in the environment of macroeconomics stress and disequilibrium or far equilibrium from previous one. It is based on collective and complementary efforts of individuals to start it and requires social capital which is easy for community to get. CBE proved as a prospective strategy for sustainability because it connects all the elements of community like social, legal, political, environmental and cultural.

Choi and Gray (2008) examined the business practices of socially responsible entrepreneurs by investigating the key non-conventional policies and decisions they have employed in building successful triple bottom-line companies. Socially responsible companies are not only the non-profit companies with no perception of making money but profitability is also their motive to run. Social responsible entrepreneurs achieve financial and non-financial objectives at the same time by using their qualities and decisions that are different from conventional companies. Social responsible companies have a purpose behind enterprise to serve for social and environmental values.

Allen and Malin (2009) have depicted that environmental concerned entrepreneurs are becoming the need of society as the population and globalization increase every day. The over utilization of finite natural resources cause the environmental degradation and damaged quality of life. Green entrepreneurs have different values, motivations, mission, belief and practices that contribute to sustainability. Unconventional theories that included high integrity, social justice and sustainable product & process are the basis of green entrepreneurship.

Rasi *et al.*, (2010) have explored the environmental initiatives implementation in small and medium enterprises of Malaysia. The authors divided the environmental initiatives into two kinds, one is reactive strategy that focuses on controlling the pollution after its occurrence and the second is proactive strategy that focuses to change the processes or products to prevent pollution. SMEs are adopting environmental practices mostly at the management level while the environmental system could not be converted into practices because these SMEs pay more attention to process-based changes and ignoring product-based changes. So, these SMEs have more

potential to develop proactive strategies in spite of slow achievement of sustainability.

Moorthy *et al.*, (2012) have developed the study to find out the key drivers for Malaysian small and medium enterprises (SMEs) to go green and analyzed the behavior of owner-manager of SME through the Theory of Planned Behavior (TPB). The research showed five main drivers; economic benefits, financial initiatives, stakeholder demand, legislation, and the last resources, motivation and knowledge which foster the environmental consciousness. All these drivers have significant relation with the adoption of green practices.

Nulkar (2014) has investigated the importance of environmental strategies and sustainability by being inquisitive about the benefits of traditional firms to planet and humans. Over the years, the sustainability and environmental consciousness have increased due to various researches and the proliferation of availability of information. The author analyzed few small and medium enterprises of India through in-depth interviews and found that the potential contribution of Indian SMEs to greening the businesses and paying attention to sustainability is not being realized yet. Thus, various green strategies and their benefits have been suggested to SMEs as traditional green practices must take a step towards adopting green strategies because green practices are short term goals and green strategies are long term efforts that need to be implemented.

Yacob *et al.*, (2013) have examined the small and medium enterprises SMEs owner/managers attitude towards awareness of environmental impact, issues and adoption of green practices. There is a positive relation between owner/managers perception, attitude towards environmental impact, efforts to reduce environmental issues and adopting green practices. SMEs have huge impact on economy and environment because it constituent almost 90 percent of global enterprises and with increasing awareness about greening the firms and sustainability, the burden of adopting environment friendly business practices lie on SMEs

Khan (2014) intended to recognize all the possible ways in which the initiation or growth of an entrepreneurs business can get influenced by social and economic factors in the industrial hub Chennai which is one of

the prime states of Tamil Nadu, India. This research is conducted through a survey carried via well-structured questioners. Factors like government policies, technology at hand, education, gender, work experience, social and economic culture etc. have vital impact on the small and medium scale enterprises, which further effect and contribute in the economic development of the country. It is shown that all these factors had immense impact on the performance and growth of these small scale enterprises.

Cekanavicius *et al.*, (2014) have developed the study to clarify a definition of green business and to know the differences between countries regarding business penetration by green ideas, the authors established case study of the firms of Ireland and Lithuania. The findings of this study revealed that both countries differ significantly in terms of economic, cultural and political developments. The companies of Lithuania are more concerned about the costs of greening the business while the Irish companies are more concerned in reaping the benefits of going green.

3. Data and Methodology

Case study method is one of the most popular methods of qualitative research and it covers the phenomenon in depth rather than breadth. Case study consists of detailed and complete investigation of the unit of analysis. It gives more emphasizes on the careful and intensive analysis of the particular topic. This approach is based on the assumption that unit of consideration or the case is of typical of a cases of certain type therefore by thorough study of that case generalization would be drawn that will be applicable to other cases of the same type. Moreover, case study method also deals with the processes and their interrelationships. It is mostly used for new topics or behaviors that need exploration (Mark *et al.*, 2009; Kumar, 2005 and Kotari, 1990)

For this study multiple cases with holistic unit of analysis is preferable so, that the findings of one green firm as a whole can be generalized for other green firms. This present study explores the questions of how, what and why and it discovers the green business field from the scratch so there is no existing theory we measure. There are different sources of data like interviews, observation method, archival records, documents, participant

observation and physical artifacts that can be used in any combination according to the need of research and circumstances. The choice of data collection technique also depends on the constraints of time, finances and access.

As the data of this research work is primary and need exploration of the green firms and their working behavior so interviewer`s technique is used. The interviews can provide extensive information that will help in making conclusion. These interviews are open-ended so that participants can talk more comfortably without thinking the time constraints and can provide details and unlimited answers. Moreover these interviews provide respondents` goals and beliefs and spontaneity. (Christine, 2001).

4. Results & Analysis

The case studies evidenced here are drawn from primary data in the form of interview with owners-managers of companies. The first case described is that of SGH, an organic food company, the second case is Herbal Essentials an organic cosmetic organization, third is Green Earth Recycling – manufacturer and retailer, fourth is Green Technologies Pakistan an environmental consultancy and product developer, fifth is Solar Shop in a trading sector providing solar technology, sixth case is Olive Pakistan – manufacturer and the last seventh case is Pak Green Enviro Engineering an environmental consultancy.

Table 1: Summary of Business Sampled

Business	Sector	No. of employees	Age of business (years)
SGH	Food	10-15	2
Herbal Essentials	Cosmetic	5-8	3
Green Earth Recycling	Manufacturer, Retailer	150	22
Green Technologies Pakistan	Consultant	15	6

Solar Shop	Trader	15-20	5
Olive Pakistan	Manufacturer	150-170	9
Pak Green Enviro Engineering, Ltd.	Consultant	12	7

4.1.1 SGH

SGH is an organic food company that provides nutritional edible products and health services in the field of nutritional support, medical nutritional therapy, fitness advice, nutrition career counseling, and nutrition guidance. It was founded in 2014 in the form of sole proprietorship by a female entrepreneur Saba Gul Hassan, an MPhil graduate in the discipline of Food sciences and Human Nutrition. This organization is green and is determined to provide healthy and chemical free home grown food stuffs.

Being a nutritionist and dietitian, her inspiration to start the business was to change the life style of people by developing healthy food habits in them and she really wanted to enter into this field by her own choice. Initially, she was using her own home grown gluten free home products and herbal teas so she thought she should avail herself this opportunity to make it as a business to provide gluten free and organic products to the people to convert them from unhealthy life style to a healthy and pure life style. For this she started growing vegetable like tomato for organic tomato sauce, various herbs for teas and medicine and other products like Quinoa i.e. a good substitute for rice, cereals etc. at her own farm without using chemical, pesticides and fertilizer. Now, she is not only making above mentioned products but also educating people regarding healthy life style through consultation, conducting workshops and different awareness programs. Thus, she is benefiting the society through her work but actually is not aware from environmental point of view.

As she is a sole proprietor of this project and began this business in a small way by using her own land and investment as resources with the support of

her family. She is still self-sufficient and uses her own money for further expansion. She faced no hurdles in starting this venture and translates her idea of educating the masses about organic food into reality. Initially, she considered this field is costly and profit is important for establishing this business but when as firm grew and products are produced in the bulk then per- unit cost is decreased and profit is raised. She further expressed that these organic food stuffs are bit expensive because of their pure raw material so the balance between cost and benefit remains maintained.

Her mindset behind starting this venture was to generate income by providing healthy organic food to people but as she was asked about green business and environmental concerns of her business then she told she has “no idea about green businesses”. She is basically health conscious and not environmental conscious but she has bit knowledge that chemicals, inorganic fertilizers etc. could harm the food and environment both. When she was acquired about environmental problems and measures to mitigate them then she told “she does not have much awareness about environmental aspects of her business”.

SGH is an organization that believes in simple working style. Its workforce consists of 10-15 workers who are assigned different duties from sowing seeds and herbs to final products to end users; also they advertised the products through social media and indigenous organic markets. The owner uses her own land for raw material and processes them at home for making products like sauces, muffins etc. with proper hygiene. After preparation of the products, packaging is done to supply. SGH utilizes its raw material sustainably as per requirement of the customers in order to not to waste them and manages the wastage (if any) on routinely basis. SGH is making Eco-Friendly products that in return preserve the land quality and fertility also by not using any chemicals or fertilizers to obtain the raw materials but the process to make the products which is only sauce and muffins is simple because most of their products are dry and ready to use like tea herbs or leaves, quinoa that cannot put negative impacts on the environment. At the end, she is happy and satisfied whatever she is doing and in future she wants to further expand this business.

4.1.2 Herbal Essensuals

Herbal Essentials is an organic handmade cosmetic organization which gives chemical free customized beauty products. It is a sole proprietorship started in 2013 by a female entrepreneur Faiza Shabbir who is a mother of two kids and a housewife. She holds multiple degrees in different subjects but on the top she studied eastern medicine and is an herbalist. While studying eastern medicine she decided to enter in this field and provides pure beauty stuffs to everyone. She described her passion for this field as “it’s not about ideas, it’s about making ideas happen.” She is very compassionate about this business and her passion is shown in her products which are prepared with great effort and love. She also creates awareness regarding cosmetic and natural products through different programs in different universities and local organic markets. She is aware of going green and knows the impacts of business on environment and society.

In this case, the background of entrepreneur favored her to enter in this field. She chose this line by observing a daily routine problem of fake and chemical oriented beauty products that exploit the customers especially women by creating false promises. She observed health issues by the usage of inorganic products and decided to introduce her own line of organic homemade cosmetic items. She described her products as “chemical free, without preservatives pure products that are prepared from homegrown herbs.” The line of products includes handmade herbal soaps, herbal oils, shampoo, herbal scrubs, face wash, creams, masks, serum, lip balms, etc. it also includes herbal medicines, seeds, herbs and powders. The entrepreneur also pays special attention to her customers and prepares customized products on their demand. She believes that every individual is unique and needs unique products. Moreover, she told that she wanted to have a detailed conversation with her clients for quality assurance. She knows about sustainability and green business and said that “our company not only provides chemical free beauty products but also uses our own homegrown herbs that are free from any artificial fertilizers and other chemicals.” She further added that “being a naturopath, my intention is to save the land and environment from any harmful material.” Thus, in terms of green business she is benefitting the society and environment through her knowledge about nature and products.

When the questions of investment and other resources are raised then the

owner answered that she started this project from a small scale with her own investment and by using her own kitchen garden for various herbal raw materials. She still using the same resources and create funds from family members. Initially, she faced many hurdles like not recognizing her idea of this business, male dominant business trend and unavailability of several ingredients; she said that “I had to scourge the streets to find the right ingredients. In this male dominated market, I was almost never taken seriously which was very frustrating.” According to her this field of organic cosmetics is costly and demands more effort, awareness, trained people and required skills. The profit in such businesses is of secondary concern; the “most prioritized thing is the idea and passion to implement that idea into reality” she said. After the initial struggle of establishing this idea, profit comes automatically in return.

As the owner is naturopath, a graduate of Tib and also an environmental conscious person, her mindset or vision to start this business is to provide the safe, healthy and natural products to people in order to preserve the environment and also to generate a source of income. She also expressed that “we should not forget the environment, it’s an important entity as environmental problems are rising day by day at the global level such as climate change, global warming, air pollution, etc. that also affects the agriculture and in return food quality, so everyone should play his/her on role to make the environment save”. By considering these factors, she wanted to contribute to lessen the environmental burden by introducing such products that are safe and natural and also environmental friendly.

As an Herbal Essensuals is a sole form of venture started from a very small scale at home with the simplest working mechanism by using GMO free no imported herbs or seeds are used. The entrepreneur with her team of more than five personals prepare products by growing their own herbal raw materials and in some cases rely on local organic materials chosen by the owner herself. All products are made at home with proper care and hygiene followed by growing own herbs, cutting, crushing, mixing, molding and then packaging into paper boxes or bags. Every product has different kind of manufacturing process but the ingredients for all are natural and homemade. Herbal Essensuals utilizes its raw material sustainably according to the requirement of customers and manages to reuse the leftover in new product as the owner told that “as such there is no waste

material produced from their processes.” She suggested to save the environment and side by side availing the opportunity of doing such eco-friendly businesses. She is satisfied and happy with her business and wants to expand it in future.

4.1.3 Green Earth Recycling

Green Earth Recycling (GER) Company is an environmental conscious organization dealing with the manufacturing different plastic products such as lumbers and sheets through recycling of various plastic scrap, plastic bags and post-consumer beverage carton packaging. It devised environment friendly, high quality and long lasting wood alternative putting together a winning combination of material and technology. The products resemble like wood with strong resistant, termite and water proof, maintenance free and easy to handle that save the cutting of trees. This company was founded in 1994 in the form of private partnership and now is running under the supervision of Zafar Bhatti, a chief executive officer of the company. Mr. Bhatti is a retired army officer who has interests in innovation, alternative energy, technology and recycling. He started this firm to provide alternatives of wood in the era of forest depletion resources through recycling plastic. Through these plastic sheets and green lumbers all kind of furniture can be made and in construction purpose they are also helpful. It provides safer and toxic free alternative for hardboard. This firm is aware about sustainability and performing in the line green businesses successfully but it produces less as compared to its potential because of no or little awareness regarding their products and its usage among masses. The manager of the company defined about its capacity as “our production is low against our installed capacity because people do not aware about our product.”

The rationale or inspiration behind starting this business is clear that is to conserve trees up-to its maximum limit and provide its alternative material. The entrepreneur paid high attention in adopting green practices to save the environment as well so; he started production through recycling tetra packs and other plastic wastage and grabbed this opportunity for generating income. He really wanted to start this business and entered into this field in 1993 with proper planning. Initially, the company is started with little

investment and was producing few product but with the passage of time, Green Earth Recycling (GER) started to produce wide range of products from green plastic wood including benches, chairs, tables, play areas, gates, landscape timbers, decks for houses, parking stops, bus stops counters, different cabins, dust bins, sheets, chip board, irrigation pipes etc. All these products are made from recycled plastic which look like wood and have better qualities like cheap, light weight, water proof, termite and insecticide free, slip resistant, splinter proof, maintenance free, durable and long lasting but on the top these are environment friendly. It also prepares customized products on the demands of customers. The owner says that he was “immensely disappointed” when officials discouraged him to produce irrigation pipes although its cost are also less than the traditional pipes.

The funding and resources for production at the time of starting this project were collected from personal savings of partners and from family and friends but once the business is established and products are produced in the bulk form, the problem of investment is reduced and now the “system is maintained.” GER faced serious issues in the starting years as the entrepreneur described “Lack of awareness regarding environmental friendly products, limited capital and untrained workers are the main hindrances in establishment of business and still people are unaware.” The owner of the company also said that “profit is important for every business but for me my aim is more important.”

As this firm is producing environment friendly products and the entrepreneur himself is environmental conscious person so, this firm is truly achieving sustainability by conserving natural resources and providing its alternatives. GER is utilizing the opportunity to not only attain monetary benefits but also resolved environmental problems of solid waste in the urban areas and depleting forests resources of the country. In this way, this company benefiting the society in the form providing alternative eco-friendly products and on the other hand is conserving the environment by utilizing the waste material through recycling and reusing.

Green Earth Recycling carries out the recycling of plastic materials and post-consumer beverage carton packaging such as generated by Tetra Pak. They collect the scrap plastic and post-consumer beverages carton packaging from the suppliers and then recycle them in their plants to produce plastic wood and chipboard (sheet) respectively. The owner also

told that “Green Earth Recycling is probably the only industry of its kind and size in the country with 150 employees that recycles used tetra-packs to produce above mentioned plastic products and his focus is to take care of the increasing problem of solid waste and diminishing trees.” The company is playing its role to save the environment through its recycling operation that in return also lessen the burden in landfill sites for dumping the waste as owner expressed that “their recycled products are environment and health-friendly and can be used to manufacture a wide range of products”. Their plastic wood product is not only cheaper than wood, as the owner told, but is also long lasting and does not require maintenance. It also takes care of environmental degradation and pressure on our depleting forests.

Moreover, the owner of the company is innovative person and has intentions to bring innovations in methods, technologies and products such as he imported machinery from Germany with improved and efficient technology.

Being a SME firm, the behavior of owner is collaborative and less rigid which means there is more room for creativity and innovation. There is cohesive work environment in the firm where all employees have to be in regular collaboration with one another to translate this idea into reality. Also, both the entrepreneur and his employees are aware of green business concept and sustainability so, they concerned both aspects i.e. environment as well as profit.

4.1.4 Green Technologies Pakistan -- Go Green

Green technologies Pakistan is a leading project developer & environmental consultancy started with the purpose to provide experts' advice to investors, clean-tech firms, construction companies, factories, and other clients on environmental issues arising due to their business activities. It has five main areas in which green technologies team provides its services to clients including renewable energy, environment and waste management, climate change and sustainability, agriculture and lastly in the field of water followed by sub-categories of each area. This firm was established in 2010 but before it was formerly known as Green Technology Environmental

Corporation which was founded in 1997 in the form of partnership but now it is running as independent organization by a male entrepreneur Dr. Ata ul Haq who belongs to the field of environment. He is a foreign degree holder in this specialized field and is an internationally certified waste manager.

As the green technologies Pakistan is an environmental consultancy so its rationale is matched with the background of entrepreneur Dr. Ata Ul Haq who is masters in environmental policy and a waste manager. The idea behind starting this venture was to utilize his knowledge and creating awareness among investors and businessmen about environmental impacts. Thus, he availed himself this opportunity and started as a business. Although this field was new in 1997 but in 2010 it was fully established and trend of environmental consultancies increased with the further emphasis by the government to check the impacts of businesses on environment and society. Initially, this consultancy started with limited funds and had limited services with few clients but as time passes it explored more areas of opportunity and now is providing services in almost every area related to environment. The areas of expertise of the firm ranges from various renewable energy projects like biomass, biodiesel, wind, solar and thermal, waste to energy, provides in-house expert advices on waste management projects involving planning, pre-feasibility, feasibility, different local governmental agreements and approvals, environmental impact assessment (EIA), designing, tender documentation, supply of equipment, installation, construction management, commissioning, testing, star-ups, improvement in waste collection, and operational activities. It also focuses on climate change and sustainability and analyzes its impacts on environment and society. It provides cost effective and innovative solutions to these problems and tries to reduce the negative emissions of businesses. Green Technologies Pakistan also pays special attention to agricultural and water related issues. Through these services this company is providing benefits to environment and society and also educates people regarding environment led problems as the manager of this firm described that “our consultancy is not only check the environmental impacts of any business but also aware them to mitigate those problems.” It tries to resolve various issues of noise, air and water pollution. This problem solving is the basic rationale to start this consultancy.

The source of resources for this business is obtained from clients in the form

of their fees in advance while in the starting of this consultancy, partners had invested from their personal savings and loans. Like other businesses this consultancy also faced serious issues of limited funds and lack of technology. The manger also told that with the help of teamwork and collaboration these problems have been solved.

Green technologies Pakistan is not a product based company it is a service provider to other companies. This consultancy is aware of going green and creates awareness and resolves environmental issues generating from different business activities like construction of any type, chemical factories, and industries. It checks the environmental impacts of these activities on land, soil, air, water and society. Its owner as well as employees are environmental conscious and know how to cope up with such issues. All over the behavior and mindset of this organization and its people are pro-green. This is a true green firm in terms that it gives special focus on environmental issues and suggested to pay attention on environmental degradation, depletion of natural resources, its distribution and availability in the era of rising population. It not only sorts out environmental issues but also attains monetary benefits which are necessary for smooth running of business mentioned by its concerned manager. Moreover, the respondent showed positive attitude in adopting green business practices and suggested that this field should be promoted among people by government and other institutions as green SMEs are important for society to reduce poverty and unemployment. It can also contribute in the economy of country.

This firm is not any kind of processing industry that follows any process or methodology to operate its activities. It is an environmental consultancy which provides services in different fields of environment. The firm is basically providing solution for the environmental issues like solid waste management, water and agricultural issues, greenhouse gas emissions, sanitation issues, etc. The organizational structure is cohesive and collaborative in nature as the manager described that our company does not believe in command and control style of working, we believe in teamwork.” Different duties are assigned according to the ability of person like in making an environmental assessment study, different team members with specialized knowledge of different fields as geologist, hydrologist,

engineers, environmentalists, zoologist, botanist, statisticians are required to work collaboratively on single project. Employees are also environmentally aware and give their inputs while keeping the main cause of this firm in their minds. The manager also told while replying that size of firm matters for greening the business but small companies can also adopt green business practices if they are committed to their vision. He said that “in order to run the green business employer and employees both should be pro-environmental and innovative in their approach so that they can achieve competitive advantage over other conventional business.” Green technologies Pakistan is an environmental conscious SME and implements the idea of going green through its services.

4.1.5 Solar shop

The company solar shop was established in 2008 as a partnership among three members but at present is totally running under the supervision of Mr. Nadeem Jaffer who belongs to IT & telecom sector. Firstly, it dedicated to the development of new energy products designing, production and installation of solutions all over the Pakistan operated through Lahore head office but after 2011 Solar Shop is acting as trader/distributor. It imports products from different countries and supply it to its selected customers with the service of installing the complete setup. The main purpose of this company is to provide alternative renewable energy solutions in the form of solar panels, batteries, emergency chargers for phones, notebook, MP3/MP4, Digital camera and any other small devices, solar street Lights and solar advertising lamp, Solar tube wells, etc. The industry of solar products is in its initial stage now and people are not much aware of this as Mr. Jaffer said that “here people are not aware of this industry, and this field is already in crisis before its emergence.”

Solar Shop Company is started haphazardly as Mr. Jaffer was in telecom sector and worked there for 9 years but not satisfied from his job and then started with his friend who was dealing already in solar industry. So his previous boss told him about a company named J.K.S that had intention to enter into the field of Solar Panel and wanted a consultancy services. Then he and his friend agreed to provide consultancy to that company regarding this field by importing solar panels and batteries from Germany and America and also producing some of its parts locally. For this he contacted

and visited different big companies, institutes, architects companies to market this technology but they were not much interested. Initially he and his friend faced many difficulties to run this kind of business where there is no market or people are price conscious because every green business or technology is costly, also having no environmental conscious mindsets and due to unavailability of trained labor. But gradually they developed some of their clientage to provide them services to install the solar panel/system that involves mostly doctors, schools and organizations or companies that work on day and night basis.

They are actually not environmental conscious. They have chosen this field as a new opportunity to solve the problem of load shedding by providing alternative energy. But with the passage of time, their morale got down as they saw the response of people. Afterwards they shifted their business from manufacturing to trading/distributing solar setups. The owner told that “people are price conscious; they are not quality conscious so they are not willing to invest in this field.”

All the three partners were doing jobs before starting this firm so they used their own savings as an investment. Moreover, one partner belongs to abroad who invested more than other two members, while the rest of the two provided their expertise and contacts. After the establishment of business and selection of clients, the resources for running it becomes smooth. According to the owner the field of green business is not costly but it seems to be because “you have to pay the all cost at one time.” The profit margin in this field is relatively more than conventional business because the product is different than traditional products and profits can be achieved through product differentiation as mentioned by the entrepreneur. Mr. Jaffer told that “we do not sell to anyone we selected our customers and our profit margin is moderate although its pace is slow but we provide quality products.” furthermore, he said that “the field of solar energy is good for Pakistan but here people are not willing to spend money.”

The owner of Solar Shop acknowledges the concept of green business and said that “green business is like to save the world and is good in terms that it reduces carbon footprints to zero level.” He showed positive attitude towards its adoption and mentioned that his company is also saving the environment through providing alternative energy technologies. He said

“through solar technology the problem of electricity shortage can be solved.” He further suggested adopting the field of green businesses but he also showed concerns regarding customers as they are not aware or even they do not want to spend money in this area. Solar shop is providing eco-friendly solutions to customers but at personal level both the employers and employees are not environmental conscious, they are just doing business like any other business because it was started haphazardly.

Solar Shop is a trading company which imports solar setups or equipment from foreign brands and provides to its customers. Their total numbers of employees are 15-20 i.e. based on external and internal both who perform their duties for installation and maintenance of panels/set ups. The company only deals with those clients who are well aware with the solar technology and really want to install it not to those clients who are price conscious and are not actually interested with this technology. At last, the company is implementing the idea of going green by providing Eco-friendly products and they want to expand their current business in future also.

4.1.6 Olive Pakistan

Olive Pakistan is a manufacturing company providing organic olive based products to health conscious consumers. It was founded in 2007 in the form independent organization by a male entrepreneur Sheikh Azam Nazir who is business oriented professional having multiple degrees in the field of social sciences and is working for multiple organizations as a consultant and expert. Olive Pakistan is a firm which promotes the production of olives in Pakistan and gives pure & nutritious items without any chemical for better healthy lifestyle. It provides ‘*khaalis*’ organic olive based products made by organically grown olives Its main purpose is to provide an opportunity of income generation to local farmers through purchasing olives and every part from them.

The owner came into this field with the intention of providing healthy food to people and not by concerning environmental aspect although he is aware of organic food and environmentally concern businesses. He works with different agro-based& herbal related forums. He started this firm to promote olive growth in Pakistan and to improve the lives of Pakistani farmers. He found this field as an new opportunity of achieving financial

and non-financial goals at the same time because Pakistan meets its demand of olives mostly by importing it rather than producing it so, he found this area as a good business idea to develop as he said “olive Pakistan is a product development firm & marketing with a niche to achieve its motives.”

Initially, the owner invested his own money in this enterprise as he was working in different organizations so he used his savings to boost it up but later on as the market for its products grow the issue of capital reduced over time. He found this field costly as the production of olives in Pakistan is not up to its potential and also it produce in far flung areas like northern areas of Pakistan so transportation cost is high. The entrepreneur also told about the difficulties which he faced in starting this business as “less availability of olives, lack of latest equipment and lack of government support are the basic hurdles here in this field.” About profit margins in this business he mentioned that profit margin is not much high, “it is based on consumer demand.”

The owner knows the concept of green businesses and is aware of sustainability. He is providing environment friendly products to people but he did not choose this field by keeping intention of environment in his mind. He is not environmental conscious but a health conscious. He came after seeing that this field is new which can develop niche market. The owner showed positive attitude in adopting green business and suggested to promote this field in Pakistan as “here people are not aware about green business so public and private sector both should promote this field to provide a new business opportunity to people.”

Olive Pakistan believes in working under the rule of collaboration and cooperation among all members. The owner also described that “every employee is important for the company”. It produces various products like olive oil, olive based jams, olive pickles and sweets with the help of labor force of 200 people. This company prepares products on small scale based on consumers demand. It buys only organic olives from selected farmers relating to every part of country mostly from northern areas of Pakistan and southern Punjab, and then processes them in its own plant, then manufactures into various items and then packaged. The company sells their product to only health conscious consumers through special organic

markets and exhibitions. Thus, the company implements the idea of going green through providing healthy (*khaalis*) organic products.

4.1.7 Pak Green Enviro-Engineering

The company Pak Green Enviro-Engineering Pvt. Ltd. was established in 2009 as a sole proprietorship running under the supervision of Mr. Hafeez Nasir who is a PhD. degree holder in Environmental management. It is an environmental consultancy dealing in three divisions i.e. Pak Green Enviro-Engineering, Pak Green Laboratories and Pak Green Techno-Legal services followed by further sub-divisions of each. The purpose of this venture is to provide reliable environmental services, attain reliance in environmental consultancy and replace foreign consultants.

The owner started this business with proper intention and planning as he was doing job in a renowned company at then but working in a marketing sector which is not relevant to his field and qualification so he with his three friends with same educational background began to work on this idea of providing consultancy to different firms about their environmental impacts. He left the job and dedicated himself to this new line. Initially, he and his team members began to operate business activities from home but later on his friends left him and but he still stuck to this idea and continue his business with proper office. He then registered his company and hired few employees and now running his consultancy firm with up to 15 workers, each assigned with relevant duties. The rationale behind this start-up was to provide environmental services and to generate income and make autonomy because he feels that “in job you have to bind yourself with one kind of work, while in business you are free to make any change.” He grabbed the opportunity of giving expert advice to investors as a business which relates to his qualification and choice of sector.

At the starting, Mr. Nasir and his friends invested themselves in the company but when his friends left him than he alone arranged resources for its operations. According to him this field of consultancy does not require much finance to start because it is based on project and client demand. But later on with the evolution of market and trend of this business, finance is required for installing with latest equipment and technology. Once the firm gets established resources are generated from clients in the form of their

fees in advance while the profit margin in such business also depends on projects. The owner told that “profit is important for any business but for environmental concern businesses vision matters more” because after the establishment of business profits get increased automatically.

The owner and his all employees are environmental conscious and fully aware about its impacts. This enterprise is a service provider to other companies and checks the impacts of them on society and environment. This consultancy implements the idea of going green by providing its services like Environmental approvals, Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE), analytical monitoring, wastewater treatment systems installation, air emission control devices and legal services. The company also deals in import and manufacturing of different industrial and laboratory equipment. The behavior and mindset of this organization and its people are pro-environment as its owner said “Pak Green is a team that works for sustainable development keeping in view development not at the cost of the environment.” In addition, the entrepreneur also acknowledges the adoption of green business practices. He further shoed desirability in the promotion and awareness of such field among people as “green firms are important not just for society but also for ecological conditions.”

Pak Green is an environmental consultancy having collaborative and cohesive working style where each task is dependent on all experts of every department ranging from environmentalists, geologist, hydrologist, engineers, zoologist, botanist, statisticians to marketing and accounts department. It operates in a productive environment, with the full support of skilled and professional expertise, laboratory and library facilities from Department of Environmental Sciences, Lahore College for Women University, Lahore, Industrial Linkage & Sustainable Development Studies, GCU Lahore and Chemical Engineering Department, UET Lahore. All employees work as a team and know the importance of greening the business. The respondent answered on the question of size of firm that “firm size does not matter in starting green businesses; it is the vision and idea that matters.” He is satisfied with his current business and sad that “our company not only achieves environmental benefits but also gains financial goals” and in future he wants to expand its company by creating more department and services.

4.2 Analysis

Seeking commonalities in all case studies gives us insight into knowing the objectives of this study through interviewing entrepreneurs of SMEs. The findings of this study emerge as all entrepreneurs except the owner of Solar Shop have specific intention to enter into this specialized field having clear purpose to benefit the society and save the environment in any form. These entrepreneurs are environmentally aware and have relevant qualification to start related businesses. Out of seven startups` owners only two that are SGH`s owner and Olive Pakistan`s owner did not intentionally start their businesses by keeping environmental aspect in their minds. SGH`s owner does not know about green business and even does not know that her business falls under this category. But the rest of them are fully aware about greening the business and its importance. They somehow are doing green businesses in the form of providing eco-friendly products and environment related services either by using pro-environment raw materials or processes having least environment impacts of it, which depict their behaviors regarding implementing the idea of going green. All studied entrepreneurs have used their personal savings for establishing business and expressed that green businesses are not much expensive and small companies can also adopt this field by staying focus on its vision only, these findings are contrary to Lee (2009) who portrayed in his study about expensiveness of green practices for small companies. Moreover, about profit margins these entrepreneurs described that profits are needed to run the business smoothly but the most important achievement is the fulfillment of one`s vision as the owner of Hebal Essentials said “most prioritized thing is the idea and passion to implement that idea into reality.” About working mechanism these entrepreneurs do not properly differentiate between conventional and green businesses , they only expressed that in green businesses, owner`s objective/vision is the primary goal to start the business while the other things are of secondary concerns. One common point of view described by all enterprises about style of working is to maintain collaboration & cooperation among all members and departments of company and work as a team. In addition to that, both employer and employees should know about environmental aspects of their business activity so that a productive outcome in the form of green business could emerge. SMEs are freer to make changes and innovation as compared to large scale businesses

because of rigid working environment there as mentioned by these owners. They also highlighted that owners can also achieve cost effectiveness and competitiveness by producing differentiated products than others. These companies are only interested in selling their products to quality and environmental conscious consumers and they have selected their target customers or clients to whom they provide services. Through their businesses they do not only achieve financial motives but also contribute in improving the quality of people's lives by educating them. They show satisfaction with their current startups and want to expand it in future. Thus, the findings here are matched to Petts (1998) that owners are concerned about the environment by showing their willingness and understanding to enhance the quality of life. They all acknowledged the concept of green economy and showed positive attitude in adoption of environmental concern practices. Furthermore, they are in a strong favor to promote this field to reduce poverty and unemployment by the help of governmental and other institutions. In the end, they suggested that green entrepreneurs must be focus on their ideas of saving environment through creating new solutions to resolve the environment related issues. They must be passionate, innovative, and hardworking and on the top should act as an environmentally-responsible citizen. In Mr. Nasir words, "eco-preneurs should be goal oriented rather than profit oriented."

5. Conclusion

This study identifies owner-manager attitudes and working mechanism in SMEs to the environment. The research is based on primary data done through interview presented in the form of case studies of randomly selected seven green firms. The cases reported here are all small environmental concern start-up businesses of city Lahore which are defined through number of employees described by SMEDA. The case studies make clear that although sustainable entrepreneurship or ecopreneurship in the SME sector remains in its infancy, findings here are matched with Petts' (1998) and Choi and Gray's (2008) that owner-managers of studied businesses are concerned about the environment and have perception behind starting enterprise to serve for social and environmental values. Generally, they are aware of green businesses and its importance in this world of scarce resources and are providing environment friendly products

and services. They possessed positive attitude about adoption of green businesses practices and showed concerns regarding burden on sustainability and quality of life. The research has shown that collaboration, cooperation, teamwork, less rigidity, innovation and are the style of operation in such firms that distinguish these green enterprises from other`s. commitment to vision/ idea and awareness about going green among all members of company are the real motivators behind green businesses through which owners attain benefits. The results have shown that these companies are achieving financial and non-financial objectives at the same time by using their differentiated inputs, outputs, qualities and decisions from conventional companies. They are also creating awareness about this field through their work, and suggested to promote it through public and private sectors among masses. Ecopreneurship or Green entrepreneurship is a complex issue to fully understand and manage. It takes many forms and emerges under different conditions, moreover this new field has limited researches and studies on it but despite its limitations, it is an increasingly important and emerging area of business especially in recent years.

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